National Park Service
Cultural Landscapes Inventory

2009



High Peaks Trail System
Pinnacles National Monument

High Peaks Trails System
Pinnacles National Monument

Pinnacles National Monument concurs with the findings of the CLI, including the management category and condition assessment as identified below:

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

CONDITION ASSESSMENT: **Good**

J Bunyan 04.10.09

Superintendent, Pinnacles National Monument Date

Please return to:

Vida Germano
Cultural Landscape Inventory Co-coordinator
National Park Service
Pacific West Regional Office
1111 Jackson Street, Suite 700
Oakland, CA 94607-4807

STATE OF CALIFORNIA – THE RESOURCES AGENCY ARNOLD SCHWARZENEGGER, *Governor*

OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION
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August 11, 2009

Reply in Reference To: NPS090612A

Vida Germano
Cultural Landscape Inventory Coordinator
Pacific West Regional Office
1111 Jackson St. Suite 700
Oakland, CA 94604-4807

Re: Section 106 Consultation for Pinnacles East Entrance Historic District and High Peaks Trail System, Pinnacles National Monument

Dear Ms. Germano:

My office received a letter from the National Park Service (NPS) dated 10 June 2009 requesting my concurrence with the findings of a Cultural Landscape Inventory (CLI) and amended district boundary for Pinnacles East Entrance Historic District and an amended period of significance for the High Peaks Trail System at Pinnacles National Monument. NPS is consulting with me in order to comply with Section 106 and 110 of the National Historic Preservation Act of 1966 (16 U.S.C. 470f), as amended (NHPA). The implementing regulation for Section 106 is found at 36 CFR Part 800, while the regulations for Section 110 are at U.S.C. 470.

The National Park Service has amended the list of features of the Pinnacles East Entrance Historic District to include those not originally identified in previous eligibility determinations. As indicated on the submitted form, I concur with the amended list of contributing and non-contributing features of the Pinnacles East Entrance Historic District as listed in the 2009 High Peaks Trail System Cultural Landscape Inventory and the amended district boundary that now includes the entire High Peaks Trail System. Furthermore, I concur with the amended period of significance for the High Peaks Trail System.

Thank you for seeking my comments and considering historic properties as part of your project planning. If you have any questions or concerns, please contact Ed Carroll of my staff at (916) 653-9010 or at email at ecarroll@ca.parks.gov.

Sincerely,

Susan K Stratton for

Milford Wayne Donaldson, FAIA
State Historic Preservation Officer

PINNACLES NATIONAL MONUMENT
High Peaks Trail System of the Pinnacles East Entrance District

California SHPO Consensus Determination of Eligibility

Actions Requested:

1) SHPO concurrence that the landscape characteristics as identified in the High Peaks Trail System CLI contribute to the historic character of the Pinnacles East Entrance District (see the following landscape characteristic descriptions in the Analysis and Evaluation section of the CLI: Circulation, Buildings and Structures, Topography, Natural Systems and Features, Spatial Organization, Land Use, and Archeological Sites):

I concur __X__, I do not concur _____ that the landscape characteristics as described in the High Peaks Trail System CLI contribute to the historic character of the Pinnacles East Entrance District.

2) SHPO concurrence with the amended period of significance of 1923 to 1942 as described in the High Peaks Trail System CLI.

I concur __X__, I do not concur _____ with the period of significance as described in the High Peaks Trail System CLI.

3) SHPO concurrence with the amended boundary of the Pinnacles East Entrance District as identified in the High Peaks Trail System CLI.

I concur __X__, I do not concur _____ with the amended boundary of the Pinnacles East Entrance District as identified the High Peaks Trail System CLI.

4) SHPO concurrence with the list of contributing and non-contributing structures to the Pinnacles East Entrance District. (See tables below and the following landscape characteristic descriptions in the Analysis and Evaluation section of the CLI: Circulation; and Buildings and Structures):

Contributing Structures: Based on the information provided in the High Peaks Trail System CLI, the following structures have been identified as contributing features of the Pinnacles East Entrance District:

Contributing Structure Name	Date Built	Concur	Do not Concur
Bear Gulch Caves Trail	1932	Has CA SHPO concurrence with determination of eligibility on 6/6/02.	
Moses Spring Trail	1932	X	

Contributing Structure Name	Date Built	Concur	Do not Concur
High Peaks Trail	1924-1934	X	
Condor Gulch Trail	1924-1934	X	
Tunnel Trail	1933	X	
Juniper Canyon Trail (Upper Segment)	1933	X	
Wall Trail	1935	X	
Rim Trail	1935	X	
Chalone Peak Trail	1936	X	
High Peaks Cut-Off Trail	During period of significance	X	
Condor Gulch Overlook	1924-1934	X	
Tunnels (3)	1928-1943	X	
Bridges (6)	1932-1933	X	
Causeways (2)	1923-1942	X	
Retaining Walls (351)	1923-1942	X	
Parapet Walls	1923-1942	X	
Steps (47)	1923-1942	X	
Check Steps (8)	1923-1942	X	
Check Dams (Water Bars) (2)	1923-1942	X	
Open Ditches (Open Culverts) (5)	1923-1942	X	
Spillway (Culvert)	1935	X	
Bear Gulch Dam	1935	X	
High Peaks Comfort Station	1935	X	
Chalone Peak Comfort Station	1936-1937	X	
Switchback Retaining Walls	During period of significance	X	
Handrails (15)	During period of significance	X	
Cut Stone Bench	During period of significance	X	
Switchbacks (64)	During period of significance	X	
Tread Cuts (212)	During period of significance	X	
Rip Rap Trail Tread (1)	During period of significance	X	

Non-contributing Structures: Based on the information provided in the High Peaks Trail System CLI, the following structures have been identified as non-contributing features of the Pinnacles East Entrance District:

Non-contributing Structure Name	Date Built	Concur	Do Not Concur
Moses Spring Trail Realignment	Post-period of significance	X	
Cave Access Trail	Post-period of significance	X	
Chalone Peak Trail- Fire Road segment	Post-period of significance	X	
Rock Climbing Access Trailheads	1980s	X	
Bridges (2)	Post-period of significance	X	
Retaining Walls (73)	Post-period of significance	X	

Non-contributing Structure Name	Date Built	Concur	Do Not Concur
Steps (15)	Post-period of significance	X	
Check Steps (176)	Post-period of significance	X	
Check Dams (Water Bars) (22)	Post-period of significance	X	
Open Ditches (Open Culverts) (31)	Post-period of significance	X	
Culvert	Post-period of significance	X	
Diversion Ditch	Post-period of significance	X	
Terraces (5)	Post-period of significance	X	
North Chalone Peak Fire Lookout	1952	Has CA SHPO concurrence with determination of eligibility on 6/6/02.	
Interpretive and Wayfinding Signs	Post-period of significance	X	
Wayfinding Arrows	Post-period of significance	X	
Gates (7)	Post-period of significance	X	
Temporary Fences	Post-period of significance	X	
Wood Bench	Post-period of significance	X	
Switchbacks (12)	Post-period of significance	X	
Tread Cuts (7)	Post-period of significance	X	
Rip Rap Trail Tread (1)	Post-period of significance	X	

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

California State Historic Preservation Officer Date

Please return form to the attention of:
Vida Germano
Cultural Landscape Inventory Coordinator
Pacific West Regional Office
1111 Jackson Street, Suite 700
Oakland, CA 94607-4807
510-817-1407, vida_germano@nps.gov

CONCUR:

Susan K Stratton for
Milford Wayne Donaldson, FAIA
State Historic Preservation Officer
11 August 2009

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Inventory Unit Summary & Site Plan

Inventory Summary

The Cultural Landscapes Inventory Overview:

CLI General Information:

Cultural Landscapes Inventory – General Information

The Cultural Landscapes Inventory (CLI) is a database containing information on the historically significant landscapes within the National Park System. This evaluated inventory identifies and documents each landscape's location, size, physical development, condition, landscape characteristics, character-defining features, as well as other valuable information useful to park management. Cultural landscapes become approved inventory records when all required data fields are entered, the park superintendent concurs with the information, and the landscape is determined eligible for the National Register of Historic Places through a consultation process or is otherwise managed as a cultural resource through a public planning process.

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, National Park Service Management Policies (2001), and Director's Order #28: Cultural Resource Management. Since launching the CLI nationwide, the NPS, in response to the Government Performance and Results Act (GPRA), is required to report information that respond to NPS strategic plan accomplishments. Two goals are associated with the CLI: 1) increasing the number of certified cultural landscapes (1b2B); and 2) bringing certified cultural landscapes into good condition (1a7). The CLI maintained by Park Historic Structures and Cultural Landscapes Program, WASO, is the official source of cultural landscape information.

Implementation of the CLI is coordinated and approved at the regional level. Each region annually updates a strategic plan that prioritizes work based on a variety of park and regional needs that include planning and construction projects or associated compliance requirements that lack cultural landscape documentation. When the inventory unit record is complete and concurrence with the findings is obtained from the superintendent and the State Historic Preservation Office, the regional CLI coordinator certifies the record and transmits it to the national CLI Coordinator for approval. Only records approved by the national CLI coordinator are included on the CLI for official reporting purposes.

Relationship between the CLI and a Cultural Landscape Report (CLR)

The CLI and the CLR are related efforts in the sense that both document the history,

significance, and integrity of park cultural landscapes. However, the scope of the CLI is limited by the need to achieve concurrence with the park superintendent resolve eligibility questions when a National Register nomination does not exist or the nomination inadequately addresses the eligibility of the landscape characteristics. Ideally, a park's CLI work (which many include multiple inventory units) precedes a CLR because the baseline information in the CLI not only assists with priority setting when more than one CLR is needed it also assists with determining more accurate scopes of work.

In contrast, the CLR is the primary treatment document for significant park landscapes. It, therefore, requires an additional level of research and documentation both to evaluate the historic and the existing condition of the landscape in order to recommend preservation treatment that meets the Secretary of Interior's Standards for the treatment of historic properties.

The scope of work for a CLR, when the CLI has not been done, should include production of the CLI record. Depending on its age and scope, existing CLR's are considered the primary source for the history, statement of significance, and descriptions of contributing resources that are necessary to complete a CLI record.

Inventory Unit Description:

Inventory Unit Description

Physical Description

The High Peaks Trail System (trail system) is an extension of the existing Pinnacles East Entrance District. The trail system, like the other construction with Pinnacles East Entrance District, was developed by the National Park Service (NPS) and the Civilian Conservation Corps (CCC) between 1923 and 1942, and it provides recreational access to the finest geologic features of Pinnacles National Monument (National Monument). Geologic features include rock spires, canyons, and talus caves which are remnants of an ancient volcano. The trail system that navigates through the unique terrain is an outstanding example of the rustic-style of design employed by the NPS during the 1920s and 1930s. A high percentage of the existing trail features date to the historic period and includes Bear Gulch Caves Trail, Moses Spring Trail, High Peaks Trail, High Peaks Cut-Off Trail, Condor Gulch Trail, Tunnel Trail, Wall Trail, Rim Trail, and portions of the Juniper Canyon and Chalone Peak Trails.

The trail corridor width of 30 feet includes trail system features that extend beyond the trail tread such as switchbacks, cuts & fills, retaining walls, and managed vegetation. The 13.01 mile long trail system totals 47 acres. All but 0.77 miles of the 13.01 mile trail system contribute to the trail system. The High Peaks Trail System is an extension of the existing Pinnacles East Entrance District boundary.

The historic structures constructed in support of the High Peaks Trail System were designed in the rustic-style, which emphasized the blending of built works into their setting. The manipulation of natural topography that occurred along the majority of the trail system is still evident including the effort in minimizing the disturbance to the surrounding landscape. The trail alignment, as established during the historic period, balances the challenges of the steep topography with the desire to allow visitor access to the park's unique features.

Relationship with Pinnacles East Entrance District

The Pinnacles High Peaks Trail system is being documented for the Cultural Landscapes Inventory (CLI) as a component of the Pinnacles East Entrance District (district). The Pinnacles East Entrance District was determined eligible for the National Register of Historic Places and received SHPO concurrence on the findings of eligibility on November 27, 2002. The previous document focused on the historically developed areas around Bear Gulch and Chalone Creek on the east side of the monument and on the roads which provide circulation through these areas. Included in the district were the trailheads of the Condor Gulch, High Peaks, and Moses Spring trails. The present document adds further information to the Pinnacles East Entrance District CLI by inventorying the High Peaks Trail System and associated features which were constructed during the same period of significance and extend beyond the district boundary. The trail system possesses significance under the same criteria as the Pinnacles East Entrance District.

The Pinnacles East Entrance District is locally significant under National Register Criteria A and C with

a period of significance that extends from 1923 to 1941. The Pinnacles East Entrance Historic District is locally significant within San Benito and Monterey Counties for its multitude of historic features designed in the rustic style and associated with the establishment of Pinnacles National Monument and the work done there by the CCC. The district contains buildings, structures, roads, planted vegetation, and other features from the 1923 to 1941 period of significance which create a cohesive rustic assemblage that demonstrates the early development pattern of the park. Under Criterion A, the Pinnacles East Entrance Historic District is locally significant for its association with early park development and the CCC. Under Criterion C, the district is significant for its design according to early National Park Service rustic design principles.

In a separate determination of eligibility in 2002, the SHPO concurred with the determination that the Bear Gulch Caves Trail is eligible for the National Register under Criteria A and C. The Bear Gulch Caves Trail is included in the High Peaks Trails System inventory.

Period of Significance

The Pinnacles East Entrance District and the High Peaks Trail System share the same period of significance. The Pinnacles East Entrance District CLI established a period of significance which began with the work initiated by the first custodian of the monument and ended with the conclusion of the CCC's contribution. This period was defined as extending from 1923 to 1941. Subsequent research has discovered that the CCC continued to make significant contributions to the district and the trail system all the way into the spring of 1942 when the last of the trail work was completed. In order to capture these contributions and to realize the actual intent of the original CLI, this document proposes making a minor adjustment in the stated period of significance so that it extends from 1923 to 1942 (rather than 1941).

Landscape Characteristics and Features

The High Peaks Trail System (trail system) is an outstanding example of a rustic-style trail system providing visitor access to many of the finest geologic and natural features of Pinnacles National Monument. The historic character of the High Peaks Trail System is evident in the remaining landscape characteristics and features: circulation, buildings and structures, topography, natural systems and features, spatial organization, and land uses.

Circulation: The major circulation patterns and features of the High Peaks Trail System have changed little since the end of the period of significance. The original alignment and trail width established during the historic period has been retained with nominal changes. The locally quarried materials utilized in the construction of the trail system are retained from the historic period. Contributing trails include Bear Gulch Caves Trail, Moses Spring Trail, High Peaks Trail, Condor Gulch Trail, Tunnel Trail, Wall Trail, Rim Trail, and portions of the Juniper Canyon and Chalone Peak trails.

Buildings and Structures: The historic structures located along the High Peaks Trail System were designed in the rustic-style, which emphasized the blending of built works into their setting. The

attention to detail and adherence to naturalistic design principles is still evident throughout the trail system. Modification of historic structures and new construction taking place after the period of significance has generally been sensitively completed and is compatible with the existing historic fabric. Trail structures along the trail system include tunnels, bridges & causeways, switchbacks, retaining walls, parapet walls & curbing, steps, check steps, check dams, and open culverts. In addition, Bear Gulch Dam, two comfort stations, and a fire lookout were also constructed along the trail system during the historic period to meet park operational needs.

Topography: The manipulation of natural topography that occurred along the majority of the trail system is still evident including the effort in minimizing the disturbance to the surrounding landscape. The construction necessitated by the steep and rugged terrain included numerous switchbacks, tread cuts, and cuts and fills, most of which date to the period of significance.

Natural Systems and Features: The responses to natural systems dictated the design of the historic High Peaks Trail System. The trail alignment, as established during the historic period, balanced the challenges of the steep topography with the desire to allow visitor access to the park's unique geologic and natural features. Vegetation patterns, geologic features, and steep topography reflect historic patterns and the rustic-style trail system harmonizes with the unique natural setting.

Land Use: The High Peaks Trail System provided visitor access to a variety of the park's unique geologic features, and retains the land use.

Spatial Organization: The layout of the trail system with a central stem trail and branch trails is retained from the historic period. The curvilinear trail alignment established during the historic period responds to the natural contours of the land and steep terrain while providing access to broad panoramic views, distinctive geologic features as well as a variety of the park's plant communities.

Integrity

The High Peaks Trail System and associated contributing features within this district retain all seven aspects of integrity. Only in a few instances have minor trail segments been realigned, and nowhere have substantial features been moved, so that the system retains integrity of location, and the district as a whole has not suffered from any substantial changes in spatial configuration or extent. The original design of the trail system evolved considerably within the period of significance, with the expansion of the trail system and the addition of shortcuts, but the final configuration has not changed since that time. Rustic-style principles are still apparent in the design of individual features. The setting of these features has also remained largely unchanged, characterized by rugged backcountry with steep, often precipitous terrain and frequently dramatic vistas. The durable materials of which the trails and associated features were constructed have survived with little deterioration, and subsequent maintenance has largely avoided substituting new materials or methods of workmanship. The manual labor associated with the original workmanship is still visibly evident in the surviving features. The integrity of these features allows the district to retain much the same feeling and associations of the period of significance. Where new additions have been made they have not compromised the integrity of the original feeling and

association because they have utilized the same materials and similar methods of workmanship employed during the period of significance and are compatible with its historic character.

Landscape Condition

The High Peaks Trail System is in good condition. Though there is clear evidence of disturbances due to visitor use of the trail system, the maintenance staff has had a history of sensitively stabilizing these impacts through routine and periodic maintenance.

Trail Features

Fingers Foot Trail: The Steep and Narrow section of the High Peaks Trail was known as the Fingers Foot Trail during the historic period.

High Peaks Trail Bridle Path: The Tunnel Trail and the upper segment of the Juniper Canyon Trail (from Junction Saddle to the Tunnel Trail) were referred to as the High Peaks Trail Bridle Path during the historic period.

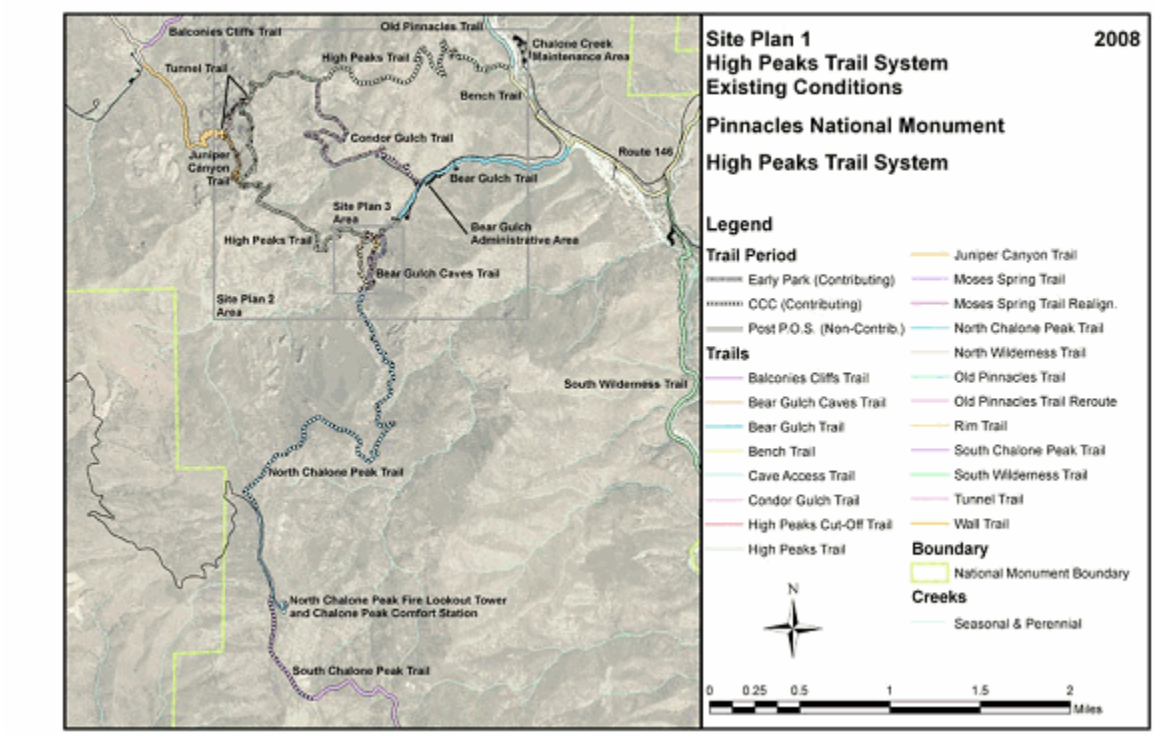
Junction Saddle: The term Junction Saddle refers to the saddle adjacent to Scout Peak at the junction of the High Peaks and Juniper Canyon trails.

Hawkins Peak: Hawkins Peak is used to reference the adjacent trail junction where the High Peaks and Tunnel trails meet. Hawkins Peak is also used by park staff to describe the portion of the High Peaks Trail leading from the Chalone Creek Maintenance Area to the Hawkins Peak area.

Chalone Peak Trail: The Chalone Peak Trail is composed of two trails: the North Chalone Peak Trail which leads from the Bear Gulch Dam to North Chalone Peak and the South Chalone Peak Trail which branches off the North Chalone Peak Trail and leads to South Chalone Peak.

Nature Center: The Nature Center was referred to as the Visitor Center before 2008. In 2008 the Visitor Center function was moved from the Bear Gulch Nature Center to the campground store at the Pinnacles Campground.

Site Plan

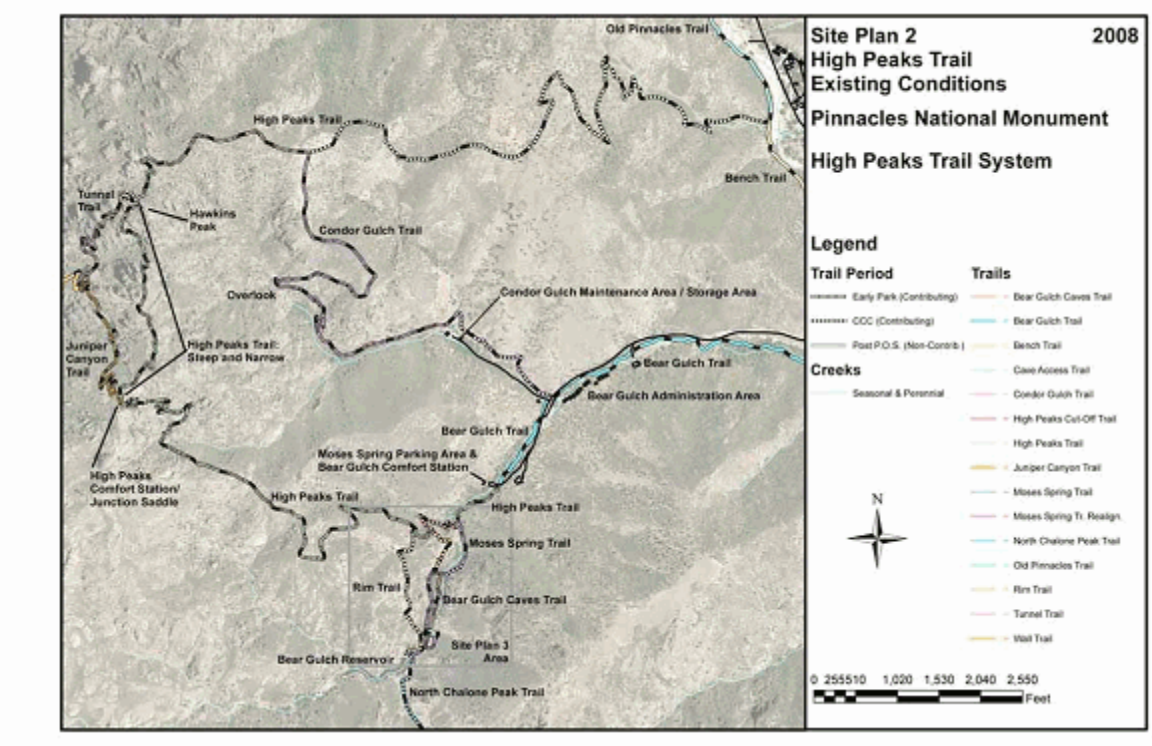


Site Plan #1
High Peaks Trail System
Existing Conditions (2008)

Source: CLI, PWR - Oakland, CA

Data Sources: Park GIS data and CLI Field Survey.

(For a larger version of this map see the Supplemental Information section at end of document).

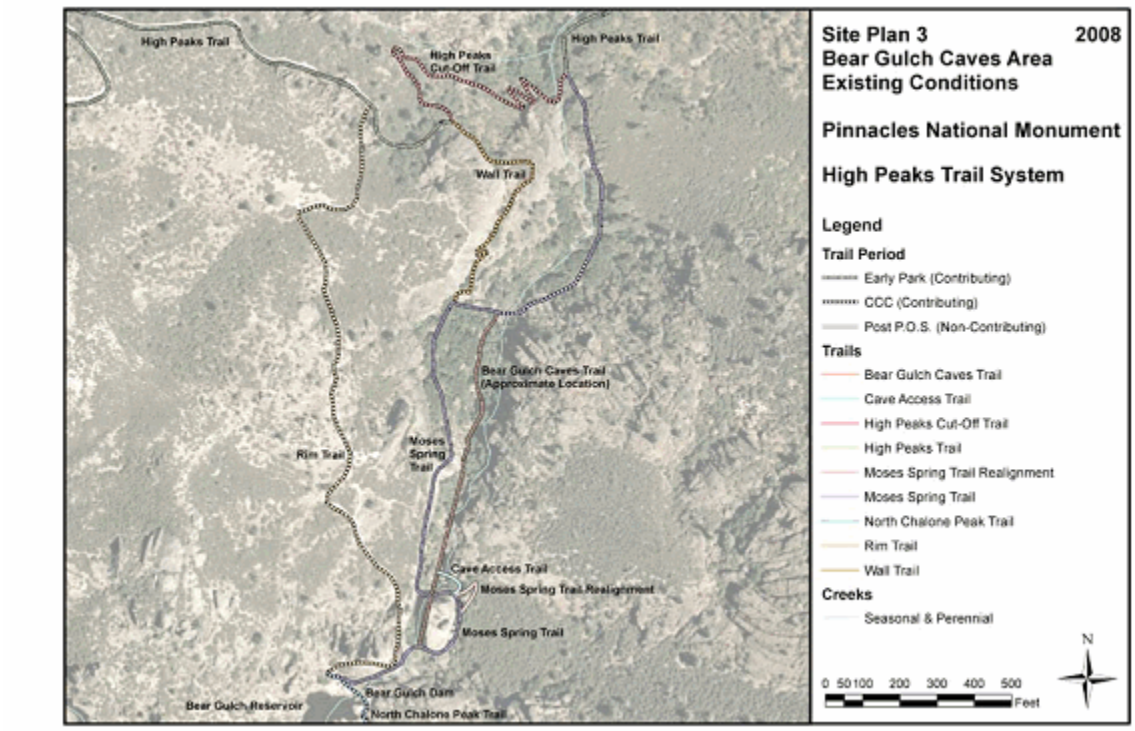


Site Plan #2
High Peaks Trail
Existing Conditions (2008)

Source: CLI, PWR - Oakland, CA

Data Sources: Park GIS data and CLI Field Survey.

(For a larger version of this map see the Supplemental Information section at end of document).



Site Plan #3
Bear Gulch Caves Area
Existing Conditions (2008)

Source: CLI, PWR - Oakland, CA

Data Sources: Park GIS data and CLI Field Survey.

(For a larger version of this map see the Supplemental Information section at end of document).

Property Level and CLI Numbers

Inventory Unit Name:	High Peaks Trail System
Property Level:	Landscape
CLI Identification Number:	725071

Park Information

Park Name and Alpha Code:	Pinnacles National Monument -PINN
Park Organization Code:	8450

Park Administrative Unit: Pinnacles National Monument

CLI Hierarchy Description

The High Peaks Trail System is a landscape with no component landscapes.

Concurrence Status

Inventory Status: Complete

Concurrence Status:

Park Superintendent Concurrence:	Yes
Park Superintendent Date of Concurrence:	04/10/2009
National Register Concurrence:	Eligible -- SHPO Consensus Determination
Date of Concurrence Determination:	08/11/2009

Geographic Information & Location Map

Inventory Unit Boundary Description:

The proposed boundary for the 13.01 mile long High Peaks Trail System is a 30-foot-wide-corridor that is measured 15 feet from the centerline of the trail in either direction. The total area of the trail system is 47 acres. The trails constructed during the proposed period of significance (1923 to 1942) include the Bear Gulch Caves Trail, Moses Spring Trail, High Peaks Trail, High Peaks Cut-Off Trail, Rim Trail, Wall Trail, Condor Gulch Trail, Tunnel Trail, and portions of the Chalone Peak and Juniper Canyon trails.

The boundary includes only those trails that were constructed during the period of significance. In some cases, new sections of trails were added to the trails after the period of significance and in these cases, the newer sections are non-contributing segments within the trail system boundary.

The park has constructed multiple trails since the period of significance which are not associated with the CCC or early park development and therefore were not included within the trail system boundary. These trails include the Balconies Trail completed in 1964, the Bench Trail constructed after 1965, the Bear Gulch Trail (inventoried in the Pinnacles East Entrance District CLI) constructed in 1972, the lower segment of the Juniper Canyon Trail constructed in 1976, the North Wilderness Trail constructed in 1976, and the South Wilderness Trail constructed in 1976. The Old Pinnacles Trail was originally constructed by the CCC as a road and only converted to a trail in 1974 and is therefore not associated with the historic trail system.

The upper segment of the Juniper Canyon Trail dates to the period of significance and is associated with early park development and the CCC. This segment of the trail, along with the Tunnel Trail, was originally constructed as the Bridle Path of the High Peaks Trail System, an alternate to the Foot Path. The upper segment of the Juniper Canyon, included in the High Peaks Trail System boundary, includes the segment leading from Junction Saddle to the Tunnel Trail junction. The lower segment of the Juniper Canyon Trail was constructed in 1976, postdating the period of significance. This lower segment, associated with Mission 66 development, leads from the Tunnel Trail junction to the Chaparral Parking Area and is not associated with early park development or CCC development and therefore was excluded from the trail system.

Included in the trail system is a 0.72 mile segment of the Chalone Peak Trail that does not contribute to the High Peaks Trail System. This segment is the stretch of trail leading up to North Chalone Peak along the fire road. The trail segment does not contribute because a road was constructed over the trail after the period of significance. The construction of the road allowed vehicular access to the North Chalone Peak Fire Lookout Tower and included widening of the trail corridor. This non contributing road segment is included in the trail system boundary because it follows the historic alignment of the original trail and provides the link to the historic terminus of the Chalone Peak Trail at North Chalone Peak.

The segment of the Chalone Peak Trail excluded from the trail system boundary is the final 1.09 mile stretch between South Chalone Peak and the saddle between the North and South Chalone peaks. This segment was cleared of brush late in the period of significance, but never constructed. The trail segment was not cleared again until 1979-1980. After being cleared of chaparral, the trail has been

maintained every three years. Because the trail was not constructed during the period of significance and not maintained until after 1980, the trail has been excluded from the High Peaks Trail System boundary.

See the Location Map for the UTM points that demarcate the trail system boundary.

State and County:

State: CA

County: San Benito County

State: CA

County: Monterey County

Size (Acres): 47.00

Boundary UTMS:

Source:	GPS-Differentially Corrected
Type of Point:	Area
Datum:	NAD 83
UTM Zone:	10
UTM Easting:	663,720
UTM Northing:	4,039,924
Boundary Datum Other:	A

Source:	GPS-Differentially Corrected
Type of Point:	Area
Datum:	NAD 83
UTM Zone:	10
UTM Easting:	662,005
UTM Northing:	4,039,800
Boundary Datum Other:	B

Source:	GPS-Differentially Corrected
Type of Point:	Area
Datum:	NAD 83
UTM Zone:	10
UTM Easting:	662,904
UTM Northing:	4,038,898
Boundary Datum Other:	C

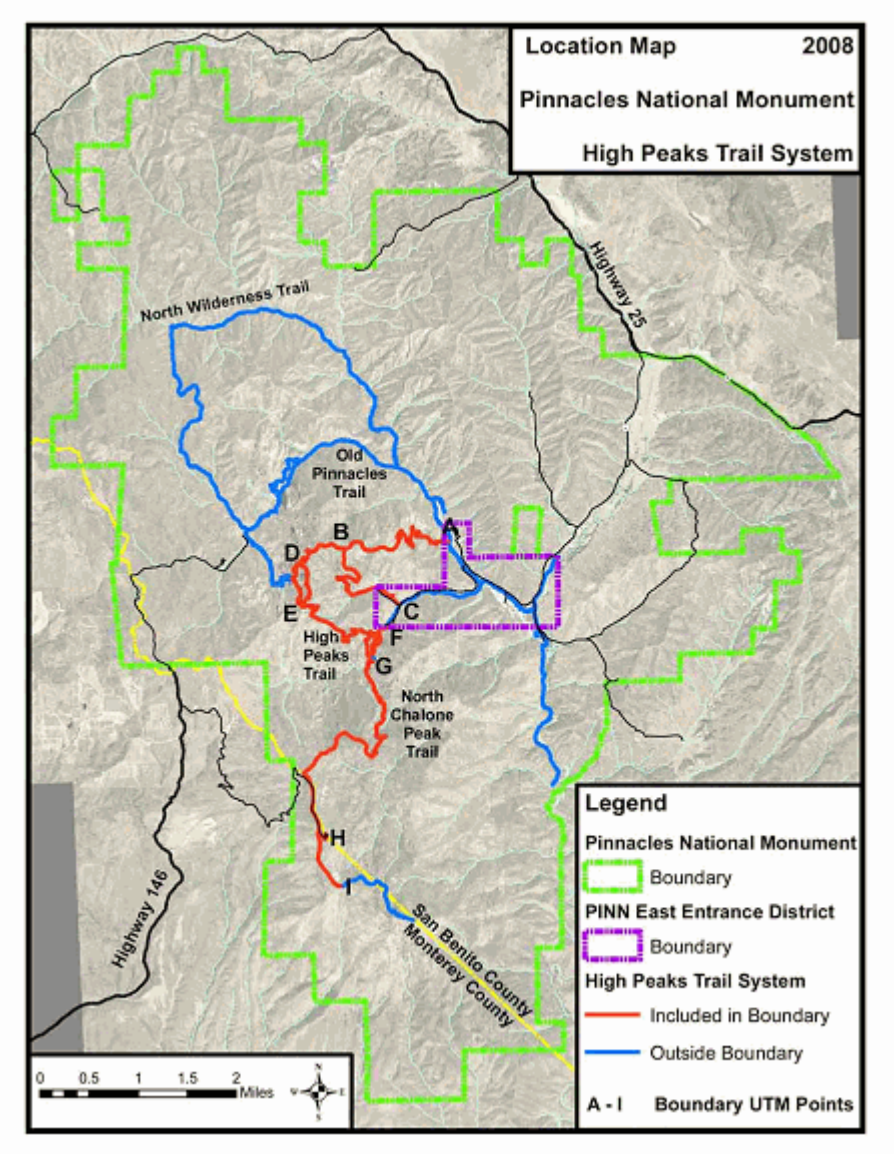
Source:	GPS-Differentially Corrected
Type of Point:	Area
Datum:	NAD 83

UTM Zone:	10
UTM Easting:	661,319
UTM Northing:	4,039,602
Boundary Datum Other:	D
Source:	GPS-Differentially Corrected
Type of Point:	Area
Datum:	NAD 83
UTM Zone:	10
UTM Easting:	661,322
UTM Northing:	4,038,898
Boundary Datum Other:	E
Source:	GPS-Differentially Corrected
Type of Point:	Area
Datum:	NAD 83
UTM Zone:	10
UTM Easting:	662,555
UTM Northing:	4,038,416
Boundary Datum Other:	F
Source:	GPS-Differentially Corrected
Type of Point:	Area
Datum:	NAD 83
UTM Zone:	10
UTM Easting:	662,429
UTM Northing:	4,037,958
Boundary Datum Other:	G

Source:	GPS-Differentially Corrected
Type of Point:	Area
Datum:	NAD 83
UTM Zone:	10
UTM Easting:	661,718
UTM Northing:	4,035,117
Boundary Datum Other:	H

Source:	GPS-Differentially Corrected
Type of Point:	Area
Datum:	NAD 83
UTM Zone:	10
UTM Easting:	661,967
UTM Northing:	4,034,288
Boundary Datum Other:	I

Location Map:



Location Map
High Peaks Trail System

Source: CLI, PWR - Oakland, CA

Data Sources: Park GIS data and CLI Field Survey.

(For a larger version of this map see the Supplemental Information section at end of document).

Management Information

General Management Information

Management Category: May be Preserved or Maintained

Management Category Explanatory Narrative:

Current CLI research indicates the trail system is a contributor to the National-Register-eligible Pinnacles East Entrance District. The Pinnacles East Entrance District's trail system does not specifically relate to the park's legislated significance, to preserve and protect the natural formations and caves of the national monument, and therefore falls under Management Category C (The trail system may be preserved or maintained).

Agreements, Legal Interest, and Access

Management Agreement:

Type of Agreement:

NPS Legal Interest:

Type of Interest: Fee Simple

Public Access:

Type of Access: Unrestricted

Adjacent Lands Information

Do Adjacent Lands Contribute? No

National Register Information

Existing National Register Status

National Register Landscape Documentation:

Undocumented

National Register Explanatory Narrative:

The High Peaks Trail System is being inventoried as an extension of the Pinnacles East Entrance District, which was determined eligible for the National Register of Historic Places and received concurrence from the California State Historic Preservation Office (CA SHPO) on November 27, 2002. The Pinnacles East Entrance District includes the developed areas around Bear Gulch and Chalone Creek on the east side of the monument and on the roads which provide circulation through these areas. The district is locally significant under National Register Criteria A and C with a period of significance of 1923-1941. The features associated with the district reflect the period of early park development, rustic-style design, and the craftsmanship of the Civilian Conservation Corps (CCC). The trailheads of the Condor Gulch Trail, High Peaks Trail, and Moses Spring Trail were determined to be contributing features of the Pinnacles East Entrance District. These contributing trailheads are located within the boundaries of the proposed High Peaks Trail System. The present documentation expands Pinnacles East Entrance District to include these trails. The Bear Gulch Trail was determined to be a non-contributor to the Pinnacles East Entrance District.

CA SHPO also concurred with the National Register eligibility of the Bear Gulch Caves Trail on June 6, 2002, which was determined eligible at the local level under Criterion A and C with a period of significance beginning with its construction in 1930. This Bear Gulch Caves Trail is included as a contributing feature within the High Peaks Trail System.

CA SHPO also concurred with the National Register eligibility of the North Chalone Peak Fire Lookout Tower on January 22, 2003, which was determined eligible at the local level under Criterion A for its association with forestry and fire protection in California and under Criterion C as the oldest example of the revised 809R plan, a design for fire lookout towers that began to be used in California in the 1950s. The lookout tower is located within the proposed boundary of the trail system, but has a later period of significance, starting with its construction in 1952. For this reason, the lookout tower is included in the trail system boundary but is considered a non-contributor to the Pinnacles East Entrance Historic District.

National Register Eligibility

National Register Concurrence:	Eligible -- SHPO Consensus Determination
Contributing/Individual:	Contributing
National Register Classification:	District
Significance Level:	Local

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

Period of Significance:

Time Period:	AD 1923 - 1942
Historic Context Theme:	Expressing Cultural Values
Subtheme:	Landscape Architecture
Facet:	The 1930's: Era Of Public Works
Time Period:	AD 1923 - 1942
Historic Context Theme:	Expressing Cultural Values
Subtheme:	Architecture
Facet:	Rustic Architecture
Time Period:	AD 1923 - 1942
Historic Context Theme:	Creating Social Institutions and Movements
Subtheme:	Social and Humanitarian Movements
Facet:	Poverty Relief And Urban Social Reform
Time Period:	AD 1923 - 1942
Historic Context Theme:	Transforming the Environment
Subtheme:	Conservation of Natural Resources
Facet:	Origin And Development Of The National Park Service

Area of Significance:

Area of Significance Category:	Landscape Architecture
Area of Significance Subcategory:	None
Area of Significance Category:	Architecture
Area of Significance Subcategory:	None
Area of Significance Category:	Social History
Area of Significance Subcategory:	None

Statement of Significance:

The Pinnacles High Peaks Trail System is being documented for the Cultural Landscapes Inventory as a component of the eligible Pinnacles East Entrance District, which received concurrence on its eligibility from the California State Historic Preservation Officer in 2002. The Pinnacles East Entrance District focused on the historically developed areas around Bear Gulch and Chalone Creek on the east side of the monument and on the roads which provide circulation through these areas. This district is locally significant within San Benito and Monterey Counties for its features that are designed in the rustic style and associated with the establishment of Pinnacles National Monument and for the work done there by the CCC. The district contains buildings, structures, roads, planted vegetation, and other features from the 1923 to 1941 period of
significance which create a cohesive rustic assemblage that demonstrates the early development pattern of the park. Under Criterion A, the Pinnacles East Entrance Historic District is locally significant for its association with early park development and the CCC. Under Criterion C, the district is significant for its design according to early National Park Service rustic-design principles.

The present report adds further information to the East Entrance District CLI by inventorying the High Peaks Trail System and associated features which were constructed during the same period of significance. These features were an integral part of the same efforts which resulted in the developed areas already documented and possess significance under the same criteria.

Historic Context

The Pinnacles East Entrance District CLI established the following historic context for the contributing features associated with this district:

"In the Civilian Conservation Corps, the Departments of War, Agriculture, Interior, and Labor collaborated in one of the largest organizations of personnel in American history. Its work represents the most concentrated and wide reaching social program ever undertaken in the United States to promote economic recovery and the welfare of American society by providing conservation service jobs for unemployed, single young men during the Great Depression. The CCC was an important, innovative aspect of President Franklin Delano Roosevelt's New Deal, designed to provide both on the job training for a specific segment of the population and some financial security for their families during a time of economic crisis. The CCC program not only boosted the morale, improved the health, and developed the technical skills of numerous young men, it helped shape the landscape of America's national and state parks.

"The CCC arrived at Pinnacles National Monument in 1933, and occupied the camp at Chalone, constructed earlier that year in anticipation of their arrival. Work immediately began on constructing numerous buildings, a road, trails, retaining walls, tree wells, a reservoir, dam, initiating roadside cleanup projects, and re planting hillsides. Many of these projects helped to define the rustic and naturalistic image of the road system, park structures, and surrounding landscape....

"The rustic style was widely used in park service design between 1916 and 1942 primarily through the efforts of National Park Service Landscape Architect Thomas C. Vint and his staff. The rustic style

emphasized a philosophy of non intrusive, naturalistic architectural design in natural settings, the sensitive use of native vegetation, and the incorporation of natural color were used to position roads, buildings, and other developments in harmony within the surrounding setting. Designed to “lay lightly on the land,” park roads built during this period blended with the surrounding environment, followed natural topographic contours, and were located with a minimum of cuts and fills. Materials for surfaces, shoulders, bridges, culverts, and signage were acquired locally and were compatible with the surrounding colors and textures. These principles of landscape design traced their roots to the pioneering work of nineteenth century horticulturist Andrew Jackson Downing and landscape architect Frederick Law Olmsted who stressed design in harmony with nature. Downing recommended that park roads follow the natural curves of the landscape, present a planned sequence of views, and provide access to precise points of interest to disclose particular vistas or natural features. Using onsite, natural materials and curvilinear road alignments, all design decisions subordinated the built environment to the natural environment. (McClelland, 1994: 20 27) The rustic style is demonstrated in the Pinnacles East Entrance District by the harmony achieved between the developments and their surroundings through the use of locally quarried stones for masonry construction, native plants, and naturalistic designs; all of which promote an appearance of developments that blend with their environment."

The High Peaks Trail System is adequately described by the same historic context. Like the features already documented within the East Entrance District, the trail system also embodies the distinctive characteristics of the rustic style and is directly associated with some of its leading practitioners. Landscape Engineer Thomas Vint, whose connection to the rustic style is noted above, devised the initial plan for the High Peaks Trails in 1928, and his staff directly oversaw the construction of these trails for the duration of the period of significance. They ensured that the CCC enrollees continued—and even improved upon—the rustic style precedent they had already established. The Civilian Conservation Corps constructed the trail system through manual labor, hand tools, dynamite, and pneumatic drills to manipulate materials located on site. As a result, the design and construction of the trails within the High Peaks Trail System exhibit many characteristics of the naturalistic and rustic design styles, including the simple appearance of the trails that blends into the surrounding natural landscape through the carefully selected alignment that conforms with the topography, the use of native rock and vegetation to blend rock cuts and fill slopes into the landscape. These design aspects minimize the trail system’s footprint on the land and highlights the natural landscape.

Period of Significance, 1923 1942

The Pinnacles East Entrance District began with the work initiated by the first custodian of the monument and ended with the conclusion of the CCC's contribution. This period was defined as extending from 1923 to 1941. Subsequent research has discovered that the CCC continued to make significant contributions to the district all the way into the spring of 1942. This included a substantial concrete lined box culvert with masonry wingwalls located in Bear Gulch (Historic Structure #: HS22), of which the date and construction history were unknown at the time the previous CLI was written. This feature has since been attributed to the last CCC enrollment—an African American company—which remained at Pinnacles through April of 1942. This company also realigned a portion

of the Bear Gulch Caves Trail, constructing a tunnel through a solid buttress of rock to accomplish this. In order to capture these significant features and to realize the actual intent of the original CLI, this document proposes making a minor adjustment in the stated period of significance so that it now extends from 1923 to 1942 (rather than 1941).

National Historic Landmark Information

National Historic Landmark Status: No

World Heritage Site Information

World Heritage Site Status: No

Chronology & Physical History

Cultural Landscape Type and Use

Cultural Landscape Type: Designed

Current and Historic Use/Function:

Primary Historic Function: Hiking Trail

Primary Current Use: Hiking Trail

Other Use/Function	Other Type of Use or Function
Leisure-Passive (Park)	Both Current And Historic
Outdoor Recreation	Both Current And Historic
Government-Other	Both Current And Historic

Current and Historic Names:

Name	Type of Name
High Peaks Trail	Both Current And Historic
Condor Gulch Trail	Both Current And Historic
Bear Gulch Caves Trail	Both Current And Historic
Moses Spring Trail	Both Current And Historic
Chalone Peak Trail	Both Current And Historic
Rim Trail	Both Current And Historic
High Peaks Cut-Off Trail	Both Current And Historic
Steep and Narrow Trail	Current
Tunnel Trail	Current
Juniper Canyon Trail	Current
Wall Trail	Current
High Peaks Loop Trail	Historic
Fingers Foot Trail	Historic
Bridle Path	Historic
Cave Loop Trail	Historic

Chronology:

Year	Event	Annotation
AD 1908	Established	On January 16, Pinnacles National Monument was established on 2,080 acres in southern San Benito County.
AD 1916	Planned	The newly-established National Park Service assumed responsibility for managing Pinnacles National Monument.
AD 1922	Built	The first Bear Gulch Trail was completed by park caretakers Herman Hermansen and Viggo Petersen from the latter`s auto campground on Chalone Creek to the meadow in Bear Gulch where the lodge and headquarters were later located.
AD 1924	Built	Herman Hermansen and Zotic Marcott, the park's chief ranger, completed an extension of the trail through the upper reaches of Bear Gulch. It began in the present headquarters area and followed portions of the following alignments: the Moses Spring Trail, the Wall Trail, the High Peaks Trail, and the Rim Trail. It went at least to the upper end of the reservoir but may have continued as far as the west side of the mountains to the road in Stonewall Canyon.
	Built	Hermansen and Marcott construct rudimentary trails through the upper and lower Bear Gulch Caves. The trail was not continuous between the two cavern systems.
	Developed	While working on the Bear Gulch Trail, Hermansen and Marcott discovered and developed Moses Spring. They excavated a shallow pool at the base of the wall from which it flowed.
	Built	A portion of the Condor Gulch Trail was constructed by Hermansen and Marcott from Bear Gulch to an undetermined point somewhere below the top of the ridge.
AD 1925	Built	The first road up Bear Gulch was completed on April 19, 1925 with county funds.
	Demolished	The Bear Gulch Trail was partially destroyed by construction of the new Bear Gulch Entrance Road. The rest was presumably abandoned.

	Built	Herman Hermansen and Viggo Petersen constructed a lodge and campground in Bear Gulch at the top of the new road.
AD 1928	Planned	Thomas Vint, NPS Architect, prepared the first Development Outline for Pinnacles, which included a plan for trail development.
AD 1932	Built	The Caves Loop Trail was completed by park staff. This included masonry stairs and steel pole railing in the Bear Gulch Caves. The trail through the caverns was now continuous.
AD 1933	Built	The High Peaks Trail was constructed by park staff, with all but a short segment on the west side of Hawkins Peak (now part of the Tunnel Trail) completed. The original loop included the present Condor Gulch Trail, which originated behind the horse barn (park # 202; LCS # 7394) rather than in the Bear Gulch parking area as it does now.
	Built	The 120 foot tunnel on the west side of the High Peaks was completed. Originally part of the main High Peaks Trail, this became part of the Tunnel Trail.
	Built	The bridge on the west side of the High Peaks was completed. Originally part of the main High Peaks Trail, it became part of the Tunnel Trail.
	Built	The Fingers Foot Trail (now called the Steep and Narrow) was completed. This included installation of steel pole railing.
	Inhabited	The CCC camp on Chalone Creek was occupied by the first group of enrollees at the beginning of November.
	Built	The CCC completed the remaining 1,500 foot segment of the High Peaks Trail (now the Tunnel Trail) on the west side of Hawkins Peak.
	Built	The CCC constructed a new road approximately 1/3 mile in length up Condor Gulch to a proposed utility area, requiring the realignment of the existing High Peaks Trailhead.

	Moved	The High Peaks Trailhead was moved to the bottom of Condor Gulch and the trail extended about 1/3 mile along the north side of the canyon in order to separate hikers from the proposed utility area and road.
AD 1934	Built	The CCC completed a new segment of the High Peaks Trail, beginning at a trailhead on Chalone Creek opposite the CCC camp and joining the existing High Peaks Trail on the north shoulder of Hawkins Peak. The trail was approximately 2.2 miles in length.
	Altered	With the completion of the new High Peaks Trail segment, the Condor Gulch segment became a secondary spur and was renamed the Condor Gulch Trail.
	Built	A wooden footbridge was constructed across Bear Gulch Creek on the Cave Loop Trail a little below the caves.
AD 1935	Built	The CCC completed the first version of the Bear Gulch Dam. It was an unadorned reinforced-concrete structure standing 24 feet in height.
	Built	In September, the CCC completed the High Peaks Comfort Station (park # 400; LCS #23050), located at Junction Saddle on the High Peaks Trail.
	Built	In July, the CCC completed the North Chalone Peak Fire Lookout Tower (park # 402; LCS # 444168).
	Inhabited	A small CCC camp was established near the top of Chalone Peak. It was occupied for the duration of construction on the Fire Lookout.
AD 1935 - 1936	Altered	Work began on raising the height of the Bear Gulch Dam by approximately 14 feet.
AD 1935	Built	A wooden trail bridge was constructed to convey hikers on the Chalone Peak Trail across the chasm above the Bear Gulch Dam.
	Built	The Rim Trail was constructed along a portion of the original alignment established in 1924.

	Built	The High Peaks Cut-Off Trail was constructed. It was approximately 1,000 feet in length and became part of the main route of the High Peaks Trail through Bear Gulch.
AD 1936	Built	The Chalone Peak Trail was completed early this spring. Work began in January of 1935, and the trail was finished from the Bear Gulch Dam to the top of North Chalone Peak by the following month. An extension to connect this trail with the Cave Loop Trail, however, took much longer and was not finished until early the following year. It included more than fifty steps cut directly into the rock wall beside the dam.
	Demolished	The wooden trail bridge over the Bear Gulch Dam was demolished after the dam was raised to a height sufficient for the parapet to serve as the trail grade.
AD 1936 - 1937	Inhabited	The small CCC camp was re-established near the top of Chalone Peak. It was occupied from the fall of 1936 through the spring of 1937.
AD 1936	Altered	Improvements were made to the Fire Lookout with the construction of a 3,000 gallon cistern, located in the basement, and installation of pipes to convey rain water from the roof gutters.
	Built	A small rustic-style pit toilet (park # 403; LCS # 23051) was constructed next to the Fire Lookout.
	Built	The Chalone Peak Trail was extended from the Fire Lookout to the top of South Chalone Peak. About half of the 1.6 mile distance was constructed while the remainder was only brushed.
AD 1937 - 1942	Altered	Work began on facing the Bear Gulch Dam with native stone quarried from nearby sources. This project would continue for the duration of the CCC period at Pinnacles.
AD 1938	Built	An electrical system was installed in the Bear Gulch Caves to power a string of lights, replacing the older system of kerosene lanterns. The electricity was supplied by an 800 watt gasoline-powered generator located on a ledge above a natural skylight in one of the caverns.
AD 1942	Altered	A short section of the Bear Gulch Caves Trail just below the caves entrance was realigned.

	Excavated	A short tunnel was cut through solid rock to accommodate the trail realignment.
	Removed	Following the realignment of the Bear Gulch Caves Trail, the wooden footbridge which originally took hikers across the creek was removed (or possibly just abandoned). The stone supports still exist.
	Abandoned	The CCC camp on Chalone Creek was closed in April of 1942 and shortly afterward the entire CCC program ended.
AD 1952	Built	A new North Chalone Peak Fire Lookout Tower was constructed by park staff to replace the original tower destroyed by fire in 1951.
AD 1958	Land Transfer	San Benito County conveyed a quarter-section parcel to the NPS.
AD 1962	Built	The earliest segment of the Bench Trail was completed about this time. It connected the Chalone Creek Campground Annex (and the High Peaks Trailhead) with the Bear Gulch Entrance Road. Ten years later, it would be realigned to connect with the Bear Gulch Trail.
AD 1964	Built	The Balconies Cliff Trail was completed at the beginning of this year. It passed through the land recently acquired from the county.
AD 1972	Built	The Bear Gulch Trail was completed. This trail ran up Bear Gulch, connecting the Bench Trail on Chalone Creek with the Headquarters Area and Visitor Center.
AD 1976	Built	The Juniper Canyon Trail was completed in June.
AD 1978	Built	The second extension of the Bench Trail was completed this year. It connected the Bear Gulch Trail (at the bottom of Bear Gulch) with the the Pinnacles Ranch Campground under construction.

AD 1983	Built	Gates were installed at the entrances to the Bear Gulch Caves and the cave system was closed for more than a year following storms of 1982-83. The caves reopened in 1985. Monitoring potential movement of the talus boulders using an extensometer began that year and continues to present.
AD 1985	Built	The South Wilderness Trail was completed by the end of the 1980s.
	Built	The North Wilderness Trail was completed by the end of the 1980s.
AD 1988 - 2008	Built	Short access trails were built to most of the major climbing walls in order to mitigate damage to surrounding habitat.
AD 2003	Altered	With seasonal closure of the caves to protect the Townsend Big-Eared Bats, additional gates had to be installed in the caves and a 200 foot segment of trail constructed to access an intermediate exit point.
AD 2006	Demolished	The Old Pinnacles Road above the CCC camp site was removed between 2003 and 2006.
	Naturalized	The floodplain and stream channel through which the Old Pinnacles Road had previously passed were restored to natural conditions and revegetated and a foot trail was created on the old roadbed.

Physical History:

Period I: Early Trail Work Under Hermansen's Custodianship, 1923-1925

The earliest trails constructed in Pinnacles National Monument were put in by the first custodian, Herman Hermansen, between 1923 and 1925. Hermansen had been active in the area since 1921, a few years before being appointed custodian. He and a group of like minded friends, all veterans of the recent war in Europe, had homesteaded land just outside the monument boundary and were managing Pinnacles on an informal, voluntary basis. In doing so, they filled a significant void, for the monument at that time had no formal staff, though the National Park Service had nominally been in charge of Pinnacles since 1916. On account of their stewardship, Hermansen and his friends became known locally as the "Pinnacles Boys." At first, their activities were limited to guiding the visitors through the unimproved, rugged landscape, but eventually they began brushing out rudimentary trails as well. This work may have begun as early as 1922 but was definitely underway by 1923. [1]

Probably the earliest trail to be put in by Hermansen ran up Bear Gulch from the bottom of the canyon. This trail originated in an auto campground which one of the Pinnacles Boys, Viggo Petersen, had established on the broad flood plain of Chalone Creek at the mouth of Bear Gulch. At the time, Petersen's campground was as close as an automobile could easily get to the Pinnacles, for the road above this point ran through deep sand or along a cobbled creek bed and was barely drivable. [2] Hermansen also hoped to encourage visitors to enter the monument through Bear Gulch rather than continuing north up Chalone Creek to the Old Pinnacles, because the latter was controlled by a mining company (the Copper Mountain Mining Company) which had fenced off the entrance and was charging an admission for the right to pass. This company also controlled access on the west side of the monument along the road from Soledad. The trail which Hermansen and Petersen built allowed visitors to avoid the mining company's lands and enter the monument at the top of Bear Gulch without paying a fee. It also brought visitors to the Little Pinnacles, a previously unknown part of the monument, where dramatic features like the Bear Gulch Caves rivaled the scenic interest of the better known Old Pinnacles area. These efforts by Herman Hermansen, Viggo Petersen and the other Pinnacles Boys represented the earliest development in Bear Gulch and established a precedent for making this area the center of monument activities as well as the hub of the future trail system.

Late in 1922, after learning that the Park Service wanted to abandon Pinnacles National Monument, Hermansen wrote to the Director in Washington, DC and asked to be appointed custodian. [3] His application was accepted and plans for abandoning the monument were temporarily forgotten. As custodian, Hermansen was able to obtain a small budget allotment, which he used to begin developing visitor facilities and trails. Probably his greatest effort was devoted to raising county support for a road up Bear Gulch. When this was completed in April, 1925, visitors could finally drive to the edge of the monument about half way up the canyon—at that time, the eastern boundary lay just above, or south, of Condor Gulch at the upper end of the present parking area. The new road followed a portion of the original trail from Petersen's campground, obliterating much of it, but the trail was no longer needed, since Petersen moved his operation to the top of the road and established a new campground just outside the

monument boundary. He and Hermansen also built a simple lodge and several cabins here. [4]

While this work was underway, Hermansen and the other Pinnacles Boys began constructing the first trails inside the monument. Although Hermansen had no training in Park Service design standards, he acquainted himself with at least the basic principles of the rustic style on his own initiative, a fact which was later acknowledged by the Washington Directorate. [5] His work is seen as an early example of rustic style design at Pinnacles and is continuous with later, more formal, expressions of it by the NPS. The most important of these was the Bear Gulch Caves Trail. This began just above the lodge on the north side of Bear Creek and followed very closely the alignment of the present trail to the Bear Gulch Caves. Hermansen was able to make only minor improvements in the caves themselves and was not able to connect the lower caverns with the upper ones, so his trail remained discontinuous. Hermansen also cut an alternate route which crossed to the north side of the canyon just below the entrance to the caves, following the route of the present Discovery Wall Trail north and then looping back south to follow the route of the Rim Trail to the top of the canyon. How far Hermansen actually took this trail beyond that is not clear, though he later proposed bringing it over the saddle below Scout Peak and down to the west side of the monument. It was while constructing this trail that Hermansen first discovered Moses Spring and dug out the pool at its base. [6] Hermansen also cut an improved trail up Condor Gulch a short ways, but again, how far is not clear. He intended to bring this trail to the top of the ridge and then back south in a loop that would follow approximately the same alignment as the present High Peaks Trail. Though he was never able to develop this ambitious trail, he did brush it out and would guide visitors along the route. [7]

Herman Hermansen was replaced as custodian by W.I. Hawkins in September, 1925 before he was able to complete the entire trail system he originally proposed. [8] Little if any physical trace remains of the trails he did construct, which have largely been obliterated by subsequent development. However, the alignments he established are still followed, more or less, by several important trails developed later during the period of significance and still used today. These include the Bear Gulch Caves Trail, the lower half of the Moses Spring Trail, the Rim Trail, and a portion of the Condor Gulch Trail. Much of the present High Peaks Trail also follows an alignment first established by Hermansen. The Bear Gulch Trail, which was constructed in 1972 to connect the Bench Trail on Chalone Creek with the Bear Gulch developed area, follows the alignment of the earliest trail which Hermansen and Viggo Petersen built from Petersen's campground in 1922 or 1923, at least for its lower half.

Period II: NPS Trail Work Under Hawkins' Custodianship, 1929-1933

Between 1925 and 1928, no trail construction and little other work of any kind was done at Pinnacles. This lack of activity is unusual, given that the NPS budget was growing substantially during the period, and major infrastructure projects—including roads and trails—were being initiated in parks throughout the west. After a favorable response to Director Stephen Mather’s testimony before the House Committee on Public Lands, Congress passed the Roads and Trails Act in 1924, appropriating approximately $7.5 million in park construction funds over the next three years. [9] But Pinnacles was largely overlooked during this period of growth, because the Park Service remained unconvinced that Pinnacles met the criteria of a national

park unit and was considering transferring the monument to the state park system. [10] Much of this uncertainty was owing to the continued monopoly of the Old Pinnacles by the Copper Mountain Mining Company, which the Park Service had not been able to evict despite aggressive litigation. Until these issues could be resolved, Washington would commit no more than was necessary to bring existing facilities up to acceptable standards—sanitary improvements to comfort stations and water supply systems, for example—but not to expand the monument's infrastructure beyond its current extent. Nevertheless, in January of 1928, Chief Landscape Engineer Thomas Vint from the Park Service's recently-established Western Field Headquarters visited Pinnacles to propose a simple development outline. Vint spent only one day (if that), and his outline was rudimentary—only one typed page—but it represented the earliest master plan ever prepared for Pinnacles. Among other things, it proposed that a High Peaks Trail be constructed which would constitute the backbone of any future trail system. Vint also recommended approximately two miles of spur trails connect with this central loop. [11]

Encouraged by Vint's recommendations, Custodian Hawkins wrote to Washington a few months later requesting funds to implement the proposed developments. He noted that the most urgent need of the Pinnacles just then was the High Peaks Trail, which he estimated would cost approximately $5,000.00 to put in. Still uncertain about the fate of Pinnacles, Washington demurred for the remainder of the summer, but finally agreed to increase the roads and trails allotment for the 1929 fiscal year. Though only a small appropriation, this represented the start of a nearly-continuous period of development lasting until the outbreak of World War II. The majority of the monument's physical infrastructure, including most of its trails, was built during these years. Washington's decision was soon justified when the state announced a few months later that it would have no funds to spare from its limited parks budget to acquire Pinnacles. This meant that, unless the National Park Service managed Pinnacles, nobody would. The question of abandoning the monument never again came up, and Washington's commitment to retain Pinnacles within the national park system would remain solid from this time forward. [12] In preparation for the anticipated trail work, Associate Engineer A.B. Lewellen of the San Francisco Field Headquarters visited Pinnacles during the fall of 1928 to develop a trail construction outline. Following Vint's recommendation that a High Peaks loop should constitute the backbone of the monument's trail system, Lewellen proposed an eight mile trail that would begin in the Bear Gulch headquarters area and follow the route which Herman Hermansen had brushed out up Condor Gulch to the summit of the Little Pinnacles at Hawkins' Peak. From here, the trail would descend the west side of the ridge to the Chaparral Picnic Area, then continue south past Lone Oak Spring and up Juniper Canyon to the upper reaches of Bear Creek, just over a low saddle at the top of Juniper Canyon. Then it would turn east and follow Bear Creek back to the park headquarters, skirting the Bear Gulch Caves along the south and east sides of the canyon. [13]

Construction began almost immediately on the Condor Gulch end of the proposed loop under the supervision of Fred Prewett, a local rancher from nearby Bear Valley. (Prewett continued to work as a trail foreman at Pinnacles for several years and became highly respected for his skills). [14] In January of 1929, Associate Engineer Charles E. Randels visited Pinnacles to inspect the ongoing work and observed that Prewett's crew was doing a high quality job. He

noted that the trail had been designed for horses and was being cut from 48 to 60 inches wide on a level prism. Randels told Prewett it need only be 42 inches wide and suggested dropping the prism six inches on the bank slope to create a guttering effect to channel water down the inside of the trail. He also offered a few suggestions to help speed the flow of work, which Prewett immediately implemented. Randels was concerned that only $2000.00 had been allotted for this job, which was enough to keep the trail crew working six eight hour days for about another month but not enough to finish the job. By the end of the season, work had not even reached the top of the ridge. [15]

Later that year, Assistant Engineer Allison van V. Dunn visited Pinnacles to prepare a comprehensive report on the condition of the monument's existing facilities and its future needs. [16] During his visit, Dunn inspected the ongoing trail work and recommended changing the route originally proposed by Associate Engineer Lewellen. While acknowledging that Lewellen's proposal would cover the largest area of land then encompassed by the monument, Dunn noted that this alignment failed to take advantage of the landscape's most scenic opportunities. He suggested that the trail not descend to the West Side from Hawkins' Peak but instead continue south along the top of the ridge as far as Scout Peak and then descend back into Bear Gulch, avoiding Juniper Canyon altogether. This suggestion was adopted and represents the alignment that was ultimately constructed. Dunn also recommended improving the trail through the Bear Gulch Caves. This would require installing concrete steps and a handrail so that visitors could safely hike the entire cave system without resorting to the use of a rope. [17]

Work continued in fits and starts as money became available. Further complicating matters and delaying progress was the lack of adequate equipment. Up until 1930, Pinnacles had had to borrow an air compressor to run the pneumatic drills needed for cutting and breaking rock. Since the compressor had to be returned, it could not be left on the job site between work periods, and much valuable time was spent moving this heavy equipment back and forth. This problem was finally solved when Pinnacles acquired its own air compressor later that year. The absence of local accommodations for the work crews was another time-consuming problem, since the men had to stay on ranches at least five miles distant and ride back and forth each day between the job site and their evening residence. This situation had also improved by 1930, when the monument acquired Viggo Petersen's homestead in Bear Gulch, and the men were able to stay in the lodge he and Hermansen had built.

With the pace of work gradually improving, the High Peaks Trail up Condor Gulch was finally completed to Hawkins' Peak by the summer of 1930. [18] By early 1931, Construction Supervisor John H. Diehl reported that the concrete steps on the Bear Gulch Caves Trail were also largely done and a steel-pole handrail had been installed. He also reported that work had been started on a Cave Loop Trail, which would run along the west side of Bear Gulch by Moses Spring and allow hikers to return from the top of the caves back to the lower end of the Caves Trail without retracing their steps through the caves themselves. (This trail, or at least the upper half of it, is now called the Moses Spring Trail). The Cave Loop Trail and the remainder of the High Peaks loop had both been staked out when Diehl made his report, but construction had not yet commenced on either. (At this time, the High Peaks Trail had only

been completed from Condor Gulch to a point just south of Hawkins Peak along the ridge of the Pinnacles). [19]

In September of that year (1931), Director Albright increased Pinnacles' allotment by $8,000.00 in order to finally complete the High Peaks Trail. Work now proceeded at both ends with two crews building toward each other. By May of 1932, however, the money had run out and the two ends had still not been connected. Hawkins wrote to Washington and requested more money. To his surprise, he received notice within only a couple of days that Pinnacles' trail allotment had been increased by another $5,000.00. Hawkins was ecstatic. The amount was less than the engineers at San Francisco estimated would be needed, but Hawkins was by now so confident in his trails foreman, Fred Prewett, that he believed they would not only be able to finish the job within budget but do so to the highest possible standard. [20]

Unfortunately, the High Peaks connection proved more difficult than Hawkins had anticipated. One of the chief obstacles between the two unfinished ends of the trail was the Fingers, a single peak with multiple spires and sheer sides that offered no ledge or easy gradient along which a trail could be cut. Even as Hawkins was bragging about his trail crew's ability to move mountains, the engineers at San Francisco were beginning to realize that they might have to do just that. A.J. Burney, acting chief engineer for Frank Kittredge of the San Francisco Field Headquarters, prepared plans for a 120 foot tunnel that he proposed to bore through this stubborn obstacle. His justification for this costly expedient is illuminating:
“This proposed tunnel was decided upon by Mr. Kittredge and Mr. Hawkins, and approved by the landscape architects to carry the [High Peaks] trail through a very abrupt peak in the high portion of the area through which this trail will pass ... The construction of this tunnel will eliminate what would otherwise be a very noticeable scar on the mountainside, as it would be necessary to carry the trail around this abrupt peak by benching in and using the half tunnel method of construction for a considerable distance.” [21]
The principle purpose of the tunnel was to preserve the scenic integrity of the landscape by avoiding any measures which would draw undue attention to the trail. This was consistent with the rustic-style ideal of blending construction into the surrounding environment (or disguising its presence). As Burney indicated, Hawkins was aware of the tunnel proposal and agreed that it was necessary, but he obviously did not appreciate the time and expense it would add to the project. The tunnel and associated concrete bridge which spanned the chasm at one side were completed by the end of the 1932 calendar year. But the added time required to build these structures prevented the full completion of the High Peaks Trail by the end of the work season as Hawkins had desired. Approximately one quarter mile of steep switchbacks just west of Hawkins Peak and north of the new tunnel remained unfinished, though a rudimentary path had been roughed in, and the trail was passable. [22]

At the same time that work began on the High Peaks tunnel early in 1932, an alternate route around the Fingers was also selected, and work had commenced on both projects simultaneously. The main trail, which would pass through the tunnel on the east side of the peak, was designed to accommodate horses, (as was the rest of the High Peaks Loop Trail). But the alternate route, which would run along the east side of the Fingers, was designed to accommodate only hikers on foot. (It was originally called the "Fingers Foot Trail" and is now

known as the "Steep and Narrow" by the monument's trail crew). The engineers decided to construct the trail because of the spectacular scenery it made available and because the route was already being used by adventuresome hikers equipped with ropes. Much of the finished trail consisted of shallow steps carved into solid rock. Metal handrails were installed to make the route safer. [23]

By Spring of 1933, Pinnacles' core system of trails was essentially in place, except for the quarter mile segment west of Hawkins Peak. In a little over four years, three important trails had been constructed—the Cave Loop Trail, the High Peaks Loop Trail, and the Fingers Foot Trail. This completed the system proposed by Thomas Vint in his 1928 development outline. Visitors accessed either loop from a single trailhead just south of the lodge in Bear Gulch near the present picnic area. This represented one end of the High Peaks Trail (the other was in Condor Gulch about a quarter mile north of the lodge). The Cave Loop Trail was a separate spur off the High Peaks Trail which left the latter shortly after it crossed Bear Creek to the west side of the canyon. Hikers would proceed from this junction directly to the entrance of the lower caverns. From here, they could now walk through the entire cave system, climbing concrete steps to negotiate the more difficult parts of the subterranean passage. After emerging from the top of the upper cavern, hikers would return along the east side of Bear Gulch, then cross their original path through the caves, climbing to the west side of the canyon, and return—passing Moses Spring—to the High Peaks Trail at a second junction a little ways above the point where they began. The entire loop was actually a figure eight, allowing hikers to experience not only the caves but the dramatic scenery of Bear Gulch from the alternating perspectives of both walls.

Visitors who wanted a much longer hike with even more dramatic scenery would continue up the High Peaks Trail beyond the Cave Loops detour and climb steep switchbacks to the top of the ridge at Junction Saddle just north of Scout Peak. Here they could either turn right to follow the narrow Fingers Foot Trail cut into the rock on the east face of the formation, or turn left to follow the Bridle Path along the west side of the High Peaks, passing through the long tunnel and bridge which brought them to the back of Hawkins Peak just north of the Fingers. Here the two trails rejoined and, skirting Hawkins Peak to the north, doubled back to descend Condor Gulch and return to the lodge area a short distance from where the trail began. Except for a few local modifications, these alignments remain essentially the same today and are still in use, although in several instances the name of a trail or trail segment has changed, making it difficult to recognize the correlation between the historic and the present trail system. The only significant realignment to occur after 1933 was made on the lower portion of the High Peaks Trail in Bear Gulch when a short tunnel was cut through a pilaster of solid rock protruding from the east side of the canyon. Prior to the construction of this tunnel, the trail had to cross Bear Creek over a small bridge and climb a little ways up the west side of the canyon to the first junction of the Cave Loop Trail. The new tunnel made it possible for the trail to continue along the east side of the canyon and reach the Cave Loop junction in a more direct fashion. This change was probably made early in 1942, but records of the actual construction have been lost. [24] The only other realignment of note was the movement of the High Peaks Trailhead in Condor Gulch to its present location near the Bear Gulch parking area. This was done in the winter of 1933 when work on the utility area began. Most of this work involved simply

lengthening the existing trail and only minor modifications were made to its alignment.

Period III: Trail Work by the Civilian Conservation Corps, 1933-1942

Not long after work ceased on the High Peaks Trail in the spring of 1933, park staff learned that the monument would soon be host to a Civilian Conservation Corps camp, with over 200 young enrollees scheduled to arrive that fall. The Civilian Conservation Corps (CCC) was probably the most famous of President Franklin Delano Roosevelt's Depression era unemployment relief programs. It was designed to provide work experience and job training in a disciplined environment for young men between the ages of 18 and 25. Enrollees lived in military style camps under Army supervision for a period of six months at a time. (Each period was called an enrollment, and enrollees could sign up for successive enrollment periods until they reached the maximum age). Camps were generally located on public lands and work programs administered by the National Park Service or the Forest Service. The work was originally intended to be forestry in nature, with vegetation management and fire suppression the principal responsibilities, but the enrollees eventually undertook many light construction projects as well, ranging from trails to small buildings and even dams. These were generally carried out in a rustic style, with the emphasis on manual labor characteristic of the CCC program lending itself well to the craftsmanship ideal of this design tradition. Under Park Service supervision, the CCC continued many of the rustic style projects which had originated during the previous decade of national park development and did much to advance the rustic style itself. So considerable was their contribution that in later years the CCC are often better remembered for their rustic style construction than for the forestry and landscape conservation which actually comprised the bulk of their activities. [25]

Among the many construction projects the CCC undertook, trail building figured prominently in just about every park and monument throughout the country. Pinnacles was no exception. Between the fall of 1933 and spring of 1942, the enrollees worked on approximately 12 miles of 4 foot wide bridle paths and 3 miles of 2 foot wide hiking trails. [26] Some of this mileage was new construction, but the majority was improvement of existing trails. Much of the construction done during the previous four years by Fred Prewett's trail crew was incomplete and lacked such important details as retaining walls, bumper rails and other masonry structures. With Fred Prewett still supervising much of the work (along with at least three other crew bosses), the CCC enrollees added or enhanced these features. Park Service engineers and landscape architects closely directed the work to ensure that it adhered to the principles of rustic style design. Great care was taken, for example, when laying stone to avoid excess uniformity so that the finished work harmonized with its natural surroundings and did not appear artificial. This often meant departing from earlier precedent, so that, in general, the CCC work appears more irregular—more rustic—than the rustic style stonework installed between 1929 and 1933. In many instances, when stonework from the previous period of construction did not meet the more rigorous standards of the supervising landscape architect or engineer, the CCC would replace it. This makes the dating and attribution of specific features often confusing along some of the older trails. [27] See figure 1 at the end of this subsection.

Soon after their arrival at Pinnacles in early November of 1933, the first group of CCC enrollees were divided into details and lined out on a variety of jobs. One detail began cutting

and removing dead brush and snags from a large area of the monument which had burned in 1931. Another was assigned to trail construction. This group first began working on the 1,500 foot segment of the High Peaks Trail between the head of Juniper Canyon and Scout Peak which had yet to be connected when funding had run out the previous spring. One air compressor had been left on site by the last work crew, but the enrollees hauled a second compressor up Condor Gulch so two crews could work from both ends of the unfinished segment simultaneously and meet in the middle. Work was completed and the trail open by December.

The CCC also began laying out a new utility area at the bottom of Condor Gulch during the winter of 1933. A landscape architect from the Branch of Plans and Design in San Francisco had discussed the possibility of developing this site with Custodian Hawkins in October, and plans had already been prepared for the first building, a rustic style stone equipment shed. [28] At that time, a single lane dirt road extended about a quarter mile up Condor Gulch to the original High Peaks Trailhead. Beginning in November, a crew of about 20 CCC enrollees commenced re grading this road, adjusting its alignment slightly, and surfacing it with gravel. At the upper end, where the canyon broadened slightly into a level plateau, they graded a circular building court for the proposed utility area. The High Peaks Trailhead was moved to its present site opposite the Condor Gulch Comfort Station (park # HS17; LCS # 267612), and a new trail segment was constructed paralleling the utility area road along the northeast hillside. These improvements were mostly finished by the end of the calendar year. While this work was going on, the majority of the enrollees were constructing an entirely new trail on the northeast side of the Little Pinnacles. This trail originated on Chalone Creek just opposite the CCC camp and climbed a shoulder of Hawkins Peak for about 2.2 miles until it met the existing High Peaks Trail at the top of Condor Gulch. Once finished, this new route became part of the main High Peaks Loop, while the segment of the original High Peaks Trail which ran down Condor Gulch became only a connecting spur and was redesignated the Condor Gulch Trail. The new trail was one of only four additions the CCC would make to the existing trail system at Pinnacles; the others were the Chalone Peak Trail, the Rim Trail, and the High Peaks Cut Off Trail). A further extension of the High Peaks Trail, which would bring the westernmost end to the top of the Cave Loop Trail in Bear Gulch, was also proposed at this time, but work would not begin until the following enrollment period. [29]

At the conclusion of the CCC's first season at Pinnacles in March, 1934, Assistant Landscape Architect J. Haslett Bell visited the monument to report on the year's progress and discuss ideas for the following year with Resident Landscape Foreman Francis Lange. Bell's report was, in fact, a summary of a comprehensive Master Plan which was then being developed by his office at the Branch of Plans and Design in San Francisco. As Pinnacles' first such Master Plan, it would be ready later that year. Among other things, Bell recommended extending the existing trail system with construction of a bridle path to Chalone Peak, where a fire lookout had already been proposed. (He suggested that a temporary tent camp, called a spike camp, be established somewhere in the High Peaks to make this work easier—the wearisome experience of trudging up and down the ridge during the winter of 1933 34 when the High Peaks Trail was being completed had no doubt recommended this idea to project foremen). Bell also considered building a trail from the High Peaks down Juniper Canyon but proposed no

other development on the West Side until litigation with the mining company had been fully resolved and the Park Service had gained access to the Old Pinnacles. Once this happened, Bell and his colleagues expected that a road which had been started earlier that season under a Civil Works Administration (CWA) grant would be extended through the Old Pinnacles Gorge, making the West Side more easily accessible to development. [30] (The CWA was a short lived New Deal program, in existence from November of 1933 to March of 1934, which created construction jobs for unemployed skilled laborers. Most of the New Deal work completed in Pinnacles occurred through the CCC, not the CWA.)

* * *

During the 1934 35 winter season (the fourth enrollment period), the CCC made several important contributions to the historic district under consideration here. Two of the largest projects initiated during this period were the Bear Gulch Dam and the Chalone Peak Fire Lookout. The dam had been proposed the previous year—J. Haslett Bell had mentioned it in his final report for that season—and was funded through a Public Works Administration grant. The Public Works Administration (PWA) had been established with the passage of President Roosevelt's National Industrial Recovery Act in 1933 and was essentially a lending agency, charged with disbursing $3.3 billion in federal funds to local governments for jobs on which eligible but unemployed laborers could be put to work. The program was active at Pinnacles during the same years as the CCC and provided opportunities for many local residents to find skilled work on construction projects at the monument, often working side by side with the younger CCC enrollees. The Park Service had learned that it could combine the CCC and PWA programs to take advantage of the benefits of each and circumvent their respective limitations. The CCC provided subsidized labor but little funding; projects were actually capped at $1,500.00 per structure. Funding for the PWA, on the other hand, was theoretically unlimited, though parks had to compete for the money, and once an allocation was made, the project had to be kept within this limit. But a PWA allocation could be stretched much further if CCC labor was used for the unskilled part of a project to assist the skilled PWA laborers. Many of the larger or more complex construction projects at Pinnacles were done in this fashion, the Bear Gulch Dam being one of the best examples. [31]

The principal purpose the Bear Gulch Dam (park # HS1; LCS #7395) was to store water for fire suppression in the Bear Gulch developed area, though there is some evidence that it was planned for scenic purposes as well. Both justifications are mentioned in the assistant landscape architect's report on the proposal:
“There has been some discussion and a preliminary topographic survey made relative to the possible construction of a water storage dam just above The Caves...The construction of this proposed dam seems too great an undertaking for purely esthetic purposes, but if it will stabilize and equalize the source of water supply in this area and thus obviate the necessity of pumping water up from the C.C.C. camp site at some later date, it will be an economical and worthwhile project.” [32]

Work began in the spring of 1935—probably as early as January—with the final concrete poured by the end of February. By the first week of March, heavy rains had already filled the

reservoir and water was flowing over the spillway. As initially constructed, the Bear Gulch Dam was an unadorned reinforced concrete barrier 24 feet high. The western end of Herman Hermansen's original Bear Gulch Trail was upgraded to a truck trail so that construction materials could be driven in from Soledad. Though this route is no longer maintained, traces of the old road are still extant. [33]

The other large building project started by the CCC during this period was the Fire Lookout on North Chalone Peak. This built according to a standard Forest Service design. The building measured 14 feet square, was two stories high of wood frame construction, with windows on all four sides of the upper floor and a continuous exterior balcony. The lower story was faced in native, unshaped stone. Landscaping was avoided in order to maintain the natural character of the site. The location of the Fire Lookout had been determined by February, and a dozer road was graded up the south side of the mountain to convey materials to the construction site. Following Bell's recommendation, a spike camp was established on Chalone Peak for the CCC detail which was to work on the project. The building was finished in July during the following enrollment period. [34] The original fire lookout tower burned down and was replaced in 1952 by the new North Chalone Peak Fire Lookout Tower (park # 402; LCS # 444168).

The CCC detail located at the spike camp on Chalone Peak also began work this season on a pit toilet (High Peaks Comfort Station, (park # 400; LCS # 23050) located on the High Peaks Trail at Junction Saddle (near the trailhead of the present Juniper Canyon Trail). This was a small frame structure measuring approximately 11 feet by 10 feet. It had a wood shingle, gable roof, and the walls were faced on the exterior with a veneer of squared native stone, battered out toward the base in rustic style fashion. The building was completed during the following season in September of 1935. Though simple, this structure represents a high level of craftsmanship and is an excellent example of the rustic style, small scale buildings characteristically associated with CCC trail work. [35] See figure 2 at the end of this subsection.

During this same enrollment period, the CCC also started work on three important new trails. The first and largest of these was the Chalone Peak Trail, a bridle path which ran from the top of the Cave Loop Trail to the new fire lookout at the summit of North Chalone Peak. Building this trail required extending the Cave Loop Trail a short distance above the upper cavern through a narrow, unroofed chasm and then up the side of a sheer precipice to the top of the dam, where it would connect with the new Chalone Peak Trail. In order to bring hikers up this precipice, narrow steps were cut directly into the solid rhyolite wall and a steel pole railing installed for safety. Work was underway by January of the following year—twenty steps were cut that month—while the trail to the summit of Chalone Peak, which progressed much faster, was nearly finished at the beginning of February. [36]

Also started this season was the Rim Trail, which was to connect the new Chalone Peak Trail at the west abutment of the dam to the foot of the High Peaks Trail directly above Moses Spring. This trail had been proposed the previous season as an alternative route from the lodge area to the dam site in order to make it possible for livestock to access the new Chalone Peak Trail. (The Cave Loop Trail was only accessible by foot). The Rim Trail would follow the

original alignment established by Hermansen ten years earlier but obviously abandoned by this date. The landscape foreman in charge of the project mentioned Hermansen's old trail in his description of the proposed new project:
"[The Rim Trail] would appear to be a feasible, shorter, route to the Dam site—with a possibility of utilizing portions of the present old trail, with approximately 3 switchbacks, and a maximum grade not exceeding 15%." [37]

The last new trail started during this enrollment period was the Cut Off Trail, which bridged a large loop in the lower portion of the High Peaks Trail in Bear Gulch. It left the original trail about a half mile above the lodge, crossing Bear Creek to the west side of the canyon and climbing through a series of steep switchbacks to return to the High Peaks Trail a short distance below the junction of the new Rim Trail. The entire Cut Off Trail was only about two tenths of a mile long but required considerable labor to build on account of the steep grade and the need for numerous retaining walls and other masonry features. Soon after this trail was completed, it became known as the principal and only route of the High Peaks Trail, rather than being an alternate cut off. With this change in conception, the configuration of the original Cave Loop Trail, which originated on the older part of the High Peaks Trail, was no longer evident and that name ceased to be used. The western half of the old Cave Loop Trail, the portion which ran along the canyon wall, was now combined with the portion of the old High Peaks Trail which continued above the junction of the new cut off, and this entire segment became known as the Moses Spring Trail. The eastern half of the Cave Loop Trail, the portion which ran through the caves themselves, was now called simply the Caves Trail (or the Bear Gulch Caves Trail). This change in nomenclature reflected a new circulation pattern which had been introduced with the construction of the Cut Off Trail rather than any actual realignment of the existing trails. A short segment of the original High Peaks Trail was also isolated by the new circulation pattern and now appeared to be a distinct trail running from Moses Spring to the top of the Cut Off Trail. (This was the back curling portion of the large ess shape which the old High Peaks Trail once followed as it climbed up Bear Gulch along Hermansen's original trail alignment). This short segment is now commonly known as the Wall Trail, because it skirts the base of Discovery Wall. It is currently used as a climbers' access. [38]

Although the Chalone Peak Trail was largely finished by the end of this enrollment period (the spring of 1935), the Rim Trail and the Cut Off Trail were only about half done. Both were finished in the next enrollment period by fall of that year. The extension of the Bear Gulch Caves Trail to the top of the dam was not completed until spring of 1936. This job took much longer than the others on account of the difficulty of cutting more than fifty steps into the solid rock wall. [39]

In November of 1935 (the sixth enrollment period), work began on raising the height of the Bear Gulch Dam by 14 feet. The decision to implement this modification had already been made by engineers from the Branch of Plans and Design the previous year even before the initial construction had been completed. At 24 feet, the parapet of the original dam was significantly lower than the natural abutments on either side of the chasm, where work was already underway to connect the Rim Trail with the new Chalone Peak Trail. The initial plans for this trail had proposed skirting the upper end of the reservoir and continuing from there up

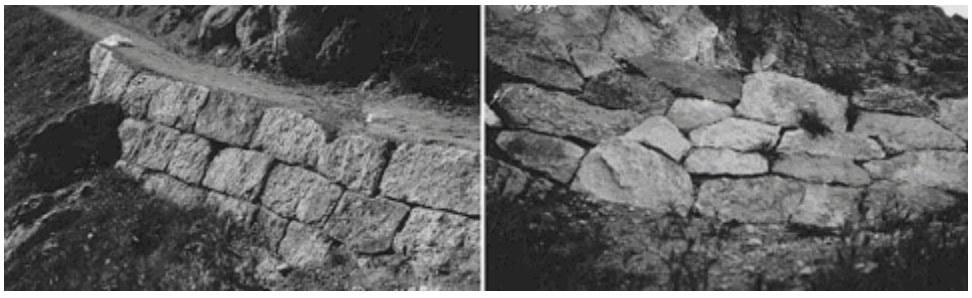
North Chalone Peak, but a more desirable solution, in the opinion of the engineers reviewing the project, was to bring the trail across the top of the dam itself. At its present height, this would necessitate a bridge, but if the height of the dam were increased another ten feet or so, the trail could utilize the parapet of the dam itself and provide a more aesthetically pleasing experience for hikers. Anticipating that this would be done, the Chalone Peak Trail had been routed directly to the dam and a temporary bridge constructed over it the previous year. Returning now to complete the project, the CCC poured 120 cubic yards of concrete during the winter of 1935 36, creating a finished dam 45 feet high and 80 feet wide along its parapet, which was surfaced to provide a walkway for hikers, and the temporary bridge was removed. When the reservoir had filled by February 1, 1937, it held approximately 40 acre feet of water, nearly triple its original size. It was also decided at this time that the exposed concrete face of the dam should be faced with native stone quarried from adjacent outcroppings in order to harmonize the structure with its surrounding environment in a rustic style fashion. [40] See figure 3 at the end of this subsection.

In the fall of 1936, the small spike camp on Chalone Peak was re established in anticipation of several new projects that were planned for the eighth enrollment period, which would extend through winter to spring of the following year. The camp had first been established in 1934 when the fire lookout and Chalone Peak Trail were under construction. About two dozen enrollees worked from here on three separate projects during this season. First was the construction of a 3,000 gallon cistern built into the foundation of the fire lookout to supply its occupants with water. Rainwater was collected from the roof gutters and directed into the cistern through pipes. The second project was construction of a pit toilet (Chalone Peak Comfort Station, park # 403; LCS # 23051) adjacent to the fire lookout. This was a simple wood frame structure with slightly battered, rubble stone veneer and a wood shingled, gable roof. It was similar, though smaller, than the High Peaks Comfort Station, measuring only 10 feet by 5 1/2 feet. Like the High Peaks structure, it also represents a high level of craftsmanship and is a good example of rustic style small scale construction. The third project undertaken from the CCC spike camp was the extension of the Chalone Peak Trail another 1.6 miles to South Chalone Peak. This project was only partially completed, with the trail brushed the entire distance but graded only halfway (to the bottom of the saddle between the two peaks). Work was never resumed after this season. [41] In 1979 to 1980 park staff re cleared the historic alignment of the trail all the way to South Chalone Peak.

In May of 1938, a small but important transformation was made to the Bear Gulch Caves when an 800 watt gasoline generating plant was installed. Prior to this innovation, one of the CCC enrollees' regular responsibilities had been to assist park staff in maintaining kerosene lanterns distributed throughout the caves. The new electrical system made it possible to keep the caves lighted with fewer staff, a decided advantage, especially now that the CCC had stopped working summers at Pinnacles after 1936. The generator plant was located in a separate chamber outside the main passage, so that visitors would not be disturbed by its noise. [42] The introduction of electric lights must have changed the visitor experience dramatically. They would be used up until the late 1960s, when repeated vandalism forced the Park Service to remove the system. Visitors are now required to bring flashlights when they enter the caves. [43]

After war broke out in Europe in 1939, the CCC program began to decline as budget appropriations for all non military programs nationwide were drastically cut. (The National Park Service budget was reduced by half). [44] Military enlistment also increased, drawing young men away from the CCC and making it increasingly difficult to find enough enrollees to fill all of the camps. By 1941, many camps were being closed and the entire program was having to be consolidated. [45] The CCC camp at Pinnacles would remain open but would never again have as many enrollees as it did prior to 1939, when the number frequently exceeded 200. Under these diminished circumstances, few new projects could be initiated, and most of the work done at Pinnacles by the CCC from 1939 through the end of the program in 1942 consisted of routine maintenance or continuation of ongoing work. This included, for example, facing the Bear Gulch Dam with native rock (a task which was not finished until 1976, when monument staff applied the last of the boulders which the CCC had quarried and stockpiled before leaving). [46] The only trail work of note appears to have been the realignment of the Bear Gulch Caves Trail, which is mentioned in a letter from 1942 (the completion reports have been lost). [47] This would have involved the construction of the short tunnel and rubble viaduct which are currently extant along the new alignment. The small redwood bridge over Bear Creek would have been abandoned at this time and no longer survives, though the mortared stone abutments and traces of the original trail alignment are still extant. See figure 4 at the end of this subsection.

The final season of the CCC at Pinnacles was the winter of 1941 42. All of the enrollees during this period were African Americans, a first for Pinnacles, though African Americans had participated in the CCC program from the beginning. Custodian Hawkins was extremely pleased with these enrollees and wrote enthusiastically about their good morale and hard work. Anticipating low re enrollment with the recent outbreak of war, he proposed actively recruiting more young black men from East Bay cities like Oakland, where a large African American community already resided. Unfortunately, nothing ever came of these plans. When the last enrollees left Pinnacles on April 25 and the CCC camp closed for the summer, it would never reopen. President Roosevelt terminated the program two months later. [48]



History fig. 1: Earlier masonry was often considered too uniform (illustrated in picture on left), and CCC were instructed to use irregular stones to create a more natural effect (illustrated in picture on right). [PINN Coll., PWRO].



History fig. 2: High Peaks Comfort Station under construction (1935), illustrating method of placing stone veneer over internal wood framing. [PINN Coll., PWRO]



History fig. 3: Original Bear Gulch Dam amd temporary trail bridge in 1935 before additional fourteen feet and stone facing were added. [PINN Coll., PWRO]

Conclusion: Trail Work Done After the Period of Significance

The Balconies Cliff Trail (1964)

With the conclusion of the CCC program in 1942, most of the physical infrastructure currently in use at Pinnacles was in place, and little new construction would occur. This included the trails, although several additions were later made to the system. The first of these was the mile-and-a-half Balconies Cliff Trail, which circumvents the largely unimproved route through the Balconies Caves in the Old Pinnacles. [49] This trail was important for the logistics of park management, because it helps connect east and west sides of the monument (and was the first attempt to do so). The Balconies Cliff Trail could not be built until after a 160 acre private inholding which encompassed most of the Old Pinnacles was acquired by the Park Service in 1958. Money was made available for the construction of the trail in 1963 through the Accelerated Public Works (APW) program. This was a temporary funding program authorized by Congress in 1962 in response to an economic recession. Like President Roosevelt's Civil Work Administration of 1933, the APW was meant to provide a temporary inducement to help restore local economies. The Balconies Cliff Trail was finished by the end of January, 1964, and official opening ceremonies were held that April. [50]

The Bear Gulch Trail (1972)
The Bear Gulch Trail is a small but extremely popular trail which follows lower Bear Creek from its confluence with Chalone Creek to Park Headquarters (the old lodge area) half way up the canyon. The trail was funded through a safety appropriations from the regional office and justified as a means of getting visitors off the dangerously-narrow Bear Gulch Entrance Road. This had become necessary after visitor facilities began to be moved out of Bear Gulch. By 1972, all overnight camping on the east side was located on Chalone Creek, and visitors who chose not to drive were forced to walk up the Bear Gulch road to get from their camp site to the principal trailheads in Bear Gulch. The new trail made it possible to enjoy a much safer and more pleasant hike without being disturbed by passing cars. This was actually the second trail to be built up Bear Gulch, but the first one, built by Viggo Petersen in ca. 1922, had been obliterated in 1925 with the construction of the first auto road up the canyon. Petersen's trail had been cut into the north side of the canyon about a third of the way up from the toe of the slope. The new trail followed the creek through the bottom of the canyon for most of its distance, climbing only slightly up the north wall to get around the falls where Bear Creek descends over an ancient landslide. [51]

The Bench Trail (1962-2006)
This trail comprises three parts, each constructed at a different time. The oldest section, which runs along Chalone Creek from the High Peaks Trailhead opposite the old CCC camp to the mouth of Bear Gulch, was present as early as 1965 and probably constructed in 1962 when the Chalone Creek Group Campground (the Chalone Annex) was completed just north of the High Peaks Trailhead. This early segment of the Bench Trail would have allowed campers to walk to the foot of the Bear Gulch Road along the west side of Chalone Creek. When the Bear Gulch Trail was completed in 1972, it joined the Bench Trail here, creating an uninterrupted route from the group campground to the park headquarters and visitor center (nature center) in Bear Gulch. This also allowed hikers to walk between both trailheads of the High Peaks Loop. This section of the Bench Trail from the Chalone Creek Group Campground to the Old Pinnacles Trail has been moved multiple times in response to flooding that occurred in 1977, 1983, 1995, and 1998.

The second section of the Bench Trail runs south from the beginning of the Bear Gulch Trail to the Pinnacles Campground on Sandy Creek. This segment was constructed in 1977 and 1978 in preparation for the opening of the private Pinnacles Campground the following year. As soon as this happened, the older government campground on Chalone Creek, including the group campground, was closed. This southern segment of the Bench Trail now served the same purpose as the original northern segment, allowing visitors to hike from their campground to the visitor center (nature center) and principal trailheads in Bear Gulch without having to walk along auto roads. This section of the Bench Trail was originally built on the south side of Sandy Creek. After the 1998 flood, the trail was moved to its present location. A portion of the new segment lying between the present Peaks View parking area and the fire road on Chalone Bench was later widened and surfaced with decomposed granite to make it compliant with Americans with Disabilities Act (ADA) standards. This trail portion was originally along Chalone Creek and was moved up along the bench due to the flooding taking place in 1995 and

1996. With the closure of the Chalone Creek Campgrounds, the northern segment of the Bench Trail was used far less than before but remained important for hikers as a link between the High Peaks Trailhead and Bear Gulch or the new Pinnacles Campground. [52]

The final segment of the Bench Trail was constructed after 1998 when floods that year destroyed the old Chalone Creek Group Campground and parts of the Old Pinnacles Road as well. By 2006, the road had been replaced with a foot trail and the group campground was restored to natural conditions. While this was being done, the Bench Trail was extended north from the High Peaks Trailhead through the group campground area to join the Old Pinnacles Trail just north of the trailhead parking area. The new segment crosses Chalone Creek on a wooden bridge (built 1977-1978) just before it meets the Old Pinnacles Trail on the east shore of the main channel. This footbridge was present prior to the restoration, but when it was constructed is not known. Its span was increased to 45 feet during the restoration and the deck reinforced with steel girders. See figure 4 at the end of this subsection.

The Juniper Canyon Trail (1976)
One of the most important of Pinnacles' later trails was constructed between 1974 and 1976 up Juniper Canyon on the west side of the High Peaks. [53] After the Balconies Cliff Trail, this was the only formal connection between the monument's principal east side development and its relatively neglected west side. The Juniper Canyon Trail had originally been proposed by Herman Hermansen in his 1925 trail plan. [54] It had been proposed again in 1928 by NPS engineer A.B. Lewellen during his initial reconnaissance for the High Peaks Trail. [55] Both men had appreciated the route's inherent scenic quality but also recognized its value as a means to connect the east side trail system with the relatively undeveloped west side of the monument. Lewellen also hoped to utilize Lone Oak Spring, which lies at the mouth of Juniper Canyon near the present Chaparral Ranger Station, but when it was discovered that the spring frequently dries up in the summer, plans for this extension of the High Peaks Trail system were temporarily abandoned. When the Park Service was once more able to initiate new construction for the first time after World War II with its Mission 66 program, the Juniper Canyon Trail was again proposed. Although work did not start for another ten years, the project was guided by the final Mission 66 Master Plan of 1965 and was probably the last project at Pinnacles to be implemented under the authority of this program. The Juniper Canyon Trail is approximately 1.2 miles long and was staked out during the summer of 1974. The majority of construction occurred during the spring of 1975, continuing until the summer heat had made it impossible to work in the dry soil. Construction resumed the following spring, and the trail was finished in June of 1976. [56]

The Wilderness Trails (1980s)
In 1976, a system of wilderness trails was proposed to bring hikers into some of the more remote areas of the monument. One of the principal interests driving this proposal was the hope that the ever-increasing number of visitors might be dispersed more evenly if the least-used parts of the monument were opened up for use. By this time, the majority of the monument's land area lay within designated wilderness and the only development that was permitted here under the conditions of the Wilderness Act was trail construction. These trails would not be constructed, however, like other trails in the non-wilderness parts of the

monument, but simply brushed with occasional markers installed to indicate the route. Three such trails were planned—one through the North Wilderness area, another through the South Wilderness and one up Frog Canyon to the saddle between North and South Chalone Peaks—but the last of these, the Frog Canyon Trail, was soon abandoned owing to the difficulty of the terrain. The other two trails were both completed. The North Wilderness Trail was put in during the latter half of the 1980s and remains one of the longest in the monument. It follows the north fork of Chalone Creek for most of its course, before turning south near the western boundary and descending to the Chaparral Ranger Station. This was roughly the same route which had once been considered for a cross-monument highway, though the modern hiker might find it difficult to imagine a car bumping along these remote canyons. [57]

The South Wilderness Trail was also put in during the late 1980s. [58] It originates on the Chalone Bench and follows Chalone Creek for a little over three miles to a dead-end just south of Horse Valley. This was the route followed by one of the earliest roads in the area, once used by homesteaders to connect their settlements in Bear Valley with those in Dry Lake. The original road continued all the way to the Salinas Valley through the Rancho Topo, but successive floods had all but obliterated it not long after the Park Service assumed management of Pinnacles in the 1920s. By the time this land had been added to the monument in 1976, the road had ceased to be maintained and was no longer passable. [59] Little evidence of the road remains today or of the homesteads which once lay along it.

Trail Restoration and Climbers' Access (1988 to Present)
During the last few decades, habitat protection and restoration activities have been implemented to address negative effects to the environment along the trails. In many areas around the most popular trails, the land was being eroded and denuded of vegetation as a result of hikers cutting switchbacks. The park began installing temporary fences to protect these damaged areas and in the 1980s initiated a program of revegetation. In 1991, a plant nursery was established near the Trails Office in the present Peaks View area, and a variety of native species were grown here for outplanting in the disturbed areas. [60] Another major source of habitat degradation was rock climbing, which was becoming a very popular sport by the 1970s. At Pinnacles, climbers were cutting random social paths to their favorite climbing walls and often trampled large areas where they congregated at the base of these cliffs. In 1988, monument staff began to prepare a management plan for the cliffs. Disturbed areas were targeted for revegetation, but to prevent further damage and to confine the impact to as small an area as possible, special access trails were constructed to the most popular walls, and climbers were asked to utilize only established routes. One historic trail was also realigned away from a heavily-used climbing wall in order to separate hikers and climbers in the interest of safety. While these measures required the voluntary cooperation of climbers, they appear to have been largely successful. (An associated program, also requiring the cooperation of climbers, involves the seasonal closure of some climbing walls to protect cliff-nesting raptors during their breeding season). [61]

The Old Pinnacles Trail (2006)
One of the largest restoration projects at Pinnacles in recent years has resulted in the conversion of the Old Pinnacles Road to a hiking trail (the Old Pinnacles Trail). This road was

built by the CCC between 1933 and 1938 along a pre-existing but low-standard dirt road, once used to access several homesteads further up the watershed. At that time the Park Service hoped to continue the road all the way through the monument to the west side, and the CCC were directed to build it to state highway standards. The road was only completed to the confluence of North Chalone Creek before the cross-monument highway proposal was abandoned in 1938. This improved segment of road ran along a raised viaduct which intersected the Chalone Creek floodplain for approximately three kilometers. It was closed to vehicles in 1974. Major flooding along Chalone Creek in 1998 raised suspicions that the road was having a detrimental impact on natural fluvial processes and riparian habitats and had contributed to the physical damage resulting from the floods (which included the destruction of the 1936 Chalone Creek Bridge). A four year study confirmed these suspicions and led to the decision to remove the road and restore the surrounding riparian habitat. Work began in 2003 and continued for nearly three years. More than 10,000 cubic meters of aggregate material was removed in all. Much of this was used to fill a couple of old quarries which had been used as borrow pits during the original construction of the road. (One of these quarries was also the source of the green lapilli tuff used in construction of the entrance pylons and the former Visitor Center (Nature Center, Historic Structure #: 1) in Bear Gulch). Native vegetation was also planted, and physical modifications were made to the stream channel to hasten recovery of natural geomorphology. By the end of 2006, the Old Pinnacles Road had been replaced by a hiking trail which followed the natural grade of the floodplain.

Physical History Endnotes

1. Misc. Correspondence 1920-23; and Herman Hermansen to Director, National Park Service, Aug. 27, 1925, Pinnacles Collection, RG 79, Box 336, National Archives and Records Administration, College Park, MD (NARA II); Lois Bourke, "The Pinnacles Boys" in The Bourke Engine Documentary (Sun Valley, CA: E. Coutant, 1968); Ro Wauer, "Interview with Mrs. Marcott in Hollister" typed manuscript, Aug. 12, 1958.
2. Edward K. Taylor to Franklin Lane, Secretary of the Interior, June 8, 1915, PINN Coll., RG 79, Box 336, NARA II.
3. W.B. Lewis, Superintendent of Yosemite, to Director, National Park Service, Apr. 5, 1922; and Herman Hermansen to Director, Oct. 9, 1922, PINN Coll., RG 79, Box 336, NARA II.
4. Hermansen to Director, Jan. 5, 1925, PINN Coll., RG 79, Box 336, NARA II.
5. See, for example, Hermansen to Stephen Mather (with Arno Cammerer's marginal notations), January 31, 1925, PINN Coll., RG 79, Box 336, NARA II.
6. Ro Wauer, "Interview with Mrs. Marcott in Hollister" typed manuscript, Aug. 12, 1958.
7. Hermansen to Director, Apr. 17, 1924; and Hermansen to Director, January 5, 1925. PINN Coll., RG 79, Box 336, NARA II.
8. W.B. Lewis to Horace Albright, May 5, 1925; Albright to Stephen Mather, June 2, 1925; and Arno Cammerer to Lewis, July 17, 1925, PINN Coll., RG 79, Box 336, NARA II.
9. Linda McClelland, Presenting Nature: The Historic Landscape Design of the National Park Service, 1916 to 1942 (Washington, DC: GPO, 1993), pg. 108. A small allotment from this fund was made to Pinnacles in 1925 for the extension of the Bear Gulch Road a short distance into the monument, but that appears to have been the only benefit Pinnacles derived from the roads and trails budget until fiscal year 1929. [Stephen Mather to Hermansen, Jan. 17, 1925, PINN Coll., RG 79, Box 336, NARA II].

10. Frank Kittredge to NPS Director, May 3, 1928; and Horace Albright to NPS Director, Dec. 16, 1928, PINN Coll., RG 79, Box 336, NARA II.
11. Thomas Vint, "Development Outline, Pinnacles National Monument," Jan. 15, 1928, PINN Coll., RG 79, Box 336, NARA II.
12. Custodian W.I. Hawkins to NPS Director, Apr. 19, 1928; and Horace Albright to Arthur Demaray, June 29, 1928, PINN Coll., RG 79, Box 336, NARA II.
13. A.B. Lewellen, "Reconnaissance Survey and Study for the Location of Roads and Trails in the Pinnacles National Monument, San Benito County, California, December 1928" January 10, 1929, PINN Coll., RG 79, Box 336, NARA II.
14. Fred Prewett's son, Ernie Prewett, worked on the trail crew with his father. Ernie is still alive at the time of writing and is living on the family's original homestead ranch a short distance from the monument in Bear Valley.
15. Associate Engineer Charles E. Randels, "Report on Trip to Pinnacles National Monument" February 4, 1929, PINN Coll., RG 79, Box 336, NARA II.
16. Assistant Engineer Allison van V. Dunn, "Needs of the Pinnacles National Monument" July 1, 1929, PINN Coll., RG 79, Box 336, NARA II.
17. Chief Ranger Zotic Marcott would occasionally use a rope to hoist visitors up the precipice between the caverns [Marcott to Holmes, NPS Chief Clerk, Aug. 31, 1926, PINN Coll., RG 79, Box 336, NARA II]. Dunn prepared the initial plan for the cave improvements [Allison van V. Dunn, "Preliminary Report on Stairway to Connect Upper and Lower Caves," January, 1930, Pinnacles Collection 3658, Box 9, f. 18, Pacific West Regional Office, Oakland, CA (PWRO)].
18. Col. John White, superintendent of Sequoia National Park, visited Pinnacles on August 31 of that year and described riding by horse to the top of the new trail with Custodian Hawkins [White to NPS Director, Sept. 2, 1930, PINN Coll., RG 79, Box 336, NARA II].
19. Construction Supervisor John H. Diehl to Chief Engineer Frank Kittredge, March 10, 1931, PINN Coll., RG 79, Box 607, NARA II. The trail up Condor Gulch was originally part of the High Peaks Trail and did not acquire its present name until after 1934.
20. Hawkins to Albright, May 7, 1932, PINN Coll., RG 79, Box 607, NARA II.
21. A.J. Burney, "Plan of Proposed Trail Tunnel, Pinnacles National Monument, PIN-4933," May 2, 1932, PINN Coll., RG 79, Box 607, NARA II.
22. Hawkins, "Activities of the Pinnacles National Monument for the Year 1932," December 31, 1932, PINN Coll., RG 79, Box 607, NARA II.
23. John H. Diehl, "Final Report on Trail Construction," May 10, 1933, PINN Coll. 3658, Box 5, f. 4, PWRO.
24. Surviving correspondence refers to a realignment of the trail occurring that spring. Though the tunnel is not mentioned, this was the only substantial realignment to be made on this trail. [Asst. Reg. Dir. B.F. Manbey to Director, August 10, 1942, PINN Coll. 3658, Box 5, f. 7, PWRO].
25. John C. Paige, The Civilian Conservation Corps and the National Park Service, 1933-1942: An Administrative History (Washington, DC: GPO, 1985); Harlan Unrau and G. Frank Williss, Administrative History: Expansion of the National Park Service in the 1930s (Washington, DC: National Park Service, n.d.); David M. Kennedy, Freedom From Fear: The American People in Depression and War, 1929-1945 (New York: Oxford University Press, 1999).
26. Hawkins, "CCC Work Accomplished under the Supervision of the National Park Service, November 3, 1933 to June 30, 1942," PINN Coll. 3658, Box 3, f. 20, PWRO.

27. R.L. Mills, "Report to the Chief Architect...," November 5, 1934, PINN Coll. 3658, Misc. Boxes, PWRO.
28. The Field Headquarters in San Francisco, which had existed since 1928 and provided professional support for many of the western parks, was greatly expanded in 1933 in response to the growth which had begun that year. Its staff and their responsibilities were now formally organized into a Branch of Engineering and a Branch of Plans and Design. [Vernon L. Hammons, "A Brief Organizational History of the Office of Design and Construction, National Park Service, 1917-1962" (1963)].
29. "Final Report, Emergency Conservation Work...Second Enrollment Period Oct. 7, 1933 to May 10, 1934," CCC Coll., RG 35, Box 22, NARA II.
30. J. Haslett Bell, "Report to the Chief Architect...," May 15, 1934; and R.L. Mills, "Report to the Chief Architect...," October 3, 1934, PINN Coll. 3658, Misc. Boxes, PWRO; "Emergency Conservation Work, Final Narrative Report...Fourth Enrollment Period, October 1, 1934 [to] March 31, 1935," CCC Coll., RG 35, Box 22, NARA II.
31. Paige, Civilian Conservation Corps, 39.
32. J. Haslett Bell and Landscape Foreman Francis Lange, "Report to the Chief Architect ...," May 15, 1934, PINN Coll. 3658, Misc. Boxes, PWRO.
33. Francis Lange, "Final Report to the Chief Architect...," May 13, 1935, PINN Coll. 3658, Misc. Boxes, PWRO.
34. Ibid.
35. "Final Narrative Report, Emergency Conservation Work ... Fifth Enrollment Period, Apr. 1, 1935 to Sept. 30, 1935." CCC Coll., RG 35, Box 22, NARA II; Architects' Files, Box 5, PINN Building Folders, Pacific West Regional Office, Oakland, CA (PWRO).
36. Francis Lange, "Report to Deputy Chief Architect...," Jan. 31, 1936, PINN Coll. 3658, Misc. Boxes, PWRO.
37. R.L. Mills, "Report to the Chief Architect...," Aug. 3, 1934, PINN Coll. 3658, Misc. Boxes, PWRO.
38. R.L. Mills, "Report to the Chief Architect...," Jan. 4, 1935, PINN Coll. 3658, Misc. Boxes, PWRO; "Final Narrative Report, Emergency Conservation Work ... Fifth Enrollment Period, Apr. 1, 1935 to Sept. 30, 1935." CCC Coll., RG 35, Box 22, NARA II.
39. Francis Lange, "Final Report to the Chief Architect...," May 1, 1936, PINN Coll. 3658, Misc. Boxes, PWRO. This report includes a photograph of the finished steps, though the steel pole railing has not yet been installed. A rope or cable is being used instead.
40. Francis Lange, "Report to the Deputy Chief Architect...," Feb., 1935; Lange, "Report to the Chief Architect...," March 22, 1935; Lange, "Report to the Chief Architect...," Nov., 1935; and Lange, "Final Report to the Chief Architect...Sixth Enrollment Period," May 1, 1936, PINN Coll. 3658, Misc. Boxes, PWRO. Superintendent's Monthly Narrative Reports, Mar., 1936 and Feb., 1937, PINN Coll. 3658, Box 3, ff. 14-15, PWRO.
41. R.L. McKown, "Seasonal Report," Nov. 30, 1937, PINN Coll. 3658, Misc. Boxes, PWRO; Architects' Files, Box 5, PINN Building Folders, PWRO; Superintendent's Monthly Narrative Reports, 1936-37, PINN Coll. 3658, Box 3, ff. 14-15, PWRO.
42. Superintendent's Monthly Narrative Reports, May, 1938, PINN Coll. 3658, Box 3, f. 17, PWRO.
43. Superintendent's Monthly Narrative Reports, 1964, PINN Coll. 3658, Box 15, f. 4, PWRO.
44. Unrau and Williss, Expansion, p.75.

45. Paige, Civilian Conservation Corps, pp. 29-32.
46. Superintendent's Narrative Reports, 1976, PINN Coll. 3658, Box 15, f. 17, PWRO.
47. B.F. Manbey to NPS Director, Aug. 10, 1942, PINN Coll. 3658, Box 5, f. 7, PWRO.
48. Superintendent's Monthly Narrative Reports, 1941-42, PINN Coll. 3658, Box 3, ff. 19-20, PWRO.
49. The segment was originally called the "Over-the-Caves Trail." Hollister Free Lance, August 27, 1963.
50. Superintendent's Monthly Narrative Reports, 1963-64, PINN Coll. 3658, Box 15, f. 4, PWRO; Soledad Bee, June 19, 1963.
51. Superintendent's Narrative Reports, 1972-1981, PINN Coll. 3658, Box 15, f. 17, PWRO.
52. Ibid.; Lisa Smith, Trails Supervisor, Pinnacles National Monument, pers. comm., 2008.
53. Ibid.
54. Hermansen to Director, January 5, 1925, PINN Coll., RG 79, Box 336, NARA II.
55. A.B. Lewellen, "Reconnaissance Survey and Study...," Jan. 10, 1929, PINN Coll., RG 79, Box 336, NARA II.
56. Superintendent's Narrative Reports, 1972-1981, PINN Coll. 3658, Box 15, f. 17, PWRO.
57. Ibid.
58. It was constructed by laborers from the California Conservation Corps working under a Memorandum of Agreement with the National Park Service [Superintendent's Narrative Reports, 1972-1981, PINN Coll. 3658, Box 15, f. 17, PWRO].
59. The exception being the stretch from Highway 146 at the Chalone Bench to the mouth of Horse Valley, which was still maintained by the Schmidt family as an alternative access to their Horse Valley Ranch. Below the Schmidt Ranch, however, the road was essentially abandoned.
60. Superintendent's Narrative Reports, 1991-97, PINN Coll. 3658, Box 15, f. 19, PWRO; Tom Leatherman, "Pinnacles Nursery," unpublished field log and manual, Resources Management Division, Pinnacles National Monument. The plant nursery was destroyed in the 1998 flood.
61. Superintendent's Narrative Reports, 1986-1990, PINN Coll. 3658, Box 15, f. 18, PWRO; Lisa Smith, Trails Supervisor, Pinnacles National Monument, pers. comm., 2008.
62. Denise Louie, Chief of Resources, Pinnacles National Monument, pers. comm., 2008.

Analysis & Evaluation of Integrity

Analysis and Evaluation of Integrity Narrative Summary:

Analysis and Evaluation of Integrity Narrative Summary

The High Peaks Trail System, developed by the National Park Service and the Civilian Conservation Corps between 1923 and 1942, provided visitor access to many of the finest geologic and natural features of Pinnacles National Monument. The 13.01 mile trail system is an outstanding example of the rustic-style of design employed by the NPS during the period of significance (1923-1942). The historic character of the High Peaks Trail System is evident in the remaining landscape characteristics and features: circulation, buildings and structures, topography, natural systems and features, land uses, and spatial organization.

Circulation: The major circulation patterns and features of the High Peaks Trail System have changed little since the end of the period of significance (1942). The original alignment and trail width established during the historic period has been retained with nominal changes. The locally quarried materials utilized in the construction of the trail system are retained from the historic period. Contributing trails include Bear Gulch Caves Trail, Moses Spring Trail, High Peaks Trail, Condor Gulch Trail, Tunnel Trail, Juniper Canyon Trail (upper segment), Wall Trail, Rim Trail, and Chalone Peak Trail.

Buildings and Structures: The historic structures located along the High Peaks Trail System were designed in the rustic-style, which emphasized the blending of built works into their setting. The attention to detail and adherence to naturalistic design principles is still evident throughout the trail system. Contributing buildings and structures generated in the construction of the trail system includes tunnels; bridges and causeways; retaining walls; parapet walls; curbing; steps; and a small percentage of existing check steps, check dams, and open ditches. Three other contributing buildings and structures associated with the trail system include the Bear Gulch Dam; High Peaks Comfort Station; and the Chalone Peak Comfort Station. Modification of historic structures and new construction taking place after the period of significance has generally been sensitively completed and is compatible with the existing historic fabric.

Topography: The manipulation of natural topography that occurred to create the trail system is still evident including efforts to minimize the disturbance to the surrounding landscape. The construction necessitated by the steep and rugged terrain included numerous switchbacks, tread cuts, and cuts and fills, most of which date to the period of significance.

Natural Systems and Features: The responses to natural systems dictated the design of the historic High Peaks Trail System. The trail alignment, as established during the historic period, balances the challenges of the steep topography with the desire to allow visitor access to the park’s unique geologic features. The trail passes through the full spectrum of plant communities at the park allowing visitors a varied trail experience including dense canopied riparian portions and open lightly vegetated rock and scree areas. The native vegetation patterns, geologic features, and steep topography are retained from the historic period as well as the rustic-style trail system designed to harmonize with the local landscape.

Spatial Organization: The layout of the trail system with a central stem trail and branch trails is retained from the historic period. The curvilinear trail alignment established during the historic period responds to the natural contours and steep terrain of the land while providing access to broad panoramic views, unique geologic features as well as a variety of the park's plant communities.

Land Use: The original High Peaks Trail System was developed to provide visitor access to a variety of the park's unique geologic features through hiking, a use that continues today. During the historic period, visitor stock and guided horse tours were allowed on the trail system, uses that are no longer allowed, though the trail crew still occasionally uses pack animals for trail maintenance.

Integrity

The High Peaks Trail System retains all seven aspects of integrity: location, design, setting, materials, workmanship, feeling, and association. The trail system reflects the spatial organization, physical features, and historic associations that it attained during the period of significance, 1923-1942. Changes to the trail system have been relatively minor with a few small changes in alignment and construction to stabilize the trail system. Work to stabilize or realign the trail has been sensitively completed using rustic-style principles. A high percentage of the existing trail features date to the historic period and the trail system reflects its historic character. As a result, the integrity of the trail system is intact.

Location: The trail system follows the alignment established during the period of significance, providing a stem and branch trail system that provides visitor access to the unique geologic features of the national monument. Only in a few minor instances have trail segments been realigned, and nowhere have substantial trail features been moved, so that the system retains integrity of location, and the district as a whole has not suffered from any considerable changes in spatial configuration or extent.

Design: The original design of the trail system evolved during the period of significance, including expansion and the addition of shortcuts, but has not changed since that time. Still clearly evident is the emphasis on integrating the trail system into the natural surroundings. A high percentage of the existing rustic-style buildings, structures, and topographic features are retained from the historic period. Additional features that postdate the historic period are generally compatible with the historic rustic-style features. Stabilization work completed along the trail system is also compatible with the historic fabric. Overall, the existing historic features still convey the design patterns and intentions of the NPS landscape architects and engineers established during the period of significance.

Setting: Little has changed in the physical environment since the period of significance. Along the trail system, the visitor experiences unique geologic features, the rugged backcountry, a variety of plant communities, and frequently dramatic vistas.

Materials: The durable locally quarried native stone material of which the High Peaks Trail System and associated features were constructed has survived with little deterioration. Subsequent maintenance has largely avoided substituting new materials or methods of workmanship, often reusing abandoned waste rock left behind by the CCC. The numerous features constructed in support of the historic High

Peaks trails still reflect the use of native materials.

Workmanship: The high level of workmanship manually produced by the NPS and CCC is still visibly evident in the surviving trail system features including retaining walls, tread cuts, steps, switchbacks, cuts and fills, comfort stations, and the Bear Gulch Dam. A high percentage of the historic constructed features are stable and are fine examples of naturalistic design.

Feeling: The integrity of the trail features and natural setting allows the district to retain much the same feeling and associations of the period of significance. The trail system as designed by the NPS and CCC follows the principles of naturalistic landscape design and engineering. Under this philosophy, built works and natural features were integrated to create a unified overall design in which the trail system and its associated features were intended to appear, to the greatest extent possible, as natural extensions of the living landscape, not as unnatural intrusions. Where new additions have been made, they have not compromised the integrity of the original feeling and associations, because they have utilized the same materials and methods of workmanship employed by the NPS and CCC during the period of significance and are compatible with its historic character.

Association: The development of the trail system associated with the efforts of the early NPS and CCC between 1923 and 1942 is still evident. The rustic-style of design, popular during the historic period, is clearly visible in the retained trail and its associated features.

Landscape Characteristic:

Circulation

Definition:

- The spaces, features, and applied material finishes which constitute systems of movement in a landscape.

The High Peaks Trail System includes the High Peaks Trail and multiple branch trails. The entire trail system was established between 1923 and 1942. Designed not only for functionality and ease of travel, the trail was also engineered to take full advantage of the natural beauty associated with the monument's unique geologic formations. The depth of consideration put into the trail's design is highly evident in the trail's width, gradient, drainage, curvilinear alignment, and surface materials. As a rustic style trail system, the goal was to create a trail system that blended into its surrounding natural environment, flowing seamlessly with gentle curves and slopes where possible, and providing an enjoyable travelling experience.

Alignment

In response to the naturalistic landscape architecture methods of design the trails were designed to follow the contours of the land. The trail system meandered through chaparral, woodlands, riparian corridors, grasslands, and rock and scree areas without taking a straight course. Only where constricted by steep linear walls do the trails follow a linear path. The vertical component of the trail alignment was designed to gently incline or decline where possible. However, in areas where the trail needed to rapidly gain grade, switchbacks were

used to keep the grade below 15%. Switchbacks allow an easier walking experience and allow pack animals to turn easily. The grade varies along each trail providing variety in the hiking experience. The Bear Gulch Caves Trail and the High Peaks Trail Steep and Narrow portion [Fingers Foot Trail] utilized steps and stairs to gain grade. The use of steps on these trail segments is a response to the particularly steep terrain along these two trail components.

Materials

Materials used during the construction also reflected the naturalistic and rustic design styles of the time. These design styles advocated the use of local or regional materials that helped to blend built structures into the natural environment. The trail surface is almost entirely composed of local soil and stones or cut into the native rock. One of the few exceptions is the concrete tread of large stretched of the cave trail where the low lighting demands a smoother walking surface. The trail system retaining walls and steps utilize quarried rock from the immediate vicinity. The trail tread is either cut into the rock or constructed with dirt and rocks adjacent to the trail. Concrete was used in the construction of many of the bridges and in the Bear Gulch Caves Trail. Rock parapets and guardwalls were added to many of the concrete features to blend the structures with the surrounding environment. The attention given to the use of local materials contributes to the seamless quality of the trail system with the natural environment and results in a trail that reflects the unique natural characteristics of each region the trail passes through.

Trail Width

Other than the Bear Gulch Caves Trail and the Steep and Narrow portion of the High Peaks Trail, the trail was also designed to accommodate both hikers and pack animals. To allow for easier travel with stock, the trail widths averaged four feet wide. The portions of the trail system that were not designed for pack animals are not as wide ranging from two to three feet in width.

Water Erosion

Surface water is usually very sparse in the hot, dry summers. Runoff water is primarily due to rain generated by Pacific cold fronts typically occurring between November and May. The runoff tends to be flashy and ephemeral with the possibility of significant erosion. Erosion is particularly challenging where sheet flow crosses the trail and where ravines and gullies cross the trail surface. Water erosion along the trail surface is accelerated by the gradual decrease in grade of the trail surface due to human erosion. The lower trail grade can lead to a concentrated flow of water down the trail during rain storms.

A variety of techniques are used along the trail system to address water erosion including angling the trail slightly outward to encourage water flow off the trail, the use of open ditches (open culverts) at points of concentrated flow, the use of check dams (water bars) to direct

flow off the trail, and the use of terraces & diversion ditches above the trail to slow water flow before it reaches the trail. Without these techniques the trail itself often becomes the easiest path for flowing water which leads to rapid erosion of the trail surface.

As described in the buildings and structures, most of the structures designed to reduce the impacts of water erosion postdate the period of significance. These modern structures used compatible construction techniques so the new features would blend with the historic rustic style trail fabric.

Changes to the Trail System

There have been a few noteworthy changes to the High Peaks Trail System established during the historic period. First, the North Chalone Peak Road was constructed on top of the last 0.72 miles of the 3.3 mile North Chalone Peak Trail. The trail now follows the road surface and any remnants of the original trail were likely graded over to expand the width for vehicular use. Second, a few small changes to the trail alignment have taken place since the historic period. A 50 foot portion of the half mile long Moses Spring Trail was realigned to reduce the possible safety risks associated with hikers passing directly underneath rock climbers. Also, a couple hundred feet of the High Peaks Trail was realigned at the junction with the Bench Trail. Other than these changes, the trail alignment and character remain largely unchanged, with minor modifications to stabilize the trail.

Contributing Trails

The trails and trail components constructed between 1923 and 1942 and that contribute to the High Peaks Trail System include: the Bear Gulch Caves Trail, Moses Spring Trail, High Peaks Trail, Rim Trail, Wall Trail, Condor Gulch Trail, Tunnel Trail, and portions of the Chalone Peak and Juniper Canyon trails. The trail system alignment established by the end of the historic period has changed little with only a few minor changes.

Bear Gulch Caves Trail (Park # HS11; LCS # 57540)
CA SHPO concurred with the National Register eligibility of the Bear Gulch Caves Trail in 2002 under Criteria A and C. The Bear Gulch Caves Trail was built (1932) parallel to the Moses Spring Trail and is approximately a quarter mile in length. The trail branches off from the Moses Spring Trail just after the trail crosses over to the west side of the Bear Creek. The trail runs through the talus cave system, one of the most popular destinations in the National Monument. The boulders that form the cave system provide a unique and varied hiking experience. Bear Creek, which passes through the caves, creates a series of water features including small pools and cascading waterfalls which add visual interest as well as an ever changing sonic factor to the cave experience. The cave trail consists of an upper and a lower cave divided at the point where the Moses Spring Trail passes above the talus cave system. The upper cave is closed for all but a couple of weeks of the year to protect a colony of Townsend’s Big eared bats. Portions of the trail, particularly in the upper cave, are very narrow

or require visitors to duck and scramble to move through small passages. The trail ends when it merges with the Moses Spring Trail just below the Bear Gulch Dam.

The trail is constructed with one hundred fifty four concrete steps and two concrete bridges. Large portions of the trail tread are constructed of concrete. The use of concrete provided a smooth walking surface that was much easier to navigate in the dark conditions of the caves. The caves were lit up with kerosene lanterns and then electric lanterns during the historic period. The lanterns were removed in the 1960s due to vandalism. Since that time, flashlights have been required for safe passage.

Changes to the Bear Gulch Cave Trail include the addition of metal grating in several locations to provide a stable walking surface in some wet and flood prone areas of the trail. The visually porous metal grating is not rustic style or compatible, but it is simple in nature and does not draw attention away from the adjacent terrain. Another change from the historic period includes the addition of the Cave Access Trail which allows visitors to exit the lower caves and access the Moses Spring Trail in the area between the upper and lower caves. This modern trail addition is partially associated with the closure of the upper caves to protect the bats. When the upper caves are closed, which is most of the time, visitors can exit the caves without retracing their steps back down and through the lower caves area.

The Bear Gulch Caves Trail retains its historic alignment, materials, and rustic character and therefore contributes to the High Peaks Trail System. Repairs and modifications to the trail are generally compatible with the rustic style trail system.

Moses Spring Trail (Park # HS10; LCS # 57539)
CA SHPO concurred with the National Register eligibility of the Moses Spring trailhead in 2002 for local significance under Criteria A and C for the period of 1923-1941. Built in 1932 by the National Park Service, the Moses Spring Trail branches off from the High Peaks Trail just before the High Peaks Trail crosses to the west side of Bear Creek. The trail leads to the Bear Gulch Dam, crossing over the talus that forms the roof of the caves. The half mile long trail averages a width of four feet and employs one switchback to minimize grade changes. Rock retaining walls are used to shore up the trail. The trail also consists of a thirty foot long tunnel through solid rock. A series of concrete and carved steps are used on the last portion of the trail, which bypasses the caves, to reach the dam.

In 1942 a tunnel was constructed creating a new alignment for the trail which kept the trail at a higher elevation out of the bottom of Bear Gulch. This change in alignment was made during the historic period and as such, the existing alignment of the Moses Spring Trail through the tunnel contributes to the historic trail system.

Another minor change in alignment of the Moses Spring Trail took place in 1989. The realignment was in response to the safety hazard of hikers walking directly beneath Monolith Climb, a popular rock climbing wall. The rock wall is located adjacent to the junction with the

Cave Access Trail constructed in 2004 (See the Moses Spring Trail Realignment on Site Plan 3). Although the historic portion of the trail is retained, it is no longer the primary route for hikers. The approximately 160-foot trail realignment trail comprises a very small portion of the entire trail and is compatible with the historic character of the rustic style trail system.

Overall, the Moses Spring Trail retains its historic alignment, materials, and rustic character and therefore contributes to the High Peaks Trail System.

High Peaks Trail (Park # HS7; LCS # 57536)
CA SHPO concurred with the National Register eligibility of the High Peaks trailhead in 2002 for local significance under Criteria A and C for the period of 1923-1941. The High Peaks Trail was built by the NPS between 1924 and 1934, prior to the CCC era. The original trail followed the Condor Gulch Trail and High Peaks Trail west of the High Peaks/Condor Gulch intersection. The portion of the trail east of the intersection with the Condor Gulch Trail was built by the CCC in 1934. The Condor Gulch Trail is now considered a separate trail from the High Peaks Trail. The High Peaks Cut Off Trail was also constructed by the CCC as a shortcut to allow visitors to hike the High Peaks Trail bypassing the need to travel south and then north on the Moses Spring and Wall trails. This shortcut became the primary route of the High Peaks Trail. The final alignment of the High Peaks Trail, established during the historic period, leads west from the Bench Trail near the Chalone Creek Maintenance Area to the High Peaks area and then turns south and southeast to the Moses Spring Parking Area. The five mile High Peaks Trail averages four feet wide with numerous switchbacks, dry laid retaining walls, steps cut into the peaks, galvanized metal handrails and a short tunnel near Scout Peak.

One minor change to the High Peaks Trail includes a slight shift of the trail alignment to the south at its intersection with the Bench Trail. This change of alignment is no more than a couple hundred feet long and is insignificant compared to the length of the trail. The newly constructed portion of the trail is compatible with the remainder of the historic rustic style trail system.

The least used portion of the High Peaks Trail is the stretch between the Condor Gulch and Bench trails. The decline in use appears to coincide with the closure of the Chalone Creek Campground in 1977 1978. Although the trail is still intact, encroaching vegetation in the meadow area has reduced the width of this portion of the trail to as little as two feet.

The High Peaks Trail allows hikers to access the unique geologic formations of the National Monument including the spires and crags of the High Peaks. Hikers also experience tremendous views and a large variety of the monument’s plant habitats along the High Peaks Trail. The trail climbs up through densely wooded riparian corridors into the large open areas of chaparral punctuated by small clustered woodlands. The trail also passes through a large number of the park’s higher elevation grasslands as well as the unique rock and scree areas of the High Peaks.

The High Peaks Trail originally was constructed with two alternate routes available in the

vicinity of the High Peaks. The wider High Peaks Trail Bridle Path, now referred to as the Tunnel Trail and the upper portion of the Juniper Canyon Trail, passed below the High Peaks and used switchbacks to gain grade. The narrower foot path, now referred to as the Steep and Narrow portion of the High Peaks Trail, went directly up to the High Peaks 'Fingers' formations using numerous steps to reach the higher elevations. These two options are still available to hikers travelling along the High Peaks Trail. The Steep and Narrow portion of the trail averages two to three feet and width and utilizes a relatively high number of steps, metal pipe handrails, and bridges to provide access the Fingers area of the High Peaks. In some cases the steps cut into the rock are just wide enough for one foot, alternating left and right sides up the slope.

Overall, the magnificent High Peaks Trail retains its historic alignment, materials, and rustic character and therefore contributes to the High Peaks Trail System.

Condor Gulch Trail (Park # HS9; LCS # 57538)
CA SHPO concurred with the National Register eligibility of the Condor Gulch trailhead in 2002 for local significance under Criteria A and C for the period of 1923-1941. The Condor Gulch Trail was originally built as part of the High Peaks Trail. Once the High Peaks Trail was extended by the CCC to the Chalone Creek Maintenance Area the trail was renamed the Condor Gulch Trail.. The trail was also extended by the CCC from the Condor Gulch Maintenance Area to the Bear Gulch Comfort Station near the intersection of the Bear Gulch Road and the Condor Gulch Road, where it crosses a small footbridge. The trailhead has been in its current location since at least 1933. The trail leads up Condor Gulch 1.7 miles to the High Peaks Trail. It is a convenient trail for hikers wishing to complete a five mile loop beginning and ending at either the Moses Spring Parking Area or the Bear Gulch Nature Center. The trail tread averages four feet wide and includes switchbacks and dry laid rock retaining walls to gain grade.

The trail alignment and trail character established in the historic period has been retained. Towards the beginning of the trail, the path stays just above the riparian vegetation located along the Condor Gulch. Chaparral is the dominant habitat with clustered woodlands scattered along the length of the trail. As the trail approaches the existing High Peaks Trail rock and scree becomes more common. At about a mile from the trailhead, a historic overlook (Condor Gulch Overlook) is located at a rock and scree opening. The overlook includes metal pipe handrails and a few steps cut into the exposed rock which serves as the walking surface. The overlook allows views of distant hills and slopes as well as the woodlands, chaparral, and riparian vegetation of Condor Gulch. Views open up in all directions at the junction with the High Peaks Trail.

Overall, the Condor Gulch Trail retains its historic alignment, materials, and rustic character and therefore contributes to the High Peaks Trail System.

Tunnel Trail (Park # HS8; LCS # 57537)

The Tunnel Trail was constructed by the NPS in 1933 before the arrival of the CCC with the exception of the last switchbacks on the northern end of the trail which were constructed by the CCC in 1934. The trail travels 0.6 miles from Hawkins Peak to the junction with the Juniper Canyon Trail. The average width of the trail is four feet with many switchbacks and dry laid retaining walls. A one hundred twenty foot tunnel is cut into the rock. Extending from a cut platform adjacent to the tunnel is a twenty five foot concrete bridge with metal handrails.

The Tunnel Trail along with the upper portion of the Juniper Canyon Trail formed what was historically called the High Peaks Trail Bridle Path. Hikers of the High Peaks Trail system could either use the foot paths of the Steep and Narrow section of the High Peaks Trail or follow the lower elevation bridle path. The steep topography of the Steep and Narrow section did not allow for stock or pack animals.

The Tunnel Trail is one of the more elaborate stretches of the rustic style High Peaks Trail System. Many of the retaining walls have parapets. Many of the parapets had tall vertically placed stones protruding from the guard walls reflecting the Finger rock formations above. Also, some of the retaining walls are constructed using stones larger than most other sections of the trail.

The full spectrum of rustic style construction techniques are used to blend the trail with the steep and gullied landscape below the High Peaks. Retaining walls, bridges, tunnels, switchbacks and tread cuts were used where appropriate to create the walking surface.

The trail passes through large chaparral habitats with a few woodland and rock and scree areas providing variety. Broad panoramic views open up to the west of the trail. Steep geologic formations are visible on the east side of the trail.

Overall, the Tunnel Trail embodies the highest aesthetic qualitiy for the rustic style of trail design found in the park. The trail retains its historic alignment, materials, and character and therefore contributes to the High Peaks Trail System.

Juniper Canyon Trail (Upper Segment)
The upper segment of the Juniper Canyon Trail is part of the historic High Peaks Trail Bridle Path. To simplify the trail system for visitors, the trail is currently labeled as a part of the Juniper Canyon Trail even though it was constructed as part of the High Peaks Trail before the Juniper Canyon Trail existed. The upper segment of the Juniper Canyon Trail along with the Tunnel Trail allowed hikers and pack animals to loop around the High Peaks Trail without needing to climb up the Steep and Narrow section of the High Peaks Trail. The 1.2 mile lower segment of the Juniper Canyon Trail constructed in 1976 postdates the period of significance and is not associated with the CCC or early park development and was therefore not included within the High Peaks Trail System.

This 0.6 mile upper segment of the Juniper Canyon Trail was constructed in 1933 by the

National Park Service before the arrival of the CCC. The trail leads from Junction Saddle to Tunnel Trail. The average width of the trail is four feet. Fourteen switchbacks and numerous retaining walls were used in the construction of the trail component.

The Juniper Canyon Trail (upper segment) passes through a relatively high percentage of woodland habitat as well as the ubiquitous chaparral. The open character of the trail allows distant views to the west.

Overall, the upper segment of the Juniper Canyon Trail (historically a portion High Peaks Trail Bridle Path) retains its historic alignment, materials, and rustic character and therefore contributes to the High Peaks Trail System.

Wall Trail
The Wall Trail was part of the High Peaks Trail before the High Peaks Cut Off Trail was constructed. The 800 foot Wall Trail became an isolated trail once the cut off trail became the primary route after its construction in 1935. The Wall Trail took the hiker upslope from Moses Springs, along Discovery Wall, to the current alignment of the High Peaks Trail.

The Discovery Wall is popular for rock climbing, and with the popularity of the sport, the Wall Trail is no longer labeled on trail maps, partly to avoid possible safety issues with hikers passing under rock climbers.

The trail travels through chaparral and small woodland clusters. Retaining walls stabilize the cuts and fills used to construct the trail tread. Some of the most outstanding views of Bear Gulch are found where the trail tread follows the narrow shelf just below Discovery Wall.

The trail width was likely four feet when the Wall Trail was the primary route of the High Peaks Trail. Now that the trail is mostly used as a rock climbing access, vegetation has encroached limiting the trail width to approximately two feet.

Overall, the Wall Trail retains its historic alignment, materials, and rustic character and therefore contributes to the High Peaks Trail System.

Rim Trail
The Rim Trail, constructed in 1935, is a 0.37 mile stretch of trail that allows hikers who walked up Bear Gulch along the caves or Moses Spring trails to reach the High Peaks Trail from the Bear Gulch Reservoir. The Rim Trail also provides a convenient connection between the High Peaks and North Chalone Peak trails. The Rim Trail is a valuable component of the Moses Spring Rim Trail Loop, providing a short 2.2 mile loop that gives a good sense of the park's resources including rock formations, talus caves, and the reservoir. As with most trails of the High Peaks Trail System, chaparral is the dominant vegetation, both hiding and revealing views along the trail. Rock and scree areas along the Rim Trail open up views in all directions. From the trail, hikers attain views of Bear Gulch, the reservoir, and glimpses of the rock formations

found at higher elevations.

The trail width is approximately four feet, though in a few locations, hikers have eroded the outer edge of the trail leading to a wider trail surface. The construction of the Rim Trail included tread cuts, some of which are deep enough to create walls on both sides of the trail. Switchbacks and retaining walls were also used in the construction of the trail. The repairs and modifications to the trail have been compatible with the rustic character of the trail.

Overall, the Rim Trail retains its historic alignment, materials, and rustic character and therefore contributes to the High Peaks Trail System.

Chalone Peak Trail (Park # HS14; LCS # 57543)
The entire Chalone Peak Trail begins at Bear Gulch Dam and continues over 3.3 miles to North Chalone Peak and then an additional 1.78 miles from North Chalone Peak to South Chalone Peak. The Chalone Peak is analyzed in two segments. The CCC initially constructed the North Chalone Peak Trail segment, which runs from Bear Gulch Reservoir to North Chalone Peak. The second segment constructed by the CCC late in the period of significance is referred to as the South Chalone Peak Trail, which runs from North Chalone Peak to South Chalone Peak. In general, both segments include terrain that is less steep than other trails in the system, and does not require the high number of switchbacks and retaining walls. Both trail segments include rustic-style retaining walls have a rough rubbly appearance, as if the wall was created by pushing cut stones onto the downhill side of the trail. These rubble walls are particularly present along the South Chalone Peak Trail. Also unique to the Chalone Peak Trail is the frequent use of swales across the trail to encourage water to flow off the trail surface. These gentle swales in the trail and they function like the open ditches (open culverts) which also are low areas in the trail surface that allow water to cross. The dominant vegetation along the trail is chaparral which hides and reveals distant views depending on the height of the shrubs. The trail also cuts through a few patches of grassland and woodland. Small areas of rock and scree are occasionally found along the trail, but it is much less common than along the High Peaks Trail.

The North Chalone Peak segment of the trail was built in 1936 by the CCC to reach North Chalone Peak and the associated fire lookout tower. The North Chalone Peak Trail begins at Bear Gulch Dam and continues over 3.3 miles to North Chalone Peak. After the historic period the North Chalone Peak Road was constructed to provide vehicular access to the North Chalone Peak Fire Lookout Tower. The road was constructed over a segment of the historic North Chalone Peak Trail. The road was likely constructed by the California Department of Forestry and Fire Protection after the historic period, possibly during or just after WWII. The two track dirt access road was constructed using cuts and fills and is approximately eight feet wide. The road was constructed on top of the North Chalone Peak Trail for the last 0.72 miles leading up to the lookout tower. The section of the North Chalone Peak Trail that is now part of the road system is a non-contributing segment of the historic trail system that documents the historic alignment of the trail. A remnant of the earlier trail can be found just below the North

Chalone Peak Fire Lookout Tower. For the last several hundred feet the road separated from the historic trail alignment to allow a more gradual climb up to the tower.

A short distance below the current Fire Lookout Tower, the Chalone Peak Trail continues for 1.78 miles towards South Chalone Peak. The CCC extended the Chalone Peak Trail towards South Chalone Peak after the northern segment was completed. This later segment is referred to as the South Chalone Peak Trail. Brush was cleared along the South Chalone Peak segment of the trail from North Chalone Peak to South Chalone Peak, but only the first 0.69 miles of the 1.78 mile length was constructed. After the CCC left, chaparral grew over the unfinished portion of the South Chalone Peak segment of the Chalone Peak Trail. In 1979 to 1980 park staff re cleared the unfinished historic alignment of the trail all the way to South Chalone Peak. The trail is maintained every three years and is now useable all the way to South Chalone Peak. Of the 1.78 miles of trail from North Chalone Peak to South Chalone Peak, only the 0.69 miles of trail completed during the period of significance contributes to the trail system and is included within the trail system. The contributing portions of the Chalone Peak Trail are approximately four feet wide.

Overall, both the north and south segments of the Chalone Peak Trail retains its historic alignment, materials, and rustic character and therefore contributes to the High Peaks Trail System. The road segment of the North Chalone Peak Trail does not contribute to the historic district.

Non Contributing Trails

Rock Climbing Access Trailheads
The increased popularity of rock climbing in the 1970s led to the generation of numerous social trails associated with accessing popular climbing walls. To reduce the number of social trails and the impacts associated with rock climbing, numerous rock climbing access trails were installed after 1988. These contemporary trails are non contributing trails which are typically smaller in scale than the trails of the High Peaks Trail System.

Character-defining Features:

Feature: Bear Gulch Caves Trail

Feature Identification Number: 133476

Type of Feature Contribution: Contributing

Feature: Moses Spring Trail

Feature Identification Number: 133478

Type of Feature Contribution: Contributing

Feature: High Peaks Trail

Feature Identification Number: 133480

Type of Feature Contribution: Contributing

Feature: Condor Gulch Trail

Feature Identification Number: 133482

Type of Feature Contribution: Contributing

Feature: Tunnel Trail

Feature Identification Number: 133484

Type of Feature Contribution: Contributing

Feature: Juniper Canyon Trail (Upper Segment)

Feature Identification Number: 133486

Type of Feature Contribution: Contributing

Feature: Wall Trail

Feature Identification Number: 133488

Type of Feature Contribution: Contributing

Feature: Rim Trail

Feature Identification Number: 133490

Type of Feature Contribution: Contributing

Feature: Chalone Peak Trail

Feature Identification Number: 133492

Type of Feature Contribution: Contributing

Feature: High Peaks Cut-Off Trail

Feature Identification Number: 136038

Type of Feature Contribution: Contributing

Feature: Condor Gulch Overlook

Feature Identification Number: 133536

Type of Feature Contribution: Contributing

Feature: Chalone Peak Trail - Fire Road Segment

Feature Identification Number: 136048

Type of Feature Contribution: Non Contributing

Feature: Moses Spring Trail Realignment

Feature Identification Number: 136040

Type of Feature Contribution: Non Contributing

Feature: Cave Access Trail

Feature Identification Number: 136044

Type of Feature Contribution: Non Contributing

Feature: Rock Climbing Access Trailheads

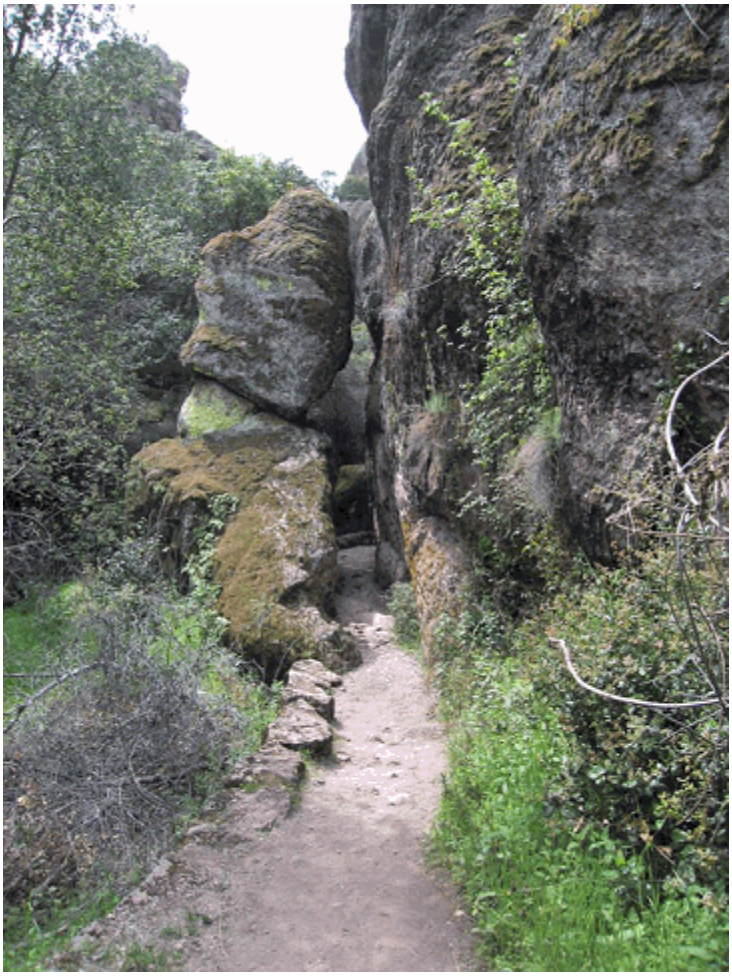
Feature Identification Number: 133532

Type of Feature Contribution: Non Contributing

Landscape Characteristic Graphics:



Circulation fig. 1: High Peaks Trail (Steep and Narrow) (1933). The trail harmonizes with its surroundings by conforming to topography, utilizing locally gathered materials, and allowing mature vegetation along the trail. [PWRO, 2008]



Circulation fig. 2: Bear Gulch Caves Trail (1924–1932). The trail takes advantage of existing geologic features approaching the lower caves entrance. Note the dense riparian vegetation characteristic of the trail along Bear Creek. [PWRO, 2008]



Circulation fig. 3: Condor Gulch Trail Overlook (1930). The overlook takes advantage of the open character of a rock & scree area to provide views of distant hills and the gulch woodlands, chaparral, and riparian vegetation. [PWRO, 2008]



Circulation fig. 4: Moses Spring Trail (1933). Repeat photo compares 1933 and 2008 conditions. The Moses Spring Trail retains its historic character. [PINN Coll., PWRO, 1933 & PWRO, 2009]

Buildings and Structures

For the purposes of the CLI, buildings are defined as those features that are built primarily for sheltering any form of human activity. Structures are defined as features constructed for purposes other than sheltering human activities.

The steep terrain of Pinnacles National Monument required a substantial number of structures in the construction of the High Peaks Trail System to allow visitor access to the unique geologic formations of the monument. The trails needed to accommodate both foot traffic as well as pack animals which have been critical to the construction and maintenance of the trail system since the trail's inception. The 13.01-mile-long trail system includes tunnels, bridges, retaining walls and/or parapet walls with curbing, steps, check steps, check dams, open ditches, and swales. In addition, Bear Gulch Dam, two comfort stations, and a fire lookout were also constructed along the trail system during the historic period to meet park operational needs. The locations of the historic and non historic features documented in this section can be found in the features chart in the Supplemental Information section. The points correspond to a pre existing

trail inventory system created by park staff in which locations are described as “waypoints” along the trails, or points measured in feet from each trail’s point of origin, either a trailhead or an intersection with another trail.

The buildings and structures constructed during the period of significance were designed using the rustic style, where an attempt was made to integrate the built structures into their surroundings following 18th century picturesque and 19th century naturalistic theories of design. The rustic style of architecture associated with early park master planning called for the utilization of available indigenous materials to help blend buildings and structures with the landscape. The readily available indigenous materials at Pinnacles National Monument were rhyolitic breccia and other volcanic rock which were used in the construction of most of the buildings and structures found within the park. The use of rustic style design and construction techniques created structures that appeared hand crafted or primitive, yet, careful engineering and design ensured their ability to accommodate hikers and pack animals. Other than a small number of exceptions, the trail system is almost entirely constructed using the rustic style of design.

Over time, some historic trails have been modified to stabilize portions of the trail impacted by human or natural events. The majority of the modifications included the repair and maintenance of switchbacks, tread cuts, retaining walls, and steps. Most changes took place since the mid 1970s, with a smaller number of changes taking place just after the historic period between 1943 and 1975. While the trail system has had periodic replacement of trail features, this is part of routine maintenance associated with a linear feature that continues to be used over time, and as such, these repairs do not necessarily degrade the integrity of the trail system. When a historic feature has been modified, the feature retains integrity if the modifications are compatible with historic fabric and most of the original fabric is retained, thus preserving the location, materials, design, workmanship, feeling and association. Most (63 of 72) modified historic trail features are considered contributing features because they have not been heavily modified and are compatible with the historic character of the landscape since they reflect the historic rustic style materials and construction techniques used throughout the historic trail. The trail system as a whole retains a majority of its original location, materials, design, workmanship, allowing the trail system to retain the feeling and association with the rustic design used during the period of significance.

New trail structures have been constructed where historic structures collapsed or where instabilities developed along the trail. Features constructed after the historic period are non-contributing, but may be compatible if the construction is similar in character to the rustic structures constructed during the historic period. In general, features constructed after 1975 continued to use rustic style techniques compatible with the historic character of the trail system. A smaller number of features, those constructed between 1943 and 1975, used poorly executed rustic-style techniques that are not compatible with the historic character of the trail system. Only 36 of 356 non historic structures identified are not compatible with the structures retained from the historic period.

Repairs, augmentations and new construction made to the switchbacks and retaining walls between 1943 and 1975 utilized locally gathered rock and similar construction techniques, but the execution was poor. In these instances, the repairs are not compatible with the retained historic structures because they have a different character than the rustic style construction during the period of significance. The stones were poorly laid and when mortar was used it was often overly thick and not appropriately smoothed. The dry stacked and mortared walls constructed and modified during this period did not conform to topography or the retained historic walls and switchbacks.

In contrast, the repairs, augmentations and new construction along the historic trail system that took place after 1975 were generally compatible with the historic rustic style trail system and well executed. The modifications used historic techniques and responded better to topography than modifications made from 1943 to 1975. New construction completed after 1975 did reflect very minor changes in philosophy from the CCC period of construction. In the construction of stone walls located at trail switchbacks, rather than placing the stone's largest face outward for visual effect, as was the tendency of the CCC, the largest face of the rock was placed down, to lend stability to the walls to the newly constructed walls. This construction method is compatible with the historic construction methods. Other simple, less-labor intensive construction has occurred on the trail system, including the addition of a metal grating trail surface in portions of the Bear Gulch Caves Trail; the biodegradable wood post retaining walls along the High Peaks Trail; and the split rail fencing along the High Peaks Trail. While these types of changes are not compatible with the historic character of the trails, they are minor changes that do not affect the integrity of the trail system.

Tunnels

Three tunnels were constructed during the historic period. These tunnels were hollowed out of the volcanic rock where the topography offered few alternatives. The arched tunnels generally have a rough hewn appearance, not overly refined, compatible with the rustic style. The use of tunnels in several strategic locations, though invasive, allowed the landscape architects and engineers to avoid more visually severe techniques that would permanently alter the exterior of scenic rock formations along the trail. No tunnels were constructed along the High Peaks Trail System after the period of significance.

A relatively short tunnel was constructed along the High Peaks Trail between 1928 and 1933. This tunnel is located between the junctions with the Rim and Juniper Canyon trails. The tunnel constructed along the Tunnel Trail is 120 feet long and is the longest tunnel along the historic trail system. The tunnel was constructed by 1932 below the Fingers of the High Peaks Trail. The tunnel constructed along the Moses Spring Trail was constructed late in the historic period, 1942, as part of the realignment of the trail out of the Bear Creek drainage.

The tunnels of the High Peaks Trail System were constructed in areas where cutting into the

rock would have had a major visual effect on the landscape. Their presence demonstrates the effort made by designers to minimize the visual impact of the trail system in areas where large expanses of volcanic rock were exposed. In the case of the Moses Spring Trail tunnel, the tunnel allowed the trail to avoid passing through the bottom of the Bear Creek drainage. The tunnels reflect the historic rustic-style character and contribute to the High Peaks Trails System.

Bridges and Causeways

The bridges and causeways within the historic district reflect the need to allow hikers and pack animals to cross the many ravines and gullies located along the trail system. Six bridges (out of eight total bridges) and two causeways were constructed during the period of significance along the High Peaks Trail System and are contributors of the historic district. Two bridges postdate the historic period and do not contribute to the historic district.

Two of the historic bridges use strategically placed stones to blend into the surrounding environment. One of the bridges, at the intersection of the Moses Spring Trail and the Bear Gulch Caves Trail, was constructed of mortared rip rap installed on top of several large boulders. The second bridge along the Moses Spring Trail was constructed using steel reinforced mortared stone to bridge a small crevice. In both cases, the stone exterior of these two historic bridges dominates the external appearance, creating a rustic-style character that contributes to the High Peaks Trail System. Both bridges are associated with the trail construction completed by the park and the CCC.

Three of the historic bridges were constructed of steel reinforced concrete with no stone facing. These bridges were built in association with the trail construction completed by the park and the CCC. The Tunnel Trail bridge, the largest bridge along the trail system, includes concrete footings and a metal handrail and no additional ornamentation. The second bridge, located in the talus caves of the Bear Gulch Caves Trail, includes mortared stone and angle steel abutments, a metal handrail, and a stone edge wall created by a single row of stones placed along the outer edge of the decking. The addition of the stone edge aids in blending the bridge into the surrounding talus environment. The third bridge, located along the Bear Gulch Caves Trail, consists of a simple concrete slab and mortared stone wingwalls that stabilize the banks of the creek. The bridge has no handrails or ornamentation. The bridge required repairs to portions of the mortared-stone wingwalls that stabilize the banks of the creek at the intersection with the concrete bridge. The portion of the wingwalls immediately adjacent to the bridge had been washed out by flooding and needed to be restacked, repaired, and patched. The modified bridge retains its integrity because the modifications to the wingwalls were completed with compatible materials and techniques and the concrete bridge itself was retained. The simple design of these three bridges represents an efficient, stable, and non ornamental solution to crossing drainages and other low areas along the trail. These bridges needed to withstand the heavy use associated with pack animals and heavy visitation, and in general they have held up well. These three bridges are associated with early park and CCC

trail construction and contribute to the trail system.

One additional historic bridge has a wood deck supported by steel I Beam stringers that rest on concrete footings. Metal handrails were included in the design of the bridge. This bridge was not faced with stone because it is located in a remote location that was not prominently visible. Also, this bridge did not need to be as sturdy as other bridges along the trail system because it was not necessary that it accommodate pack animals, being located in the Steep and Narrow section of the High Peak Trail. The bridge retains its historic materials and character and contributes to the trail system.

Two bridges were added to the trail system after the historic period. One of the bridges located at Condor Gulch Trailhead is constructed of wood decking supported by concrete footings. A second bridge located along the Bear Gulch Caves Trail is constructed of steel reinforced concrete. The two contemporary bridges do not contribute to the trail system, but are compatible with the simple character of the historic concrete and wood decked bridges of the trail system.

The two causeways are similar in function to a bridge though in appearance they do not look like bridges, but more like a typical dirt or stone surfaced trail with a retaining wall on each side of the trail. Causeways are built on top of existing stones and boulders with the insertion of material to create a level walking surface. The two causeways, constructed during the period of significance retain their historic rustic-style character, location and materials and therefore contribute to the historic trail system.

Retaining Walls

Stone retaining walls were typically constructed to support the outer edge of the trail and the back slope and in many cases, were designed to blend with the natural features they abutted. The form of the retaining walls varied according to the natural surroundings, often curving to follow the alignment of the topography adjacent to the trail. Because of the steep terrain through which the trail was constructed, the walls are ubiquitous along the trail system, sometimes stretching along the entire length of a trail. They are also an important component in the construction of switchbacks. Switchbacks generally have at least one retaining wall in the middle of the switchback and can have additional walls above and below the switchback. Approximately 351 of 424 retaining walls date to the historic period and contribute to the trail system. In addition, 64 of 76 switchbacks date to the historic period, most of which utilized at least one retaining wall in their construction. The contributing retaining walls are typically rustic in design, constructed with locally quarried rock.

In general, retaining walls are either dry stacked or mortared and vary from single course walls to walls up to 30 feet in height. Wall lengths vary from several stones to walls that are hundreds of feet long. Depending on their locations, the walls can be devoid of vegetation, covered in

moss, or hidden under dense grasses and shrubs growing in the retaining walls.

In the following discussion, there are four distinct periods of construction for retaining walls (See Buildings and Structures Fig. 8):

1. The early park development period of retaining wall construction spans from 1923 to 1933, the first half of the period of significance. With the exception of the Chalone Peak Trail, and the extension of the High Peaks Trail to the Chalone Creek Maintenance Area, most of the trails were initially constructed during this period. Retaining walls constructed during this period are rustic-style, constructed of locally quarried rock. The walls were constructed with both dry-laid stone and mortared stone.

2. The CCC period of construction spans from 1933 to 1942, the second half of the period of significance. Retaining walls constructed during this period are also rustic-style and use both dry-laid stone and mortared stone techniques. The irregular placement of stones was emphasized during this period as well as the placement of the largest stone face outward. In reality, it is very difficult to distinguish walls constructed by the CCC from those constructed earlier by the park, and no attempt was made to do so when it came to individual walls. Further complicating the matter, the CCC often rebuilt earlier sections of trail to their standards.

3. The next period of construction spans from 1943 to 1975, right after the period of significance. The retaining walls constructed and repaired during this period also used rustic-style constructed techniques. Walls constructed during this period were constructed without the same skill as the walls constructed by the CCC, and as a result stand out from CCC walls due to their poor design and workmanship. The retaining walls constructed or repaired during this period did not conform to the adjacent topography, had poor stone placement with large gaps between stones, and the mortar was applied too thickly and then not smoothed. The repaired sections of walls were not aligned with the existing historic walls. Because of the inferior workmanship, retaining walls constructed during this period are not compatible with walls constructed during the historic period and the historic walls repaired during this period no longer contribute to the trail system.

4. The final period of construction spans from 1976 to the present. In almost all instances, retaining walls constructed and repaired during this period are well executed rustic-style and difficult to distinguish from retaining walls constructed during the period of significance. These walls also include both dry-laid stone and mortared stone. These walls conform to the adjacent topography, the stones are laid appropriately, and if mortar is used it is subtle in its application as during the historic period. The mortar from this period has been appropriately smoothed. Walls constructed during this period use waste rock from historic period construction as well as locally quarried stones. Repairs reuse the collapsed stones from the historic retaining walls and additional stone is gathered or quarried if necessary. One difference from the CCC period is the placement of the largest stone face downward to increase the stability of the wall, but even this difference is difficult to detect in the final product. Overall, retaining walls constructed

during this period are compatible with walls constructed during the period of significance. Also, repairs to historic walls competed during this period are typically compatible with the historic period walls and still contribute to the trail system, except in cases where the majority of the historic wall has been repaired or replaced.

Generally, the 351 historic-era contributing retaining walls along the trail system are either dry-laid stone or mortared stone, although there are a few cases where the walls appear to be rubble tossed over the edge of the trail surface. These loose rubble retaining walls tend to be concentrated on the South Chalone Peak Trail and the southern portion of the North Chalone Peak Trail where the terrain is generally less steep. A small number of rubble rock retaining walls can be found on other trails along the trail system. Of the 351 retaining walls dating to the historic period, 27 have been modified, typically to stabilize the wall or repair damage. These 27 walls were repaired with compatible materials and construction techniques and the majority of the historic fabric was retained, and therefore these repaired walls contribute to the trail system. One historic retaining wall had the majority of its historic fabric repaired and replaced during a stabilization procedure. With the majority of the wall post-dating the period of significance, the wall no longer contributes to the trail system. The repairs to the wall were sensitively completed using historic period construction techniques and as a result the wall is compatible with the rustic-style trail system.

The 73 retaining walls constructed after the period of significance generally replace historic walls destabilized by erosion. Some retaining walls constructed after the period of significance were installed in non historic locations to stabilize terrain. The retaining walls constructed after the period of significance include 12 walls that are poorly executed rustic-style walls that are not compatible with the walls dating to the period of significance. These 12 non compatible walls include some walls constructed between 1943 and 1975, a period when rustic-style construction was poorly executed. Also included in the 12 non compatible retaining walls are a few walls constructed after 1975 which were also poorly executed. In contrast, 61 retaining walls constructed after the period of significance were well executed and are difficult to distinguish from retaining walls from the historic period. These 61 compatible retaining walls were constructed between 1976 and the present, a period when rustic-style construction was generally well-executed.

In addition to the retaining walls constructed along the linear trail segments are the retaining walls associated with switchbacks. The number of retaining walls associated with switchbacks generally varies from one to three, with a small number of switchbacks requiring no retaining walls. Because only the switchbacks were counted and not the associated retaining walls, there is no exact count for retaining walls associated with the construction of switchbacks, though in most cases each switchback has one retaining wall. The rustic-style walls are the most prominent feature in most switchbacks and vary in construction from dry laid stone walls to mortared stone walls. The use of locally quarried stones helps the walls harmonize with their surroundings. In many cases vegetation, including chaparral and grasses, has grown in the gaps of the switchback walls allowing the wall to further blend in with its surroundings. These walls

are rustic-style in design with the exception of a few non-contributing contemporary wood retaining walls near Scout Peak. These contemporary wood retaining walls are designed to stabilize the terrain temporarily while vegetation is established. Ideally, the wood rots away after the vegetation has stabilized the inclined terrain.

Retaining walls located at switchbacks are particularly susceptible to human erosion caused by hikers who shortcut over and around the switchback. In many cases, the extra wear and tear destabilizes the retaining walls used in the construction of the switchback. As a result, 27 of the 76 switchbacks have required repairs to the retaining walls after the period of significance. The repairs have generally been compatible with the historic fabric and only in six cases have the modified switchbacks been altered to such an extent that the historic walls are no longer compatible with the rustic style trail system. As with other retaining walls, the poorly executed repairs and stabilizations of switchback walls completed between 1943 and 1975 are not compatible with historic rustic-style construction techniques and the walls repaired during this period do not contribute to the trail system. In contrast, the switchback retaining walls repaired between 1976 and the present are generally well executed and difficult to distinguish from the historic fabric, with few exceptions. The well executed repairs and stabilizations to switchback walls, all taking place after 1976, were compatible with the historic walls and contribute to the trail system.

In general, the walls dating to the historic period contribute to the historic trail system. Out of 424 linear trail segment retaining walls, 351 contribute to the historic trail system. This includes 27 repaired historic retaining walls that were repaired or stabilized using compatible techniques. Only one historic wall was repaired poorly with non compatible techniques and therefore no longer contributes to the trail system. In addition, of the linear trail segment retaining walls constructed after the period of significance, 61 of 73 walls are compatible with the rustic-style trail system. Also, the construction of most switchbacks along the historic trail system necessitated the construction of retaining walls. Out of 76 switchbacks, 64 retain their rustic character and the associated walls contribute to the trail system. .

Parapet Walls

Parapet walls are low walls that extend above the grade of the trail surface protecting the outer edge of the trail and providing a sense of enclosure along many of the steepest trail segments. The parapet walls were not individually counted during the earlier trail inventory, upon which the cultural landscapes inventory was based. Typically, for the purposes of the trail inventory, the parapet walls were extensions of retaining walls and were included as part of the retaining wall. Though not individually counted, these features gave certain segments of the trail system a distinct character. .

Very often the walls are an extension of the retaining wall below, being constructed in a rustic style reflecting the surroundings. These dry stacked or mortared walls typically range from single to double course in height. Less frequently, a parapet wall was created by cutting the trail

tread into solid rock in a manner that creates a high cut wall on the uphill side of the trail and a low parapet like wall on the downhill side. In these cases, the walls are roughly cut allowing the work to blend in with the surrounding terrain. In the Bear Gulch Cave Trail the parapet walls were particularly important in giving the trail a rustic character. The walls soften the rectilinear hard lines of the concrete steps and trail tread allowing the rustic style to continue through the dark confines of the talus caves. The finest examples of rustic style parapet walls were constructed along the Tunnel Trail. The parapets in this section have finger like stones extending above the height of the low wall. These 'fingers', spaced out along the length of the parapets, reflect the verticality of the finger rock formations located above.

In a few cases, erosion of the trail surface along a retaining wall has led to the appearance of parapet wall where originally the wall was flush with the trail surface. Sometimes it is difficult to determine whether the low wall was intended or if the trail surface has dropped.

The historic parapet walls help convey the historic rustic-style character of the trail system. Some of the parapets, and in particular the fingers, have been impacted by human use and vandalism, but overall, the parapet walls that remain are an important feature of the trail system. Some repairs, modifications, and reconstructions of parapet walls have taken place since the historic period, but the work has been sensitively completed using compatible materials and techniques.

Curbing

In a few cases, curbing has been installed along the downhill side of trail surface to create a raised edge of confinement. Typically curbing might be used to define the trail edge where the trail is cut from soil and the topography is not very steep. Curbing can strengthen the highly erodible edge of the trail while ideally encouraging the hiker to stay within the trail tread. Unlike parapets, curbing tends to be lower in height and is found where the elevation changes adjacent to the trail surface are minimal. Some of the curbing dates to the historic period while some curbing has been added more recently. Curbing from both eras tend to be very simple rustic style design, most likely a single low course of stones along the trail edge. Overall, the curbing from the historic period retains its historic character and function while curbing added since 1942 is compatible with the rustic style trail system.

Steps

The need for the High Peaks Trail System to accommodate pack animals led to a trail design that avoided the use of steps to make up grade. Historically, switchbacks were the preferred means to gain elevation while allowing for use by pack animals. There were two portions of the historic trail system that were not designed for pack animal access, the Steep and Narrow section of the High Peaks Trail and the Bear Gulch Cave Trail. Both pass through steep and challenging terrain that necessitates the use of steps to gain elevation.

Approximately 47 of 62 stairways date to the historic period and contribute to the trail system. Ten of the 47 historic stairways were stabilized or repaired using compatible techniques, and continue to contribute to the trail system. One of the 62 stairways dating to the historic period was repaired with non compatible techniques and no longer contributes to the trail system. Approximately 14 of the 62 stairways are non historic which includes both new construction and rebuilt historic steps. All of the 14 non historic steps are compatible with the historic rustic style trail system.

The steps of the Steep and Narrow section of the High Peaks Trail were rustic style constructions, relying on the use of local materials that harmonize with the setting. Many of the steps are constructed of rough cut rectangular stones which are either dry stacked or mortared. Other steps are cut into the rock surface. The steps cut into the stone are typically wide enough to allow both feet on one step. In a few cases the cut steps are only wide enough for a single foot and alternate between right and left foot for the length of the steps. Where the steps are particularly steep and long, a steel pipe handrail was installed during the historic period.

The steps along the Bear Gulch Cave Trail were constructed of concrete and date to the historic period. The smooth non ornamental surface of the cave steps is a logical response to walking in the darkened conditions of the talus caves. The concrete steps are lined with a rustic style parapet. The one or two course parapets in the caves harmonize with the talus of the caves while giving a sense of safety along the steep inclines adjacent to the steps. Also, steel pipe handrails were installed along most of the cave trail stairways. The concrete stairways of the Bear Gulch Cave Trail contribute to the historic trail system representing simple yet durable design solutions responding to the challenges of constructing a safe stairway in the wet dark conditions of the caves.

Generally, the steps along the trail system contribute to the trail system. Modified, repaired, and rebuilt stairways have been completed in a sensitive and compatible manner with only one exception.

Check Steps

Check steps have been utilized throughout the High Peaks Trail System to address loss in grade resulting from hiker use. Through erosion the trail surface can drop in grade below the adjacent terrain. The loss in grade leads to accelerated water erosion along the trail surface. Check steps are used to stabilize the trail surface and increase the grade along the trail so water flows off the trail. Typically they consist of two to four cut stones linearly arranged across the trail surface above the existing trail grade. The area behind the check step is backfilled which increases the grade of the trail to a more stable arrangement. It is not always necessary to backfill behind the check step. Sometimes sedimentation increases the grade of the trail behind the check step.

Historic check steps are virtually non existent along the rustic style trail system. Out of 184

check steps along the historic trail system, just eight dated to the historic period. The check steps are a modern response to approximately 70 years of human erosion and recent 100 year flood events. The remaining 176 check steps were constructed since the mid 1970s. The historic check steps that were documented contribute to the overall historic character of the rustic style trail system.

The non historic check steps are compatible trail system features being very similar in design and construction with the historic check steps. The modern check steps complement the rugged rustic style design of the historic trail system and are typically harmonious with their surroundings. Along with their simple rough cut edges, the check steps are generally constructed from stones gathered within the immediate vicinity.

Check Dams

Approximately 24 check dams, also referred to as water bars, have been installed along the trail system. The check dams are a response to water erosion caused from water running down slope along the trail. They are constructed of several square cut stones running across the trail protruding above the trail surface. The check dams redirect the flow of water off the trail. Where properly constructed, check dams stabilize the trail surface against water erosion. On rare occasions the check dams were constructed at too steep an angle. Where the angle is too steep, the increased rate of flow may lead to excessive erosion adjacent to the trail leading to the destabilization of the trail edge.

Only two of the 24 check dams were constructed during the historic period. The remaining 22 check dams were constructed after the period of significance, generally since the mid 1970s. The historic check dams that were documented were rustic style in design and contribute to the trail system.

The 22 check dams constructed after the period of significance are compatible with the historic check dams within the rustic style trail system. Like the historic check dams, the contemporary check dams harmonize with their surroundings. Along with their simple rough cut edges, the check dams are typically constructed from stones gathered in the immediate vicinity.

Open Ditches (Open Culverts)

Open ditches, also referred to as open culverts, are a common feature where gullies and ravines intersect the trail. The climate at the National Monument is very dry and water flow in most of the low areas is limited to brief periods following rain storms. The open culverts allow the intermittent flow of water over the trail surface without severe erosion. There are three types of open ditches found on the trail system; riprap, cut stone, and dips.

Riprap ditches allows a rustic style solution to stabilizing the trail surface where gullies and ravines lead water over the trail surface. Riprap is constructed of locally gathered stones that

reflect the surrounding geology. Riprap is relatively easy to walk on but is also stable enough to withstand the intermittent force of water flow. Riprap allows a minor stabilization intervention that harmonizes with the local setting and is compatible with the historic trail system design. There is at least one example of an historic open ditch using riprap.

Stone cut cross drains provide another solution to intermittent water flow. In these cases a cross drain is cut into a solid rock area providing a low area in the trail encouraging water to exit the trail surface. Cross drains are also rustic style in appearance, being roughly cut out of the rock.

Dips are also categorized under open ditches. Dips function in the same manner as other open culverts, directing water across the trail surface. They are a constructed depression across the trail surface that blends with the trail.

Of the 36 open ditches documented along the trail system, only five date to the historic period. The five historic open ditches contribute to the rustic style trail system. The 31 non historic open culverts were sensitively constructed using compatible materials and rustic style techniques.

Culverts

Two culverts are located along the High Peaks Trail System. The first culvert is a three foot diameter galvanized steel spillway located on the Bear Gulch Dam dating to the historic period. The second is a non historic three foot diameter galvanized steel culvert that passes beneath the Moses Spring Trail.

Constructed Water Features

Bear Gulch Dam (Park # HS1; LCS # 7395)
The Bear Gulch Dam is an integral portion of the High Peaks Trail System providing the trail surface for the North Chalone Peak Trail trailhead as well as creating a scenic reservoir. The contributing reservoir provided a scenic destination for hikers walking the trail system. The reservoir was also constructed with the intention to provide an additional water supply to the Bear Gulch area, particularly useful for fire suppression. Initial construction of the Bear Gulch Dam was completed by the CCC in the spring of 1935, reaching a height of 30 feet. During the winter of 1935 1936 an additional 14 feet were added leaving the dam in its final configuration with a height of 44 feet and a length of 75 feet. The additional height allowed the deck of the dam to serve as the trail surface replacing the function of the bridge that had been installed above the dam. The concrete gravity structure was faced with a locally quarried rock veneer on the concrete deck and both sides of the dam. The majority of the rock veneer had been installed by the end of the historic period. The small portion of the veneer not completed by 1942 was installed in 1976 using the stash of rock quarried during the historic period. The 1976 work is compatible with the historic fabric of the dam. The rustic-style Bear Gulch Dam

contributes to the High Peaks Trail System.

Terraces and Diversion Ditch
One contemporary diversion ditch and five small terraces have been installed in one location along the High Peaks Trail to reduce the rate of water flow over the trail to diminish erosion. This interrelated system has been sensitively installed, blending in with the cultural and natural fabric adjacent to the trail, and is not even visible to the casual viewer. These features are non-contributing but compatible.

Buildings

North Chalone Peak Fire Lookout Tower (Park # 402; LCS # 444168)
CA SHPO concurred with the National Register eligibility of the North Chalone Peak Fire Lookout Tower in 2003. The tower was determined individually eligible at the local level of significance under Criterion A for its association with forestry and Criterion C as the oldest example of the revised 809R plan, a design for fire lookout stations that began to be used in the 1950s by the California Department of Forestry and Fire Protection. The North Chalone Peak Fire Lookout Tower is a visually prominent feature at the highest point in the park. It serves as a destination marker for the panoramic views available at North Chalone Peak. The original fire lookout tower was built by the CCC during the historic period. The existing North Chalone Peak Fire Lookout Tower is a simple contemporary structure constructed in 1952 to replace the original rustic-style stone veneered fire lookout tower that was destroyed by fire. The existing structure consists of structural steel and a wood frame supported on reinforced concrete piers and connecting footing beams. The exterior consists of 1" x 10" redwood siding over waterproof building paper. The white painted redwood siding installed [approximately 2003] replaced the original white painted asbestos sheet siding. The existing tower post dates the period of significance and its significance is not associated with early park development or CCC development. The tower is not compatible with the rustic style of the original fire lookout tower or the rustic-style trail system. Therefore the lookout tower does not contribute to the High Peaks Trail System.

High Peaks Comfort Station (Park # 400; LCS # 23050)
The High Peaks Comfort Station is located near Junction Saddle, the scenic junction of the High Peaks and Juniper Canyon Trails. The comfort station conforms to the rustic style of the historic period. Coursed ashlar stone veneer covers the wood frame of the small three room structure constructed by the CCC in 1935. It is a small 13 foot by 22 foot L shaped three room structure. A repair/preservation project on the comfort station was completed in June of 2003 and a solar panel has been added on the less visible far side of the roof. The rustic-style comfort station contributes to the High Peaks Trail System.

Chalone Peak Comfort Station (Park # 403; LCS # 23051)
The Chalone Peak Comfort Station was originally built (1936 1937) by the CCC to serve the

Chalone Peak Fire Lookout at the terminus of the North Chalone Peak Trail. The eight foot by 12 foot rustic style structure is faced with uncoursed rhyolitic breccia stone. A wooden walkway is located on the south side of the structure to access the east entry. The rustic-style comfort station contributes to the High Peaks Trail System.

Small Scale Features

Contributing

Handrails
Metal pipe handrails were installed along numerous portions of the trail system, particularly along bridges, in the caves, and in particularly steep sections of trail. The metal pipes were installed during the historic period and are contributing features.

Stone Bench
A small bench was cut into a large stone along the High Peaks Trail near the Moses Spring Trailhead. The stone bench dates to the period of significance and contributes to the trail system.

Non Contributing

A large variety of non historic small scale features have been placed along the High Peaks Trail System. Examples of small scale features include wayfinding and interpretive signs, wayfinding arrows, gates, fences, and a bench. The following small scale features postdate the historic period and do not contribute to the historic trail system.

In general, wayfinding and interpretive signs are constructed of wood posts with a small brown metallic sign attached. Interpretive kiosks found at trailheads are constructed of brown painted aluminum tubing with clear panels. The signs and kiosks are relatively simple in design and compatible with the rustic style trail character but as contemporary features they do not contribute. White wayfinding arrows have been painted on large boulders along the Bear Gulch Caves Trail to assist hikers in navigating the caves in the low light conditions. It is likely that the arrows were added sometime after the lanterns were removed from the caves in the 1960s. The large white arrows, though simple, contrast significantly with the boulders and do not harmonize with the talus cave setting and therefore are not compatible with the rustic style trail system and do not contribute. Temporary barrier fences, often bright orange in color, have been placed along the trails to reduce shortcutting and impacts on resources adjacent to the trails. These removable features are not compatible with the character of the trail system and do not contribute. There are seven non historic metal gates located along the trails of the High Peaks Trail System. The gates control access to various trail segments, including the upper and lower caves, responding to natural resource protection or unsafe trail conditions. The contemporary gates do not contribute. One simple wooden plank bench with metal legs has been installed at junction saddle. Though compatible with the rustic-style trail system, the

bench does not contribute.

Summary

Overall, the historic buildings and structures of the High Peaks Trail System retain their rustic-style historic character and contribute to the High Peaks Trail System. Generally, buildings and structures constructed after the period of significance have been constructed with rustic-style materials and techniques and are compatible with the trail system. The historic structures convey the rustic style of the trail system associated with early park development and CCC development. Particularly important to the retention of the historic character of the trail system are the visually prominent retaining walls stretching along substantial portions of the trail system. Out of 424 retaining walls, 351 date to the historic period and contribute to the trail system. Other features that reflect the historic rustic-style character and contribute to the trail system are the tunnels, bridges, causeways, switchback retaining walls, parapet walls, the Bear Gulch Dam, the High Peaks Comfort Station and the Chalone Peak Comfort Station. See the features chart located in the Supplemental Information section for locations of historic and non historic features documented in this section.

Character-defining Features:

Feature: Tunnels (3)

Feature Identification Number: 133554

Type of Feature Contribution: Contributing

Feature: Bridges (6)

Feature Identification Number: 133556

Type of Feature Contribution: Contributing

Feature: Bridges (2)

Feature Identification Number: 133558

Type of Feature Contribution: Non Contributing

Feature: Causeways (2)

Feature Identification Number: 133560

Type of Feature Contribution: Contributing

Feature: Retaining Walls (351)

Feature Identification Number: 133562

Type of Feature Contribution: Contributing

Feature: Retaining Walls (73)

Feature Identification Number: 133564

Type of Feature Contribution: Non Contributing

Feature: Parapet Walls

Feature Identification Number: 133566

Type of Feature Contribution: Contributing

Feature: Steps (47)

Feature Identification Number: 133568

Type of Feature Contribution: Contributing

Feature: Steps (15)

Feature Identification Number: 133570

Type of Feature Contribution: Non Contributing

Feature: Check Steps (8)

Feature Identification Number: 133572

Type of Feature Contribution: Contributing

Feature: Check Steps (176)

Feature Identification Number: 133574

Type of Feature Contribution: Non Contributing

Feature: Check Dams (Water Bars) (2)

Feature Identification Number: 133576

Type of Feature Contribution: Contributing

Feature: Check Dams (Water Bars) (22)

Feature Identification Number: 133578

Type of Feature Contribution: Non Contributing

Feature: Open Ditches (Open Culverts) (5)

Feature Identification Number: 133580

Type of Feature Contribution: Contributing

Feature: Open Ditches (Open Culverts) (31)

Feature Identification Number: 133582

Type of Feature Contribution: Non Contributing

Feature: Spillway (1)

Feature Identification Number: 133584

Type of Feature Contribution: Contributing

Feature: Culvert (1)

Feature Identification Number: 133586

Type of Feature Contribution: Non Contributing

Feature: Diversion Ditch (1)

Feature Identification Number: 133588

Type of Feature Contribution: Non Contributing

Feature: Terraces (5)

Feature Identification Number: 133590

Type of Feature Contribution: Non Contributing

Feature: Bear Gulch Dam

Feature Identification Number: 133592

Type of Feature Contribution: Contributing

IDLCS Number: 7395

LCS Structure Name: Bear Gulch Dam

LCS Structure Number: HS1

Feature: North Chalone Peak Fire Lookout Tower

Feature Identification Number: 133594

Type of Feature Contribution: Non Contributing

IDLCS Number: 444168

LCS Structure Name: North Chalone Peak Fire Lookout Tower

LCS Structure Number: 402

Feature: High Peaks Comfort Station

Feature Identification Number: 133596

Type of Feature Contribution: Contributing

IDLCS Number: 23050

LCS Structure Name: High Peaks Comfort Station

LCS Structure Number: 400

Feature: Chalone Peak Comfort Station

Feature Identification Number: 133598

Type of Feature Contribution: Contributing

IDLCS Number: 23051

LCS Structure Name: Chalone Peak Comfort Station

LCS Structure Number: 403

Feature: Switchback Retaining Walls

Feature Identification Number: 134314

Type of Feature Contribution: Contributing

Feature: Handrails (15)

Feature Identification Number: 134224

Type of Feature Contribution: Contributing

Feature: Cut Stone Bench

Feature Identification Number: 134316

Type of Feature Contribution: Contributing

Feature: Interpretive and Wayfinding Signs

Feature Identification Number: 134318

Type of Feature Contribution: Non Contributing

Feature: Wayfinding Arrows

Feature Identification Number: 134320

Type of Feature Contribution: Non Contributing

Feature: Gates (7)

Feature Identification Number: 134322

Type of Feature Contribution: Non Contributing

Feature: Temporary Fences

Feature Identification Number: 134324

Type of Feature Contribution: Non Contributing

Feature: Wood Bench

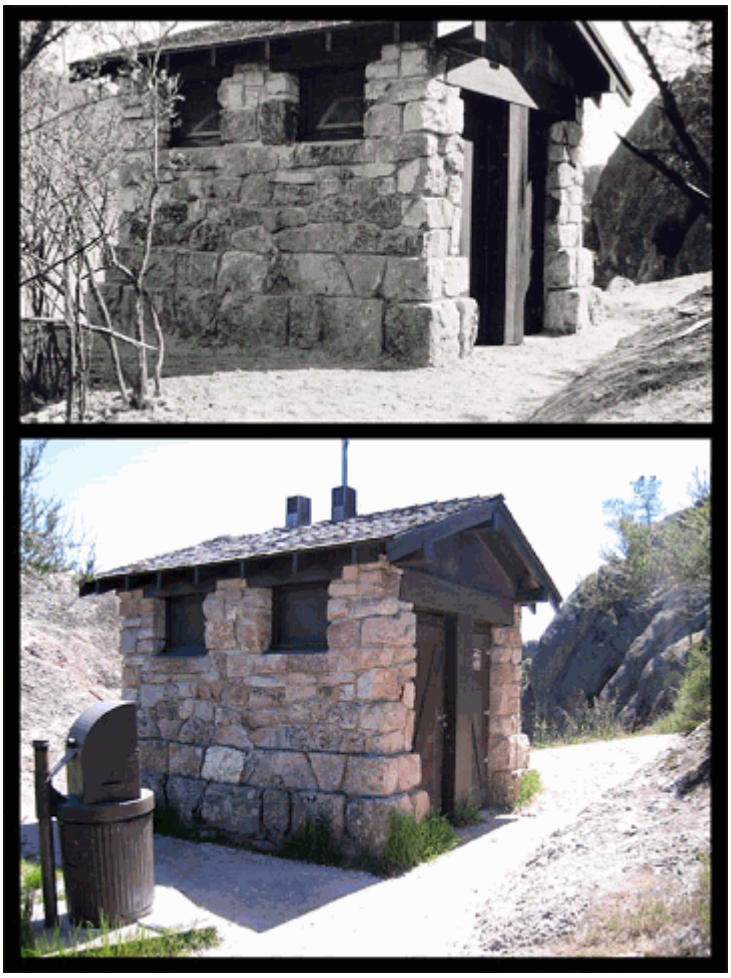
Feature Identification Number: 134326

Type of Feature Contribution: Non Contributing

Landscape Characteristic Graphics:



Buildings & Structures fig. 2: Bear Gulch Dam (Built 1935–1942). The rustic style dam created a year round water supply, a scenic feature, and connected the Chalone Peak Trail with the Moses Spring and Rim Trails. [PWRO, 2008]



Buildings & Structures fig. 3: High Peaks Comfort Station (Built 1935). Repeat photo compares 1935 and 2008 conditions. The rustic style comfort station is located along the High Peaks Trail. [PINN Coll., RG 79, NARA II, 1935 & PWRO, 2008]



Buildings & Structures fig. 4: North Chalone Peak Comfort Station (Built 1936–1937). The rustic style comfort station is located on North Chalone Peak near the fire lookout close to the terminus of the North Chalone Peak Trail. [PWRO, 2008]



Buildings & Structures fig. 6: Tunnel Trail Bridge (Built 1933). Repeat photo compares 1933 and 2008 conditions. The vertical stones that protrude from the parapets are unique to the trail. [PINN Coll., 1933 & PWRO, 2008]

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Buildings & Structures fig. 7: The left set of steps (Built 1935) is located along Moses Spring Trail just below the Bear Gulch Dam. The right set of steps (Built 1933) is located along the Steep and Narrow portion of the High Peaks Trail. [PWRO, 2008]



Buildings & Structures fig. 5: The top retaining wall is typical of rustic-style construction during the historic period, conforming to topography with a flush exterior. The lower wall dates to 1943-1975, a period of inferior construction. [PWRO, 2008]



Buildings & Structures fig. 8: Two modified switchback walls. The top wall was repaired between 1943 and 1975, a period of inferior construction. The bottom wall was repaired after 1976 and is typical of the sensitivity of repairs after 1975. [PWRO, 2008]

Topography

Definition:

- The three dimensional configuration of the landscape surface characterized by features (such as slope and articulation) and orientation (such as elevation and solar aspect).

The construction of the High Peaks Trail System required a considerable amount of topographic manipulation which is still evident. The trail system climbs steep sloped ravines and valleys, meanders through meadows and along ridge tops, and twists through the Pinnacles

geologic formations. As a rustic-style trail system, great effort was made to minimize the disturbance to the surrounding landscape. The frequently steep terrain demanded the inclusion of tread cuts, switchbacks, cut and fill, and tunnels to provide hiker access to the unique geologic formations of the National Monument. The trail system required additional topographic manipulation to accommodate the large mass and turning radius of pack animals. The only portions of the historic trail system that were not designed to provide for stock or pack animals were the Bear Gulch Cave Trail and the High Peaks Trail Steep and Narrow section [Fingers Foot Trail], both of which have particularly challenging terrain. To accommodate pack animals would have required excessive topographic manipulation that would have substantially altered the character of these two trails. The topographic features surviving from the historic period contribute to the historic character of the High Peaks Trail System.

Switchbacks

Switchbacks were constructed along the trail system to gain elevation in steeply inclined areas. Switchbacks allow the trail to gain elevation at a reasonable grade to allow for an easier hiking experience. They also create a trail surface more amenable for pack animals allowing the animals the room needed to make 180-degrees turns. The construction of switchbacks often, but not always, requires cutting into uphill side and filling the downhill side of the trail surface to create an area large enough for the trail surface as it turns 180 degrees while allowing room for pack animals to turn around. Most switchbacks require some sort of retaining wall in the middle that splits the upper and lower portion of the trail. Switchbacks also often require the construction of retaining walls either above or below the switchback to stabilize the cuts and fills.

Overall, the walls associated with the 70 historic switchbacks provide evidence of the preferred solution to making up grade in the steeply inclined topography associated with the National Monument. Seventy-eight percent of the modified historic switchbacks have compatible repairs that did not lead to lost integrity. In six instances, the walls were largely reconstructed (over a third of the historic fabric) or the repairs were poorly completed leading to a loss of integrity associated with individual switchbacks. All six of the newly constructed switchbacks are compatible with the historic rustic-style switchbacks.

Overall, the majority of the existing switchbacks associated with the High Peaks Trail System either retain integrity (84%) or are compatible (9%) with the rustic-style structures of the trail system, and contribute to the historic character of the trail system.

Tread Cuts

Tread cuts are sculpted rock surfaces of varying widths and heights created during the construction of the trail tread. Tread cuts are utilized where the trail alignment passes along a steeply inclined rocky surface. The cut involves cutting or blasting a level trail surface out of the solid rock. Tread cuts are evident throughout the trail system and in particular in the steeply

inclined solid rock portions of the trail. Tread cuts create a level ground plane walking surface and an associated uphill nearly vertical cut in the rock. In some cases the tread cut was deep enough to create a parapet or guard wall on the downhill side of the trail. In keeping with the principles of naturalistic landscape architecture, the vertical rock cuts were battered at an angle or blasted to simulate a natural rock outcropping. Most often the uphill cut is angled downward towards the trail surface. The top edges of the rock cuts were typically tapered into the natural slope. The tread cuts conform to the existing topography, giving a sense that the trail is a natural part of the topography.

There are two impacts that diminish the effectiveness of a tread cut. The first is the erosion of the tread cut trail surface through hiker use. Erosion can create an uneven walking surface. In response to the irregular surface, the trail crew will re-cut the surface recreating a level walking surface. The second impact is also related to erosion. Sometimes human and water erosion of the tread cut surface leads to an undesirably low trail surface. In these cases the trail crew will either use a combination of fill or check steps to raise the grade of a tread cut.

Since the trail alignment has been retained from the historic period, the majority of the tread cuts are likewise retained. Two-hundred-nineteen tread cuts were documented. Almost all (97%) of the tread cuts date to the historic period, reflect the historic rustic-style character of the trail system, and are contributing features. Some of the tread cuts have been modified to diminish the effects of erosion but the repairs have been completed using compatible techniques involving the addition of fill and compatibly constructed rustic-style check steps. Of the 213 historic tread cuts, only six were modified after the period of significance and only one of the modified historic tread cuts is incompatible and does not contribute to the trail system. The other five modified tread cuts are were modified using compatible techniques and contribute to the rustic-style character trail system. Only six tread cuts have been constructed since the period of significance and do not contribute to the trail system. Five of the six contemporary tread cuts were constructed using compatible construction techniques.

Overall, the tread cuts retain integrity and contribute to the historic rustic-style character of the trail system.

Cuts and Fills

Cuts and fills have been utilized along most of the High Peaks Trail System to create a relatively level trail surface. Cuts and fills are different from tread cuts in that cuts and fills involve the movement of dirt whereas tread cuts are utilized in solid rock portions of the trail system. Typically the soil displaced from the cut was then used to fill the area below the trail, thus eliminating the need to dispose of the excess soil. Using cut and fill techniques keeps the impact of the trail construction to a minimum. The series of cuts and fills tend to conform to the topography, following closely the preexisting curves of the natural topography while allowing a trail to gradually gain elevation along an inclined surface.

The cut and filled areas adjacent to the trail are often destabilized by the removal of vegetation and due to the increased slope of the cut and filled areas relative to the surrounding terrain. Retaining walls were often used to stabilize the cut and filled areas along the trail system. The retaining walls, as described in the buildings and structures section, use rustic-style construction materials and techniques. Native vegetation has stabilized the earthwork associated with cuts and fills. Where vegetation stabilized the earthwork, the vegetated character correlates well with the rustic-style ideal of harmonizing with the surrounding vegetated terrain.

Since the trail alignment is retained from the historic period, most of the existing cuts and fills date to the construction period. The few modifications since the historic period involve the stabilization of retaining walls and planting native vegetation where denuded due to human and water erosion. Overall the cuts and fills are retained from the historic period and contribute to the historic character of the trail system.

Quarries

In order to construct the trails in the rustic-style, stones necessary for the construction of the trail system were generally quarried in the immediate vicinity of the trail segment under construction. During the historic period, stones were often quarried from locations visible from the trail. The trail crew would typically roughly work the exposed quarry areas to give them a more natural appearance. Over time, the development of a natural patina along with the growth of lichens and vegetation has blended the exposed quarry areas into the natural setting. The quarries dating to the historic period contribute to the trail system.

Quarrying since the period of significance has been generally less intrusive particularly since the 1970s where any necessary quarrying has been concentrated on the backsides of stones where impacts would be less visible from the trail system. Though less visually invasive than historic quarries, the contemporary quarries are compatible with the rustic-style of design by blending in with the natural setting.

Summary

Overall, the topographic features either retain integrity from the historic period or, if constructed after the historic period, were completed using compatible materials and techniques. The existing topographic features represent the rustic-style of design and contribute to the historic character of the High Peaks Trail System.

Character-defining Features:

Feature: Switchbacks (64)

Feature Identification Number: 133600

Type of Feature Contribution: Contributing

Feature: Switchbacks (12)

Feature Identification Number: 133602

Type of Feature Contribution: Non Contributing

Feature: Tread Cuts (212)

Feature Identification Number: 133604

Type of Feature Contribution: Contributing

Feature: Tread Cuts (7)

Feature Identification Number: 133606

Type of Feature Contribution: Non Contributing

Feature: Rip Rap Trail Tread (1)

Feature Identification Number: 133608

Type of Feature Contribution: Contributing

Feature: Rip Rap Trail Tread (1)

Feature Identification Number: 133610

Type of Feature Contribution: Non Contributing

Landscape Characteristic Graphics:



Topography fig. 1: High Peaks Trail (1933). Repeat photo compares 1933 and 2008 conditions. A tunnel, cuts & fills, and substantial retaining walls were used in the construction the rustic style trail. [PINN Coll., 1933 & PWRO, 2008]



Topography fig. 2: Tunnel Trail Switchback (ca. 1933). Located at the junction of the Tunnel Trail and the Steep and Narrow segment of the High Peaks Trail. Construction used cuts & fills in conjunction with a central retaining wall. [PWRO, 2008]



Topography fig. 3: Tread cut along the Rim Trail (1935). This deep tread cut creates a parapet wall on the downhill side of the trail. Two-hundred-twelve contributing tread cuts were documented along the High Peaks Trail System. [PWRO, 2008]

Natural Systems and Features

Definition: The natural aspects that have influenced the development and physical form of a landscape. The following may be included:

- Geomorphology: the large scale pattern of land forms.
- Geology: the surficial characteristics of the earth.
- Hydrology: the system of surface and subsurface water.
- Ecology: the interrelationships among living organisms and their environment.
- Climate: the temperature, wind velocity, and precipitation.
- Native Vegetation: indigenous plant communities and aggregate and individual plan features.

Geology

Pinnacles National Monument gets its name from rock spires and crags that are remnants of an ancient volcano. The volcano eroded over millions of years as it moved northward along the San Andreas Fault.

Pinnacles National Monument is located on the eastern edge of the Pacific plate. The pinnacle formations found there are the remnants of Miocene volcanic activity. Most of the rock found at Pinnacles originated as limited lava flows from fissures which cooled rapidly on the surface. The resulting rhyolite is a much finer texture than granite. The consolidated breccia (irregular

rhyolite fragments imbedded in molten rhyolite), which rises several hundred feet, exhibits the effects of weathering, block faulting, and continuous earthquakes over the past twenty-three million years.

The talus caves of the monument were formed when steep, narrow canyons filled with a jumbled mass of boulders from the cliffs above. The canyons are the result of faults and fractures in the central area of volcanic rock.

The rock spires of the High Peaks and the caves of Bear Gulch are the principle attractions for visitors at the Monument. It was the creation of the High Peaks Trail System that allowed visitors to access these unique geologic formations. The geologic features are retained from the historic period and contribute to the historic character of the trail system.

Climate

The climate of Pinnacles is typical of the Mediterranean climate of California, with cool wet winters and hot dry summers. Summer temperatures of over 100 degrees are common, but coastal fog will often come into the valleys at night. Nighttime summer temperatures of 50 degrees are common, making for enormous daily temperature swings. Winter climate is akin to the California deserts, with mild days and nights often dropping into the low 20s. The average precipitation is approximately 16 inches per year. Nearly all of the precipitation is in the form of rainfall, with the majority occurring from December to March. Snowfall is rare, but does occur in significant amounts about every 10 years. The great variability in seasonal precipitation is due to the east Pacific high. This dominant weather feature shifts northward in the summer to shunt storms far to the north. Occasionally this feature brings subtropical moisture into central California from southerly latitudes, producing one to five thundershowers per year in the National Monument. Mostly, however, the east Pacific high acts as a giant valve completely shutting off precipitation for long stretches of the year. California is known for its long dry and wet cycles. Changes in the east Pacific high shift on approximately a six-year cycle. The result is persistent drought for five to eight years, followed by a wet period. Such cyclic variation is an important consideration in vegetation, wildlife, and water management.

Vegetation Character

The natural vegetation in the vicinity of the trail system has a strong influence on the character of the trail. Vegetation along the trails hides and reveals panoramic views. Vegetation also provides relief from the hot summer sun in portions where the chaparral or tree canopy extends over the trails. From annotated photos from the CCC period, it is clear that it was intended that pre-existing trees and chaparral were to extend over the trails to provide shade. Each of the vegetation types along the trail provided a unique hiking experience.

The vegetation at Pinnacles National Monument can be broadly classified into five major communities: chaparral, woodland, riparian, grassland, and rock and scree. The patterns formed

by the vegetation types are a result of the influence of a variety of factors including soil type, aspect, slope, moisture regime, and fire history.

Chaparral
Chaparral is the most widespread plant community along the trail system and within the National Monument. Found on shallow or deep soils, north- or south-facing slopes, moist canyon bottoms, or exposed upper ridges. All chaparral associations share similar characteristics, though the species composition and structure differ in relation to environmental factors.

This vegetation type is composed mostly of shrubs up to six feet tall, and is adapted to grow in warm climates with little or no summer moisture, and variously wet winters. To survive and even thrive in the long hot summers, many of the plants have evolved adaptive traits such as small waxy-coated leaves, deep taproots, shrubby stature, water storage structures, and summer dormancy.

Chamise, with small needle-like leaves, is the dominant shrub at Pinnacles. Chamise grows in mixes of other species, including buck brush, manzanita, holly-leaved cherry, mountain-mahogany, and black sage. The composition of the chaparral varies depending on soil type and direction of exposure, amongst other factors. The many species of the annual and perennial understory also vary depending on moisture and exposure. As a general rule, dry south-facing stands have fewer species than moister north-facing stands.

Chaparral varies in height and density along the length of the trail. There are some locations where the chaparral is dense and tall, breaking up potential views of the surrounding landscape. In many locations along the trail system, the chaparral has a broken and intermittent character which allows broad panoramic views between the stands of chaparral. Finally, there are many areas along the trail system where the chaparral is short enough that hikers can see distant views over the top of the chaparral.

It is difficult to use historic photos to determine how the character of the chaparral has changed along the trail system since the historic period. Fire history has a strong influence on the chaparral areas. Fire simultaneously burns mature plants while encouraging seeds to germinate. Since many of the historic photos were taken right after a large wildfire, the chaparral areas appear more barren than they would look during other times during the historic period before the fire or after recovery. Generally, there have been more chaparral fires in the vicinity of the park as the growing populations. Therefore, the existing chaparral may be less dense than during much of the historic period. Overall, the variety in growth habit of the species along the trail system reflects local environmental factors which are essentially the same today as they were during the historic period.

Woodlands
Woodlands are the second most common association in the monument, occurring from lower

riparian areas to upper exposed slopes of North Chalone Peak, and are characterized by trees with annual grasses and forbs in the understory. The main woodland association at Pinnacles is the blue oak woodland, comprising approximately 10% of the total vegetation cover in the monument and along the trails system. Gray pine, California buckeye, valley oak, and live oak appear both in this and the riparian associations. In the woodland habitat type, however, these tree species are only minor components, while in riparian areas they play a more significant role. The woodland understory is a mixture of non-native grasses, perennial native grasses and a variety of annual and perennial forbs.

The trails pass through patches of woodland throughout the trail system with the densest stands located in Bear Gulch. Patches of woodland are clearly visible in photos dating to the period of significance. Trees along the trail provide shade and provide variety to the varied topography of the trail system. The trees also provide another vertical element in a landscape dense with rock formations and steep slopes.

In comparing historic photos with the present day conditions, it appears that the woodlands retain a similar character to that of the historic period. In many cases, the survey crew was able to relocate trees that were visible in historic photos.

Riparian
The riparian habitat is restricted to the valley bottoms and sheltered, moist canyons of the monument. The species are deep-rooted and require more water than any of the other vegetation associations. Large deciduous and evergreen species dominate, such as sycamore, cottonwood, and California buckeye, often growing directly in small creeks and streams. Other major species include valley oak, live oak, and gray pine, as well as willow and mule fat. The understory in this community consists of shade-loving perennials with few annual species.

Riparian vegetation is evident along the trails in Bear Gulch, along the first half of the Condor Gulch Trail, and in a small area along the High Peaks Trail near the Bench Trail. The densest stands of riparian vegetation are found on the trails within Bear Gulch. The riparian vegetation provides a high degree of shade and tends to restrict views from the trail.

Rock and Scree
The rock and scree habitat is the least common in the monument, but it is its dramatic spires and rock faces that inspired the establishment of Pinnacles National Monument. Named for its predominant substrate, the association is characterized by having little or no soil. This slight but important difference in soil depth largely accounts for contrasts between the vegetation of this and the grasslands habitat. Bitter root and two-leaved onion, for example, are among the most spectacular plants in the monument, and are found in rocky areas of the High Peaks, Balconies and South Chalone Peak.

The trail system allows the visitor to access the unique rock and scree areas of the National Monument which are located at higher elevations. The vegetation of this habitat is short in

height and allows broad panoramic views. The only shade occurs where rock walls and spires block the suns rays.

The rock and scree areas that originally inspired the formation of the National Monument are still a vital component of the trail system experience.

Grasslands
Grasslands are not very common in the National Monument. They are located in shallow soils that prevent the establishment of deep-rooted species. Dominant species include introduced species such as brome; native and non-native annuals including fiddleneck and filaree; and a variety of mostly native herbaceous perennials like lomatiums.

The largest grassland found on the historic trail system is the grassy meadow on the High Peaks Trail between the intersections with the Bench and Condor Gulch trails. Small grassland areas can be found along most of the High Peaks Trail System trails. The grassland areas, like rock and scree, allow broad panoramic views with little shade.

Though a minor portion of the trail system, the small patches of grassland provide a welcome variety to the hiking experience allowing for panoramic views with an undulating grassy ground plane in the foreground.

Summary

The natural systems and features of the High Peaks Trail System retain historic patterns that are associated with the trail system setting and they help convey the historic character of the trail system.

Landscape Characteristic Graphics:



Natural Systems fig. 1: The repeat photo compares 1935 and 2008 conditions. The CCC encouraged the overhang of chaparral (in this case manzanita) to shade the relatively open trail system. [PINN Coll., 1935 & PWRO, 2008]

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Natural Systems fig. 2: The meadow located along the High Peaks Trail between Chalone Creek and the junction with the Condor Gulch Trail. Grasslands represent a small portion of the trail system which is dominated by chaparral. [PWRO, 2008]

Spatial Organization

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

As a linear landscape, the trail system connected a variety of destinations within the park including the Bear Gulch Caves, the rock formations of the High Peaks, the Bear Gulch Reservoir, North Chalone Peak (the highest point in the park), and Moses Spring. The trail itself was designed to harmonize with the setting while travelling along the natural contours of the landscape while ascending and descending the often steep terrain. It was not just the destinations, but the experience of hiking the trail that offered numerous rewards including variable views, diverse vegetation patterns, a variable trail gradient, with opportunities for movement and restful contemplation.

The trails were designed to take full advantage of the views found along steep and varied terrain of the National Monument. In numerous locations along the trail the hiker perceives broad views of distant features. At other times, the hiker's attention is focused on nearby features where the topography and vegetation limit views. In the Bear Gulch Caves Trail, the trail meanders amongst boulders and a running creek with the sounds of cascading water competing with ephemeral views inside the darkened caves. On the Condor Gulch Trail, an

overlook established during the period of significance provides views of Condor Gulch and the hills and slopes beyond. The Chalone Peak Comfort Station was placed at the highest point in the park at the terminus of the North Chalone Peak Trail adjacent to the fire lookout. The High Peaks Comfort Station was placed at Saddle Junction, a high point offering panoramic views and located where the High Peaks Trail split into the Fingers Foot Trail and the High Peaks Trail Bridle Path.

Trailheads were strategically placed near clusters of visitor activity including the Bear Gulch Visitor Center (now the Nature Center) and near the Chalone Creek Maintenance Area where a campground was located up until the late 1970s.

Chaparral, the dominant vegetation habitat at the park, was cleared where necessary to create the trail tread. Chaparral was preserved adjacent to the trail which provides variable enclosure both hiding and revealing distant views depending on vegetation height and the steepness of the surrounding hillsides. Less common in the park, but important in creating variety along the length of the trail were the open grassland and rock and scree areas; the lightly canopied and open woodland areas; and the densely vegetated heavily canopied riparian vegetation areas.

The spatial patterns associated with the High Peaks Trail System established during the period of significance have been retained. Only minor changes in alignment have taken place since the historic period. Important destinations along the trail are retained including the reservoir, the High Peaks rock formations, the talus caves, and North Chalone Peak. A replacement fire lookout tower stands where the original North Chalone Fire Lookout Tower stood before it burned down. Vegetation patterns continue to strongly influence the sense of openness along the trail. Overall, the spatial organization of the trail system is retained and contributes to the historic character.

Land Use

Definition: The principal activities in the landscape that have formed, shaped, or organized the landscape as a result of human interaction.

The original land use intent for the High Peaks Trail System was to provide visitors access to a variety of the parks unique geologic features. Most of the trails of the historic trail system were also designed to accommodate visitor stock, guided horse tours, and the pack animals of trail crews constructing and maintaining the trail system. The trail to North Chalone Peak was designed to provide park access to the North Chalone Peak Fire Lookout Tower while extending the visitor trail to the highest peak in the park.

The spine of the trail system as it developed was a large loop beginning near the Bear Gulch Administrative Area and ending near the Chalone Creek Maintenance Area. This portion of the trail that takes hikers up to the High Peaks area became known as the High Peaks Trail. The other trails of the High Peaks Trail System were alternate routes or spurs off the High Peaks Trail that allowed access to other unique areas of the park and different length loop routes.

Visitor camping was generally not allowed along the historic trail system. The CCC constructed

a temporary spike camp near North Chalone Peak during the construction of the trail and fire lookout tower. Two visitor camping areas (no longer extant) were located near the trailhead in Bear Gulch and Chalone Creek.

The trail system continues to allow hikers access the same unique geologic areas of the park. The biggest changes in land use are the expansion of the trail system. Trails have been constructed since the historic period to allow access from the west side, to allow access to wilderness areas of the park, to reduce safety concerns associated with rock climbing above trails, and to reduce safety concerns associated with pedestrians sharing roads with vehicular traffic along Route 146. Yet, the original High Peaks Trail System is intact with few changes to its original alignment and character.

The trail system still accommodates pack animal access. During the historic period, stock and pack animals would have been more common with active trail construction and the presence of visitor stock and guided horse tours on the trail system. Visitor stock and guided horse tours are no longer permitted on the trail, though the trail crew occasionally will use pack animals to aid in the maintenance of the trail system.

The fire lookout tower is no longer used and is now a historical exhibit. This land use associated with the historic trail system has ended.

One new land use taking place along the trail system is rock climbing, which became popular in the park during the 1970s. To diminish the impacts of rock climbers attempting to access climbing routes, numerous access trails have been cleared along the historic trail system. Also, in two locations where rock climbing and hiking land uses overlapped, the decision was made to reroute hiking traffic in response to safety concerns. These changes in land use are minor and do not diminish the integrity of the overall historic trail system.

Overall, the main reason for the establishment of the High Peaks Trail System, to allow visitors to hike to the unique geologic features of the park, has been sustained since the historic period. Hiking as a land use is a characteristic of the High Peaks Trail System that supports its historic integrity and contributes to its historic significance.

Archeological Sites

Archeological site inventories by the CLI include the location of ruins, traces, or deposited artifacts in the landscape that are associated with the period of significance and are evidenced by the presence of either surface or subsurface features. The CLI takes every precaution not to disclose the location of sensitive archeological sites to preserve the resources.

Pre-historic and historic archeological sites are located within the vicinity of the proposed historic district. While these sites may be archeologically significant in their own right, they are not directly linked to the significance of the trails. As a result, these features do not contribute to the district. It should be noted, however, that two historic sites may have the potential to reveal information regarding the development and construction of the trail system.

Abandoned Moses Spring Trail Remnant
The Moses Spring Trail was realigned in 1942 with the construction of a tunnel allowing the trail to stay at a higher elevation out of the bottom of Bear Gulch. Traces of the earlier trail alignment are retained which includes bridge abutments and a retaining wall. This early trail trace pre-dates the CCC and is associated with early park development. While this remnant may have the potential to reveal information concerning trail building technologies and practices as well as information regarding historic circulation systems within Pinnacles National Monument, it has not been evaluated for its information potential, and does not contribute to the historic district.

Spike Camp
The CCC constructed a temporary tent camp, known as a spike camp, near North Chalone Peak during the construction of the trail and fire lookout tower. The spike camp was located to the east of the Chalone Peak Trail on the approach to North Chalone Peak. Trash heaps mark the approximate location of the spike camp and aid in interpreting trail construction during the period of significance. While the spike camp may be may have the potential to reveal information concerning the historic circulation system, the spike camp has not been evaluated for its information potential and does not contribute to the proposed historic district.

Condition

Condition Assessment and Impacts

Condition Assessment: Good

Assessment Date: 04/01/2009

Condition Assessment Explanatory Narrative:

The High Peaks Trail System is in good condition. Though there is clear evidence of disturbances due to visitor use of the trail system, the maintenance staff has had a history of sensitively stabilizing these impacts through routine and periodic maintenance.

Stabilization Measures:

Revegetate areas where shortcutting and social trails have denuded vegetation adjacent to the trail system. In particular, shortcuts around switchback walls should be revegetated to address the accelerated erosion.

Repair walls, curbing, parapet walls and other stone features from visitor damage.

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

Reduce the downward angle of the open culverts, check dams, and dips where the angle is too steep leading to accelerated erosion during rain events.

Consider integrated pest management to control the burrowing of squirrels in stone constructed trail features.

Repoint mortared walls where necessary.

Impacts

Type of Impact: Visitation

External or Internal: External

Impact Description: Hiker use of the trail system leads to the erosion of the trail surface. In some cases the trail surface has dropped below the grade of a retaining wall leading to unintended curbing. Many hikers walk along the outer edge of the trail which can destabilize the trail edge, curbing, or retaining wall on the outer edge of the trail or lead to an expansion of the trail in width. Many hikers shortcut over and around retaining walls associated with switchbacks which leads to the deterioration of the inclined surface or wall associated with the switchback. In a few cases,

shortcutting rendered historic retaining walls obsolete as the social trail shortcutting around the switchback became the primary trail. In some cases, visitors knock down stones associated with guardwalls and curbing. Also, social trails impact the vegetation along the trail system accelerating erosion where vegetation is lost.

Type of Impact: Erosion

External or Internal: Internal

Impact Description: Heavy seasonal rains cause deterioration of the trail surface and can destabilize cuts and fills. Human caused erosion can lower the grade of the trail accelerating erosion from the flow of water down the trail surface. Erosion has led to the degradation of some of the retaining walls.

Type of Impact: Pests/Diseases

External or Internal: Internal

Impact Description: In some cases, ground squirrels burrow along the trail or around retaining walls which may lead to the deterioration of cuts & fills or walls.

Type of Impact: Inappropriate Maintenance

External or Internal: Internal

Impact Description: Along the North Chalone Creek Trail a bulldozer was used to regrade the trail surface which included the creation of dips along the trail surface to encourage flow of water off the trail surface. It is likely that the bulldozer damaged some of the historic retaining walls or cuts and fills. The dips constructed by the dozer are more excessive in construction than appropriate.

Some of the constructed dips and water bars were angled too steeply in their construction. The steep angles lead to an increased rate of erosion that may degrade the trail surface in the vicinity of the water diversion features.

Type of Impact: Vegetation/Invasive Plants

External or Internal: Internal

Impact Description: In some cases woody vegetation is encroaching on the retaining walls. As the roots grow in retaining walls, they can destabilize the wall.

Type of Impact:	Structural Deterioration
External or Internal:	Internal
Impact Description:	In some cases, such as historic retaining walls and steps, the mortar has cracked which destabilizes the feature.

Treatment

Treatment

Approved Treatment: Undetermined

Bibliography and Supplemental Information

Bibliography

Citation Title: See Supplemental Information section for a complete Bibliography.

Supplemental Information

Title: Bibliography

Description: Secondary Sources

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Archival Repositories

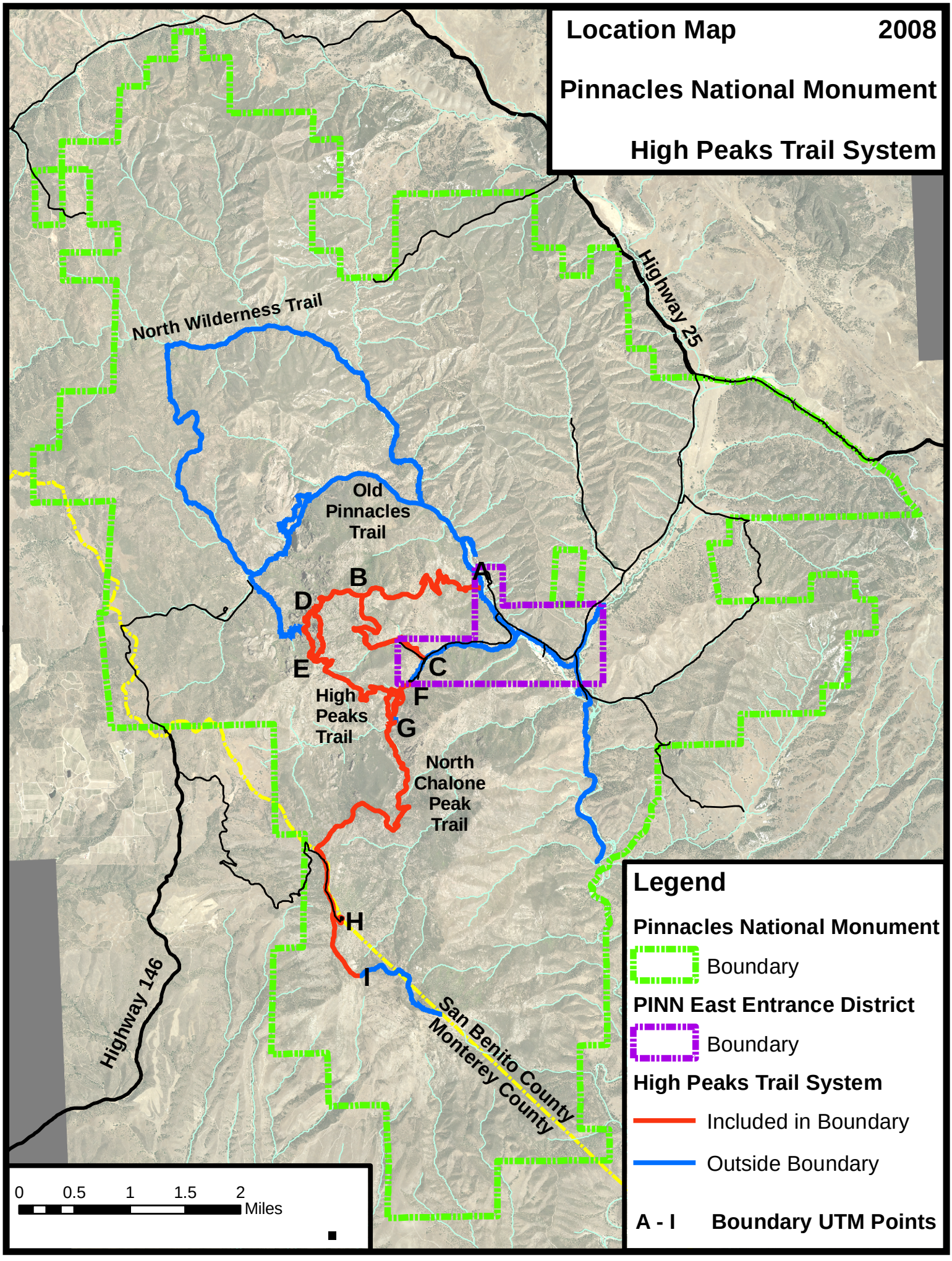
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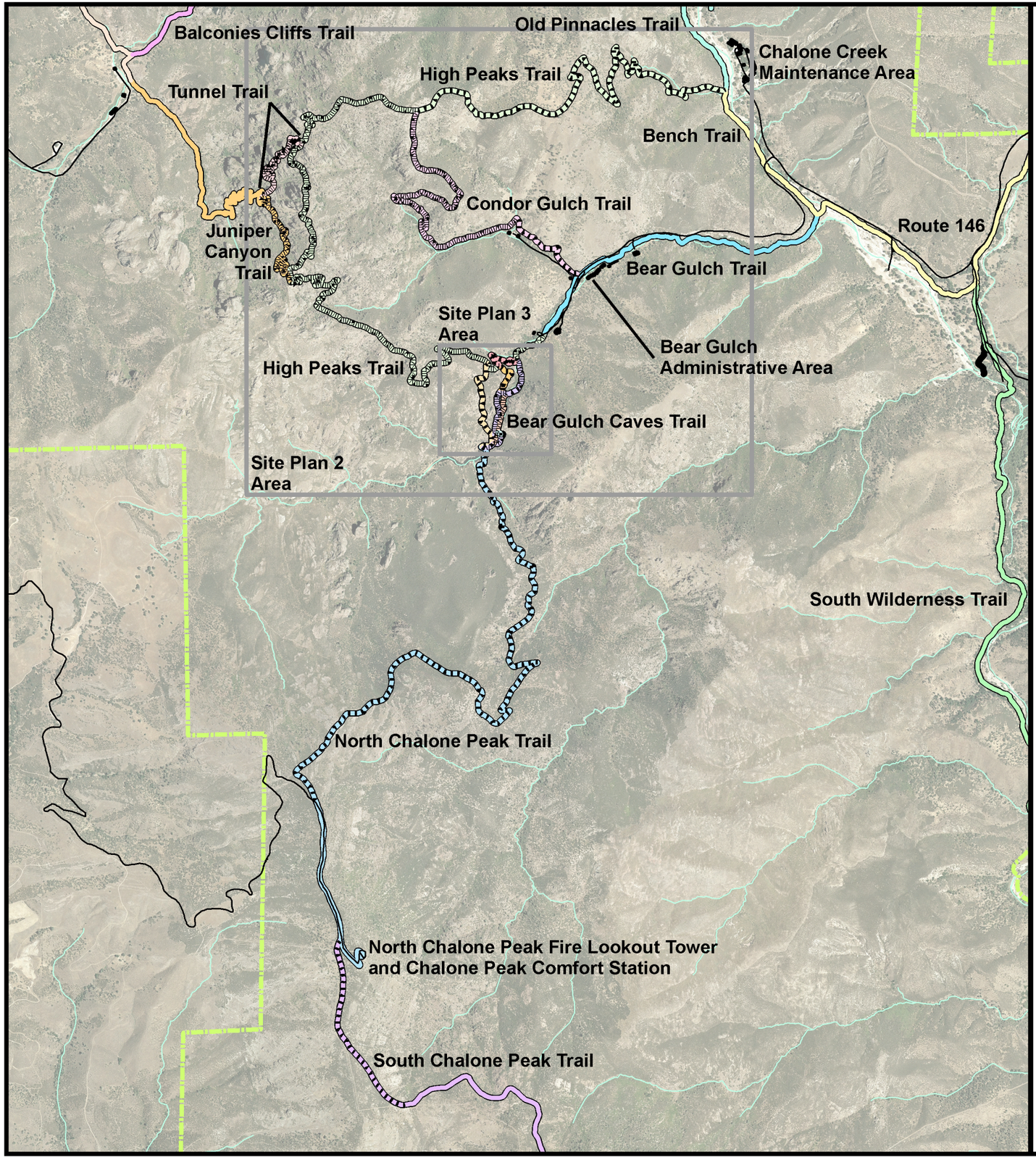

Location Map 2008
Pinnacles National Monument
High Peaks Trail System
North Wilderness Trail
Highway 25
Old Pinnacles Trail
A
B
C
D
E
F
G
H
I
High Peaks Trail
North Chalone Peak Trail
Highway 146
San Benito County
Monterey County
0 0.5 1 1.5 2 Miles
Legend
Pinnacles National Monument
Boundary
PINN East Entrance District
Boundary
High Peaks Trail System
Included in Boundary
Outside Boundary
A - I Boundary UTM Points

Site Plan 1
High Peaks Trail System
Existing Conditions

2008

Pinnacles National Monument

High Peaks Trail System



Legend

Trail Period

- Early Park (Contributing)
- CCC (Contributing)
- Post P.O.S. (Non-Contrib.)

Trails

- Balconies Cliffs Trail
- Bear Gulch Caves Trail
- Bear Gulch Trail
- Bench Trail
- Cave Access Trail
- Condor Gulch Trail
- High Peaks Cut-Off Trail
- High Peaks Trail
- Juniper Canyon Trail
- Moses Spring Trail
- Moses Spring Trail Realign.
- North Chalone Peak Trail
- North Wilderness Trail
- Old Pinnacles Trail
- Old Pinnacles Trail Reroute
- Rim Trail
- South Chalone Peak Trail
- South Wilderness Trail
- Tunnel Trail
- Wall Trail

Boundary

- National Monument Boundary

Creeks

- Seasonal & Perennial

N

0 0.25 0.5 1 1.5 2 Miles

Site Plan 2 2008
High Peaks Trail
Existing Conditions

Pinnacles National Monument

High Peaks Trail System

Old Pinnacles Trail
High Peaks Trail
Bench Trail
Tunnel Trail
Hawkins Peak
Condor Gulch Trail
Overlook
Condor Gulch Maintenance Area / Storage Area
Juniper Canyon Trail
High Peaks Trail: Steep and Narrow
Bear Gulch Trail
Bear Gulch Administration Area
Bear Gulch Trail
Moses Spring Parking Area & Bear Gulch Comfort Station
High Peaks Comfort Station/ Junction Saddle
High Peaks Trail
High Peaks Trail
Moses Spring Trail
Rim Trail
Bear Gulch Caves Trail
Site Plan 3 Area
Bear Gulch Reservoir
North Chalone Peak Trail

Legend

Trail Period

- Early Park (Contributing)
- CCC (Contributing)
- Post P.O.S. (Non-Contrib.)

Creeks

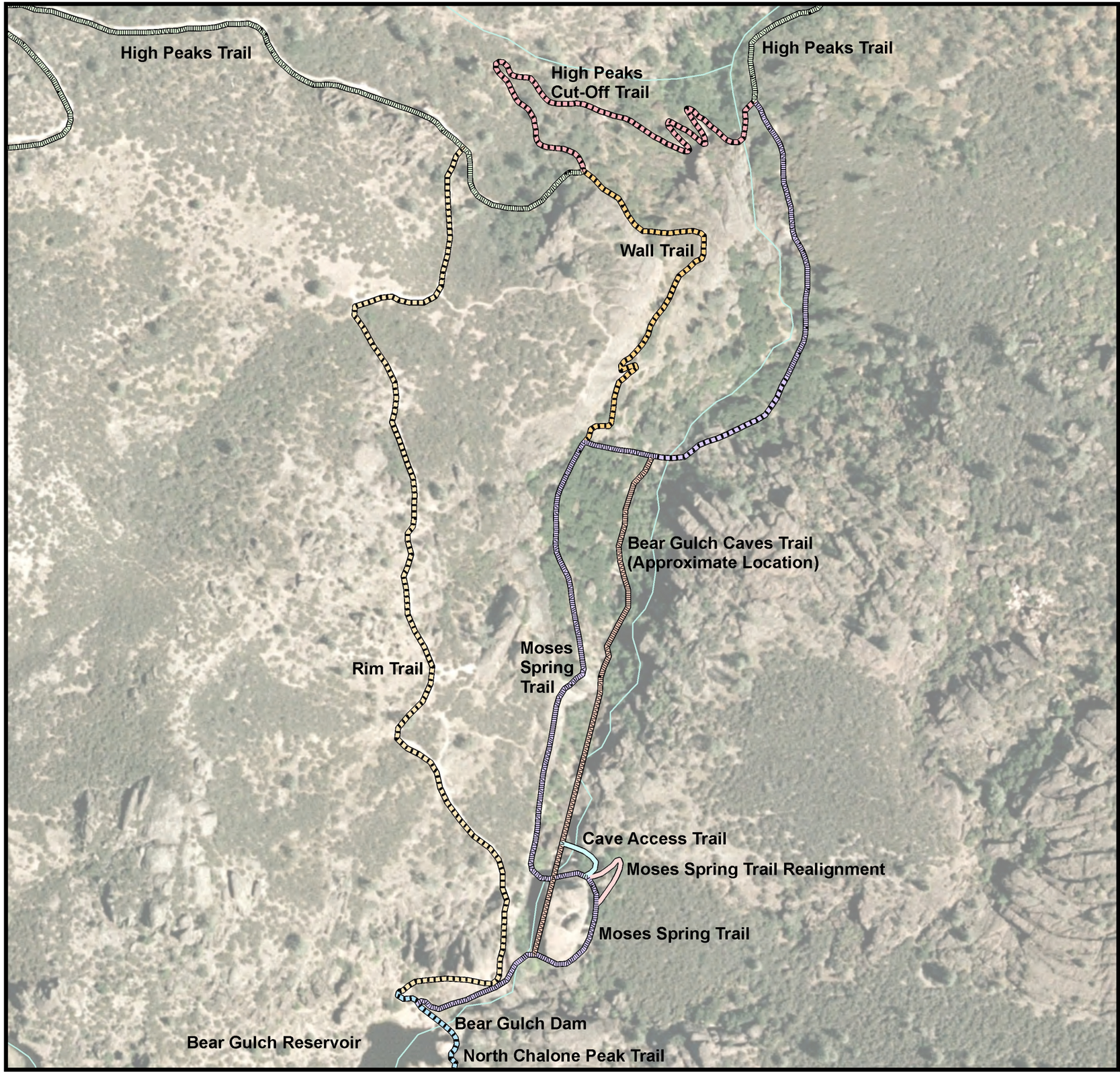
- Seasonal & Perennial

Trails

- Bear Gulch Caves Trail
- Bear Gulch Trail
- Bench Trail
- Cave Access Trail
- Condor Gulch Trail
- High Peaks Cut-Off Trail
- High Peaks Trail
- Juniper Canyon Trail
- Moses Spring Trail
- Moses Spring Tr. Realign.
- North Chalone Peak Trail
- Old Pinnacles Trail
- Rim Trail
- Tunnel Trail
- Wall Trail

Ü

0 255510 1,020 1,530 2,040 2,550
Feet



Site Plan 3 — 2008

Bear Gulch Caves Area Existing Conditions

Pinnacles National Monument

High Peaks Trail System

Legend

Trail Period

- Early Park (Contributing)
- CCC (Contributing)
- Post P.O.S. (Non-Contributing)

Trails

- Bear Gulch Caves Trail
- Cave Access Trail
- High Peaks Cut-Off Trail
- High Peaks Trail
- Moses Spring Trail Realignment
- Moses Spring Trail
- North Chalone Peak Trail
- Rim Trail
- Wall Trail

Creeks

- Seasonal & Perennial

N

0 50 100 200 300 400 500 Feet

FIELD DATA - OVERLAYS ON EXISTING FMSS TRAIL INVENTORY
HIGH PEAKS TRAIL SYSTEM CULTURAL LANDSCAPES INVENTORY
PINNACLES NATIONAL MONUMENT
2008

Photo numbers refer to field photos taken in 2008. The following photo folders can be found on the CD/DVD attached to the Cultural Landscapes Inventory.
Field photos can be found in the folder titled: "Field Photos - 2008"
Historic photo numbers refer to three collections of historic photos. The historic photos can be found in the folder titled: "Historic Photos"
Repeat photos are modern photos that allow comparisons with the historic photos. The repeat photos can be found in the folder titled: "Repeat Photos"
The referenced historic photos all date to the period of significance.

High Peaks Trail
Start Location: Moses Spring Trailhead at Parking Lot
End Location: Bench Trail

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo
High Peaks - Bear Gulch to Steep and Narrow at Junction Saddle							
0	Kiosk	NH			2963, 2964		
0	Retaining Wall	NH	Yes	Dry Stacked Stone - Constructed 1995 - No pre-existing wall	2857, 2859	2859 (MS02)	
0	Retaining Wall	Modified	Yes	Mortared Stone - Mortared Curb added after CCC, pre-Lisa	2857, 2859		
34	Retaining Wall	NH	Yes		2860, 2861		
37	Sign	NH			2965		
166	Sign	NH			2966		
277	Sign	NH					
492	Retaining Wall	Historic					
519	Sign	NH					
519	Bench	Historic		Cut Stone Bench - Not on Inventory	2862		
542	Sign	NH					
554	Retaining Wall	Modified	Yes	Modified to allow access to Tourist Trap Rock Climbing Area	2863, 2865		
601	Sign	NH					

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo
628	Retaining Wall	Historic					
639	Retaining Wall	Historic					
672	**Junction - Trail**						
672	Sign	NH		Trail Junction	2866		
810	Retaining Wall	Historic		AKA - Causeway - Pre-CCC - Large Stones	2968		
852	Check Step	NH	Yes				
858	Retaining Wall	Historic		Pre-CCC			
915	Switchback	Historic		Pre-CCC - Small portion of wall is 25' high.			
988	Switchback	Historic		Pre-CCC - Large Stone			
1016	Check Step	NH	Yes				
1062	Switchback	Historic		Pre-CCC - Large Stones			
1142	Switchback	Modified		Portions of upper wall replaced - New is compatible	2970		
1214	Retaining Wall	Historic					
1347	Open Culvert	Historic		Cut Rock	2974?		
1356	Retaining Wall	Historic		Pre-CCC			
1378	Tread Cut	Historic			2975		
1397	Sign	NH					
1400	Tread Cut	Historic					
1426	Check Step	NH	Yes				
1433	Open Culvert	NH	Yes				
1439	Check Step	NH	Yes	Or open culvert?			
1441	Retaining Wall	Historic		Pre-CCC			
1446	Check Step	NH	Yes				
1447	Check Dam	NH	Yes				
1453	Check Step	NH	Yes				
1456	Check Step	NH	Yes				
1459	Check Step	NH	Yes				
1465	Check Step	NH	Yes				
1469	Check Step	NH	Yes				
1527	Check Step	NH	Yes				
1527	Retaining Wall	Historic					
1528	Open Culvert	NH	Yes	Rip rap in stream bed.			
1530	Check Step	NH	Yes				

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo
1536	Check Step	NH	Yes				
1545	Check Step	NH	Yes				
1549	Check Step	NH	Yes				
1557	Open Culvert	NH	Yes				
1559	Check Step	NH	Yes				
1567	Retaining Wall	Historic		Includes a rock cut.			
1586	Open Culvert	NH	Yes	Rip rap in stream bed.			
1593	Check Step	NH	Yes				
1594	Retaining Wall	Historic					
1603	Check Step	NH	Yes				
1610	Check Step	NH	Yes				
1616	Retaining Wall	Historic					
1624	Open Culvert	NH	Yes				
1627	Open Culvert	NH	Yes				
1646	Retaining Wall	Historic					
1692	Retaining Wall	Historic					
1696	Tread Cut	Historic			2982, 2983	2983 (HPCO02)	1748
1796	Retaining Wall	Historic			2984, 2985	2984, 2985 (HPCO03)	1760
1892	Retaining Wall	Historic					
1916	Switchback	Historic					
1945	Sign	NH					
1955	Tread Cut	Historic					
1987	Social Trail	NH					
2048	Retaining Wall	NH	Yes				
2095	Sign	NH					
2058	Tread Cut	Historic					
2228	Retaining Wall	Historic					
2275	Retaining Wall	Historic					
2308	**Junction - Trail**	**Historic**		**Junction with Rim Trail**	**2986, 2987**		
2310	Sign	NH					
2340	Retaining Wall	Historic					
2356	Retaining Wall	Historic					
2373	Tread Cut	Historic					

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo
2380	Retaining Wall	NH	Yes	Area widened for pack stock.			
2391	Retaining Wall	Lost Integrity	Yes	Historic wall was extensively modified. Wall lost integrity.			
2415	Retaining Wall	Modified	Yes	Two-thirds historic. One-third NH.			
2450	Tread Cut	Modified	Yes	Added check dams and surface material.			
2529	Tread Cut	Modified	Yes	Added check dams and surface material.			
2561	Retaining Wall	Historic					
2572	Tread Cut	Historic					
2648	Retaining Wall	Historic		Getting buried.			
2669	Tread Cut	Historic					
2709	Tread Cut	Historic					
2711	Retaining Wall	NH	Yes				
2714	Check Step	NH	Yes	Built 2007.			
2747	Tread Cut	Historic					
2776	Check Dam	NH	Yes	Dry laid stones. Built 2007.			
2789	Steps	NH	Yes	Cut step built 2007.			
2901	Tread Cut	Historic					
2963	Check Step	NH	Yes				
2967	Check Step	NH	Yes	Built 2007.	2988		
3031	Check Step	NH	Yes				
3042	Retaining Wall	Modified	Yes	Retains integrity.			
3047	Tread Cut	Historic					
3057	Retaining Wall	Historic					
3064	Check Dam	NH	Yes				
3079	Tread Cut	Historic					
3095	Retaining Wall	NH	Yes	Built 2007.			
3289	Switchback	Modified		Part is historic, good quality. Part is NH (pre-Lisa) and sloppy.	2989, 2990		
3403	Sign	NH		Revegetated area to keep people from shortcutting.	2991		
3588	Retaining Wall	NH	Yes	Replacement of a historic wall.			
3588	Tread Cut	NH	Yes	Modified. 3588 - 4685 a heavily modified historic area of trail.			
3605	Check Step	NH	Yes	Built 2007.			

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo
3610	Tread Cut	NH	Yes	Built 2007.			
3628	Steps	NH	Yes	Cut step built 2007.			
3671	Tread Cut	Modified	Yes	Lisa: Added steps & water channels			
3721	Retaining Wall	Historic	Yes	Lisa: Altered: Repairs			
3762	Tread Cut	Modified	Yes	Lisa: Added check steps to tread cut area.			
3770	Check Step	NH	Yes	Lisa: Drylaid, single course.			
3779	Check Step	NH	Yes	Lisa: Drylaid, single course.			
3788	Check Step	NH	Yes	Lisa: Drylaid, single course.			
3914	Tread Cut	NH	Yes	Lisa: Cut away "trippy" rock on tread.			
3932	Curbing	NH	Yes	2007: Built for erosion control.			
3969	Retaining Wall	NH	Yes	Replacement of a historic wall.			
4030	Check Step	NH	Yes	Lisa			
4064	Check Dam	NH	Yes	Lisa			
4302	Tread Cut	NH	Yes	Lisa: Modified due provide a more level surface.			
4415	Access Trail	NH		Photo: "The Anvil"	2992		
4415	Tread Cut	Historic					
4419	Barrier Fence	NH					
4632	Check Step	NH		Lisa: Added small step. Incompatible.			
4644	Check Step	NH	Yes	Lisa: Compatible			
4651	Check Step	NH	Yes	Lisa: Compatible. One stone.			
4652	Tread Cut	Historic					
4662	Check Step	NH	Yes	Built 2007. Photos after this check step.	2993-2995		
4844	Social Trail	NH					
5254	Retaining Wall	Historic		Adjacent to uphill cut.			
5326	Retaining Wall	Historic					
5431	Retaining Wall	Historic					
5617	Retaining Wall	Historic					
5725	Retaining Wall	NH		Built 1990s.	2996		5718
5725	Check Step	NH	Yes				
5796	Retaining Wall	Historic		May have lost portion of wall.	2994, 95, 96		
5929	Retaining Wall	Historic					
6656	Retaining Wall	Historic					

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo
6694	Retaining Wall	Historic					
6735	Tread Cut	Historic					
6799	Tread Cut	Historic					
6873	Retaining Wall	Historic					
6886	Tread Cut	Historic					
7087	Tunnel	Historic			2997, 98	2998 (HP03)	
7104	Tread Cut	Historic					
7125	Retaining Wall	Historic					
7143	Tread Cut	Historic					
7150	Retaining Wall	Historic		Photo of wall taken from above. Tunnel also visible.	3003		
7168	Tread Cut	Historic					
7202	Check Step	NH	Yes				
7205	Retaining Wall	Historic		Overgrown with grasses - difficult to see.			
7226	Check Dam	NH					
7228	Switchback	Historic		Vegetation growing on Switchback.	2999		
7242	Check Step	NH	Yes				
7270	Switchback	Modified	Yes	Lisa: Middle portion of wall modified.	3000, 01, 02		
7282	Check Step	NH	Yes				
7288	Check Step	NH	Yes				
7297	Check Step	NH	Yes				
7307	Terraces	NH	Yes	Terraces or Check Dams: Replaced and increased. 1995.			
7308	Retaining Wall	NH	Yes	Upslope wall located below drainage checks.			
7316	Retaining Wall	NH	Yes	Downslope wall.			
7335	Tread Cut	Historic					
7380	Retaining Wall	Historic					
7387	Tread Cut	Historic					
7406	Retaining Wall	Historic					
7430	Tread Cut	Historic					
7449	Retaining Wall	Historic					
7532	Retaining Wall	Historic					
7562	Retaining Wall	Historic					

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo
7572	Tread Cut	Historic					
7580	Retaining Wall	Historic					
7598	Retaining Wall	Historic					
7610	Tread Cut	Historic					
7617	Retaining Wall	Historic					
7635	Retaining Wall	Historic					
7658	Tread Cut	Historic					
7700	Terraces	NH	Yes	Uphill. System of terraces, walls & channels. 1976-77. Nine features consturcted 1976-77 to prevent erosion.	3004	3004 (HP05)	
7705	Retaining Wall	Historic		Buried.			
7800	Tread Cut	Historic					
7916	Curbing	Unknown		Buried. Pre-Lisa. A few stones above edge.			
7933	Tread Cut	Historic					
7957	Retaining Wall	Historic					
7964	Terraces	NH	Yes	1976. Water diversion system. Walls/terraces. Excellent work. Upper	3005, 06		
7987	Retaining Wall	NH	Yes	1976. Lisa's first. Lower.	3007		
8002	Switchback	Modified	Yes	Upper portion of wall is modified. Lower portion original.			
8041	Retaining Wall	Modified	Yes				
8065	Retaining Wall	NH	Yes	Late 1970s. With terraces.			
8089	Tread Cut	Historic					
8116	Tread Cut	Historic					
8153	Tread Cut	Historic					
8190	Tread Cut	Historic					
8229	Retaining Wall	Historic		10' left of a possibly 40' historic edging wall.			
8247	Tread Cut	Historic					
8283	Check Step	NH	Yes				
8297	Check Step	NH	Yes				
8328	Retaining Wall	Historic					
8361	Open Culvert	Historic		Unknown			
8371	Tread Cut	Historic		Around Switchback.			

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo
8378	Retaining Wall	NH	Yes	Upslope. A few stacked rocks nestled into boulders.			
8385	Retaining Wall	NH	Yes		3008, 09		
8446	Switchback	Historic		Stacked wall below. Natural cut rock above.			
8514	Retaining Wall	Historic					
8515	Tread Cut	Historic					
8538	Retaining Wall	NH	Yes	Series of check dams upslope.			
8589	Switchback	Historic			3010		8576
8614	Tread Cut	Historic					
8648	Retaining Wall	Modified	Yes				
8663	Retaining Wall	Historic					
8664	Check Dam	NH	Yes	Above and below trail. Part of series mentioned at W.P. 8538.	3011		
8678	Retaining Wall	Historic					
8688	Retaining Wall	Modified	Yes	Missing stones and modified.			
8694	Tread Cut	Historic					
8710	Open Culvert	NH		Water diversion channel below trail.			
8713	Check Step	NH	Yes				
8719	Check Step	NH	Yes				
8722	Tread Cut	Historic					
8729	Switchback	Modified	Yes	Above trail. Upper portion modified.			
8758	Retaining Wall	Historic		Covered with vegetation. Downslope.	3012		
8779	Terraces	NH	Yes	Terrace above trail.			
8789	Retaining Wall	Historic		Downslope wall.			
8837	Retaining Wall	Modified	Yes	Lisa: Modified.			
8879	Retaining Wall	Historic					
8849	Ditch	NH	Yes	Downslope diversion ditch lined with stones.			
8849	Terraces	NH	Yes	Lisa: Prevent erosion. Above Tr. 3-4 not visible due to vegetation.			
8900	Tread Cut	Historic					
8913	Switchback	Historic					
8954	Tread Cut	Historic					
8964	Retaining Wall	Historic		Large rocks above smaller stones	3013		
9012	Tread Cut	Historic					

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo
9018	Retaining Wall	Modified	Yes	Modified. Below trail.			
9078	Retaining Wall	NH	Yes	Above.	3014		
9094	Tread Cut	Historic					
9159	Retaining Wall	Historic					
9196	Tread Cut	Historic					
9279	Retaining Wall	Historic					
9302	Tread Cut	Historic					
9412	Switchback	Historic					
9431	Retaining Wall	NH		1998. Pressure treated log.			
9466	Fence	NH		Approximate location of wood rail fence.			
9473	Retaining Wall	NH	Yes				
9518	Retaining Wall	NH		1994. Pressure treated log.			
9530	Switchback	Modified	Yes				
9538	Retaining Wall	NH	Yes	Beautiful wall	3015, 16, 17		
9546	Fence	NH		Wood rail fence.			
9632	Retaining Wall	NH		Pressure treated log.			
9652	Retaining Wall	NH		Pressure treated log.			
9678	Switchback	Historic		Maybe just a single stone. Buried under vegetation.	3018, 19	3018, 3019 (HP06)	
9717	Sign	NH					
9774	Switchback	Modified	Yes	Reset top layer of rock or one or two missing stones.			
9797	Fence	NH					
9825	Retaining Wall	Historic					
9845	Retaining Wall	NH		Single log on inclined surface. Stabilizing function.			
9903	Retaining Wall	NH	Yes	1990s. Replacement of historic wall. Retaining wall and rip rap.			
9915	Sign	NH					
9929	Bench	NH		1980s. Metal pipe and lumber.			
9929	Comfort Station	Historic			3024,25,26,27		
High Peaks Trail - Steep and Narrow from Junction Saddle to Tunnel Trail							
9975	Junction - Trail			Saddle area.	3020, 22, 23		

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo
9975	Sign	NH			3021		
9985	Social Trail	NH					
10026	Tread Cut	Historic					
10133	Retaining Wall	Historic		Single course.			
10248	Retaining Wall	Historic			3028, 3029	3028, 3029 (HPSN04)	
10264	Tread Cut	Historic					
10274	Retaining Wall	Historic		Large wall.			
10322	Tread Cut	Historic					
10393	Retaining Wall	Historic					
10453	Retaining Wall	Historic					
10464	Tread Cut	Historic					
10487	Tread Cut	Historic					
10501	Retaining Wall	Historic					
10520	Retaining Wall	Historic					
10651	Switchback	Historic					
10651	Social Trail	NH			3030, 3031		
10777	Switchback	Modified	Yes	Shortened wall due to shortcutting over wall.	3032		10678
10806	Social Trail	NH					
10982	Retaining Wall	Historic					
10989	Tread Cut	Historic					
10998	Retaining Wall	Historic					
11007	Tread Cut	Historic					
11018	Retaining Wall	Historic					
11032	Tread Cut	Historic					
11070	Tread Cut	Historic			3033, 34, 35		11057
11078	Retaining Wall	Historic					
11123	Switchback	Modified	Yes	Small portion non historic			
11173	Retaining Wall	Historic					
11179	Tread Cut	Historic					
11204	Switchback	Historic		Cut rock and large placed rocks.	3036		
11236	Tread Cut	Historic					
11265	Social Trail	NH					

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo
11524	Retaining Wall	Modified	Yes		3038		11432
11525	Steps	Modified	Yes		3037, 39, 40	3037 (HPSN05)	
11529	Steps	Historic					
11530	Handrail	Historic		Metal Pipe.			
11555	Tread Cut	Historic					
11575	Steps	Historic		Reset step.	3041		
11587	Steps	Historic					
11593	Check Step	Historic					
11601	Steps	Modified	Yes				
11608	Steps	Historic					
11619	Tread Cut	Historic					
11619	Handrail	Historic					
11669	Steps	Modified	Yes	Reset rocks using original alignment.	3042	3042 (HPSN13)	
11684	Steps	Modified	Yes				
11714	Steps	Modified	Yes				
11724	Steps	Modified	Yes				
11729	Tread Cut	Historic		Pipe & chain handrail (Signdates CCC?) removed from steps.			
11742	Steps	Historic					
11757	Tread Cut	Historic					
11761	Steps	Historic					
11807	Steps	Historic					
11830	Retaining Wall	NH	Yes				
11830	Steps	Historic		Cut rock.	3043, 44, 45	3043, 3045 (HPSN06)	
11853	Tread Cut	Historic					
11859	Steps	Historic			3046		
11874	Steps	NH	Yes	Unstable historic steps widened for erosion control.	3047		
11912	Steps	Historic			3048		
11913	Handrail	Historic					
11943	Tread Cut	Historic					
11975	Tread Cut	Historic					
11992	Social Trail	NH					

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo
12074	Social Trail	NH			3049,50,51		
12248	Steps	NH	Yes				
12283	Steps	Historic					
12291	Handrail	Historic					
12301	Tread Cut	Historic					
12304	Handrail	Historic					
12317	Handrail	Historic					
12322	Tread Cut	Historic			3052, 53	3052, 3053 (HPSN07)	
12330	Retaining Wall	Historic		Causeway supported by steal beam.			
12344	Handrail	Historic		Bridge handrail.			
12346	Bridge	Historic		Wood bridge decking and I-Beam stringer			
12365	Tread Cut	Historic					
12381	Handrail	Historic					
12382	Retaining Wall	Historic					
12391	Steps	Historic					
12410	Steps	Historic			3055		
12435	Handrail	Historic					
12450	Steps	Modified			3056		
12474	Steps	Historic		Difficult step spacing.			
12503	Handrail	Historic					
12503	Retaining Wall	Historic		Dry Stone.			
12510	Steps	Historic					
12524	Handrail	Historic					
12524	Steps	Historic					
12554	Retaining Wall	Historic			3057	3057 (HPSN11)	12562
12576	Steps	Historic					
12587	Steps	Modified	Yes				
12605	Steps	NH	Yes				
12624	Steps	Modified	Yes				
12648	Check Step	NH	Yes				
12659	Steps	Historic					
12671	Steps	Modified	Yes				
12732	Tread Cut	Historic					

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo
12754	Retaining Wall	Historic					
12790	Retaining Wall	Historic			3058		
12790	Tread Cut	Historic			V		
12899	Tread Cut	Historic			V		
12916	Retaining Wall	Historic			3059		
12926	Tread Cut	Historic			V		
12932	Retaining Wall	Historic			V		
13023	Tread Cut	Historic			3060,61,62	3060 - 3062 (HPSN09)	
13091	Steps	Historic					
13117	Tread Cut	Historic					
13183	Retaining Wall	Historic					
13190	Steps	Modified	Yes				
13202	Tread Cut	Historic			3063		13218
13256	Retaining Wall	Historic		Catch basin below trail. Retaining wall type.			
13271	Retaining Wall	Historic					
13288	Tread Cut	Historic					
13306	Retaining Wall	Historic					
13326	Retaining Wall	Historic					
13334	Retaining Wall	Historic					
13390	Retaining Wall	Historic					
13412	Retaining Wall	Historic					
13427	Tread Cut	Historic					
13446	Retaining Wall	Historic					
13451	Tread Cut	Historic					
13513	Retaining Wall	Historic					
13530	Retaining Wall	Historic					
13548	Retaining Wall	Historic					
13560	Retaining Wall	Historic					
13582	Retaining Wall	Historic					
13626	Retaining Wall	Historic			3064		
13640	Tread Cut	Historic					
13656	Sign	NH			3065		
High Peaks Trail - Steep and Narrow & Tunnel Trail Juntion near Hawkins Peak to Chalone Creek							

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo
13656	Junction - Trail			End of Steep and Narrow. Junction with Tunnel Trail.	8268		
13671	Retaining Wall	Historic					
13707	Retaining Wall	Historic					
13745	Retaining Wall	Historic					
13772	Retaining Wall	Historic					
13861	Retaining Wall	Historic					
13906	Retaining Wall	Historic					
13941	Retaining Wall	Historic					
13941	Tread Cut	Historic					
13962	Retaining Wall	Historic					
14034	Retaining Wall	Historic					
14090	Social Trail	NH					
14117	Social Trail	NH			8269		
14127	Tread Cut	Historic					
14212	Switchback	Lost Integrity		Poorly laid. Maybe rebuilt.	8270		
14232	Check Step	NH	yes				
14309	Retaining Wall	Historic		Erosion of trail surface. Needs a check step. Cut and built wall.	8271		
14456	Switchback	Historic					
14549	Sign	NH					
14549	Tread Cut	Historic					
14553	Retaining Wall	Historic					
14585	Retaining Wall	Historic					
14631	Tread Cut	Historic			8272		
14670	Retaining Wall	Historic					
14718	Tread Cut	Historic					
14755	Retaining Wall	Historic		Missing large pinnacle stone on wall.	8273		
14776	Tread Cut	Historic					
14783	Retaining Wall	Historic					
14801	Tread Cut	Historic					
14824	Retaining Wall	Historic					
14878	Tread Cut	Historic			8274		
15061	Tread Cut	Historic					
15079	Retaining Wall	Historic					

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo
15123	Retaining Wall	Historic					
15133	Check Step	NH	yes				
15139	Check Step	NH	yes				
15142	Check Step	NH	yes				
15146	Tread Cut	Historic					
15177	Check Step	NH	yes				
15180	Check Step	NH	yes				
15182	Tread Cut	Historic		Two track character. Trail shifting through use.	8275, 76		
15390	Tread Cut	Historic					
15424	Retaining Wall	Historic					
15643	Social Trail	NH		Aread largely enclosed by Chaparral with some openings.	8277, 78		
15942	Tread Cut	Historic			8279		15881
15995	Tread Cut	Historic			8280		
16335	Tread Cut	Historic					
16357	Retaining Wall	Historic					
16438	Tread Cut	Historic		Trippy trail character	8281		
16637	Retaining Wall	Historic					
16652	Tread Cut	Historic					
16669	Retaining Wall	Modified	yes				
16696	Retaining Wall	Historic					
16758	Retaining Wall	Historic		Atypical wall. Large chunks laid along edge.	8282, 83		
16860	Retaining Wall	Historic					
16900	Sign	NH			8284, 85		
16900	**Junction - Trail**			**Junction with Condor Gulch Trail**	**298, 99**		
16900	Tread Cut	Historic		Rock cuts on uphill side of trail	300-312	300 (HPC02), 306 (HPC01)	16900-19556
19588	Tread Cut	Historic			313,14		19668-19886
19718	Tread Cut	Historic					
19972	Social Trail	NH					
19999	Check Step	NH	yes				
20013	Check Step	NH	yes				
20020	Check Step	NH	yes				
20028	Check Step	NH	yes		315-29	327, 328 (HPC05)	20080-20451

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo
20834	Switchback	Historic			330-34		
20914	Social Trail	NH		**Stopped typing field notes**			
20937	Sign	NH					
20976	Sign	NH					
21010	Switchback	Historic					
21018	Check Step	NH	yes		8170, 8171	8170, 8171 (HPC05)	
21072	Retaining Wall	NH	yes				
21419	Sign	NH					
21459	Retaining Wall	Historic					
21539	Retaining Wall	Historic					
21563	Switchback	Modified	yes		8172, 8173	8172, 8173 (HPC03)	
21636	Retaining Wall	Historic			8174 - 8176		
21789	Tread Cut	Historic					
21880	Retaining Wall	Modified	yes				
21909	Tread Cut	Historic					
22079	Retaining Wall	Historic					
22090	Check Step	NH	yes				
22198	Retaining Wall	Historic			8177		
22341	Retaining Wall	Historic					
22401	Retaining Wall	Historic			8178		
22460	Tread Cut	Historic			8179, 8180		
22607	Retaining Wall	Historic			8181		
22829	Switchback	Historic			8183, 8182		
22829	Retaining Wall	Historic			8184		
22940	Retaining Wall	Historic					
23091	Retaining Wall	Historic					
23190	Retaining Wall	NH	yes				
23225	Retaining Wall	Historic					
23280	Retaining Wall	Historic					
23253	Retaining Wall	Modified	yes				
23260	Tread Cut	Historic					

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo
23499	Retaining Wall	Historic					
23591	Tread Cut	Historic			8185	8185?	23813
23855	Retaining Wall	Historic					
23895	Retaining Wall	Historic					
23971	Retaining Wall	Historic					
24013	Tread Cut	Historic					
24030	Switchback	Historic			8186		
24060	Retaining Wall	Historic					
24103	Retaining Wall	Historic					
24138	Retaining Wall	Historic					
24243	Tread Cut	Historic					
24316	Retaining Wall	Historic					
24602	Retaining Wall	Historic					
24653	Switchback	Modified	yes				
24734	Retaining Wall	Modified	yes				
24982	Switchback	Modified			8187 - 8190		
25242	Retaining Wall	Historic					
25264	Check Dam	NH	yes				
25277	Check Step	NH	yes				
25313	Check Step	NH	yes				
25323	Retaining Wall	Historic			8191, 8192		
25331	Check Step	NH	yes				
25887	Tread Cut	Historic			8193, 8194		
26403	Switchback	Modified	yes				
26570	Open Culvert	NH	yes		8195		
26570	Retaining Wall	Modified	yes				
26572	Check Step	NH	yes				
26703	Retaining Wall	Historic					
27297	Retaining Wall	NH	yes		8196, 9197		
27304	Check Step	NH	yes				
27311	Check Step	NH	yes				
27315	Check Step	NH	yes				

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo
27320	Check Step	NH	yes				
27324	Check Step	NH	yes		8198		
27329	Check Step	NH	yes				
27333	Check Step	NH	yes				
27338	Check Step	NH	yes				
27345	Check Step	NH	yes				
27352	Check Step	NH	yes				
27365	Check Step	NH	yes				
27375	Check Step	NH	yes				
27428	Sign	NH			8199, 8206	8204, 8205 (HPC06)	

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo

Condor Gulch Trail
Start Location: Trailhead near Bear Gulch Comfort Station
End Location: High Peaks Trail

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo
0	Bridge	NH		Wood decking with concrete footings.			
21	Retaining Wall	NH	Yes				
27	Sign	NH					
64	Retaining Wall	Historic					
190	Retaining Wall	Historic					
231	Retaining Wall	Historic					
254	Retaining Wall	Historic					
254	Retaining Wall	NH	Yes	Terraces			
274	Steps	NH	Yes				
292	Weather Station	NH					
692	Check Dam	NH	Yes				
719	Check Dam	NH	Yes				
1017	Tread Cut	Historic				273-77 (CG05)	969
1064	Retaining Wall	Historic					
1785	Open Culvert	Modified	Yes	Rip rap			
1858	Sign	NH					
1936	Sign	NH					
2001	Sign	NH					
2081	Sign	NH					
2177	Retaining Wall	Historic					
2394	Retaining Wall	Historic					
2419	Tread Cut	Historic					
2483	Retaining Wall	Historic					
2518	Tread Cut	Historic					
2589	Open Culvert	NH	Yes				
2645	Retaining Wall	Historic					
2660	Tread Cut	Historic					
2727	Retaining Wall	Historic			278?		

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo
2797	Retaining Wall	Historic				279, 280 (CG04)	
3340	Tread Cut	Historic					
3430	Check Step	NH	Yes				
3467	Check Step	NH	Yes				
3517	Check Step	NH	Yes				
3619	Check Step	NH	Yes				
3651	Check Dam	NH	Yes				
3684	Check Step	NH	Yes				
3700	Tread Cut	Historic					
3725	Check Step	NH	Yes				
3795	Check Step	NH	Yes				
3810	Check Dam	NH	Yes				
3817	Retaining Wall	NH	Yes				
3834	Check Step	NH	Yes				
3856	Retaining Wall	NH	Yes				
3954	Switchback	NH	Yes		281?		
4057	Retaining Wall	Historic					
4084	Retaining Wall	Historic					
4087	Retaining Wall	Historic					
4115	Switchback	Modified	Yes				
4170	Tread Cut	Historic					
4190	Retaining Wall	NH	Yes				
4232	Retaining Wall	Historic					
4371	Check Step	NH	Yes				
4408	Retaining Wall	Historic					
4474	Tread Cut	Historic					
4508	Tread Cut	Historic					
4558	Switchback	NH	Yes				
4624	Switchback	NH	Yes				
4624	Switchback	Historic					
4689	Check Step	NH	Yes				
4760	Retaining Wall	Historic					
4809	Tread Cut	Historic					
4818	Retaining Wall	Historic					
4917	Check Step	NH	Yes				
5013	Check Step	NH	Yes				

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo
5037	Check Step	NH	Yes				
5048	Check Step	NH	Yes				
5069	Retaining Wall	Historic			283?		
5104	Tread Cut	Historic					
5167	Sign	NH	Yes				
5167	Overlook	Historic			284-289		
5167	Steps	Historic					
5167	Handrail	Historic					
5213	Steps	Historic					
5210	Handrail	Historic					
5267	Tread Cut	Historic					
5278	Switchback	NH	Yes		290?		
5300	Retaining Wall	Historic					
5304	Social Trail	NH	Yes				
5323	Tread Cut	Historic			291?		
5485	Retaining Wall	NH	Yes				
5780	Check Dam	NH					
6164	Retaining Wall	Historic					
6254	Retaining Wall	Modified	Yes				
6391	Tread Cut	Historic			293?		
6548	Tread Cut	Historic					
6703	Tread Cut	Historic					
6846	Tread Cut	Historic					
7078	Tread Cut	Historic		Rubbly			
7364	Tread Cut	Historic					
7874	Retaining Wall	Historic					
7882	Tread Cut	Historic					
7967	Retaining Wall	Historic					
8003	Retaining Wall	Historic					
8020	Tread Cut	Historic			295?		
8075	Steps	NH	Yes				
8083	Social Trail	NH			296?		
8121	Tread Cut	Historic					
8144	Check Step	NH	Yes				
8173	Check Step	NH	Yes				
8201	Check Step	NH	Yes				

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo
8218	Tread Cut	Historic					
8288	Check Step	NH	Yes				
8433	Check Step	NH	Yes				
8510	Retaining Wall	NH	Yes				
8515	Check Step	NH	Yes				
8632	Retaining Wall	NH	Yes				
8707	Check Step	NH	Yes				
8842	Sign	NH	Yes		297		

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo

North Chalone Peak Trail
Start Location: Bear Gulch Reservoir
End Location: North Chalone Peak Fire Lookout Tower

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo
0	Causeway	Historic			8393		
6	Tread Cut	Historic			8394 - 8396		
78	Culvert	Historic			8390 - 8392		
79	Social Trail	NH					
100	Retaining Wall	Historic			8386 - 8388		
144	Sign	NH					
179	Retaining Wall	Historic			8389		
201	Tread Cut	Historic			8385		
360	Retaining Wall	Historic					
360	Sign	NH					
367	Retaining Wall	NH	Yes				
386	Tread Cut	Historic					
404	Sign	NH					
419	Sign	NH					
436	Tread Cut	Historic					
540	Retaining Wall	Modified	Yes				
542	Tread Cut	Historic			8384		
597	Check Dam	NH	Yes				
599	Retaining Wall	NH	Yes				
609	Tread Cut	Historic					
663	Retaining Wall	NH	Yes				
671	Retaining Wall	NH	Yes				
672	Retaining Wall	NH	Yes				
744	Sign	NH					
756	Sign	NH					

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo
782	Sign	NH					
793	Retaining Wall	Historic			8383		844
1147	Tread Cut	Historic					
1158	Tread Cut	Historic					
1175	Retaining Wall	Historic			8382		
1196	Retaining Wall	Historic					
1246	Tread Cut	Historic					
1286	Retaining Wall	Historic					
1681	Retaining Wall	Historic					
2248	Tread Cut	Historic					
2511	Tread Cut	Historic			8380, 8381		
2572	Retaining Wall	Historic				8377 - 8379 (NC01)	2630
2866	Access Trail	NH			8376		
3526	Retaining Wall	Historic					
3792	Tread Cut	Historic					
3992	Retaining Wall	NH	Yes				
4085	Check Step	NH	Yes				
4121	Check Step	NH	Yes				
4274	Check Step	NH	Yes		8375		
4304	Check Step	NH	Yes				
4349	Check Step	NH	Yes				
4402	Check Step	NH	Yes				
4454	Check Step	NH	Yes				
4469	Check Step	NH	Yes			8374 (NC05)	
4857	Check Step	NH	Yes			8375 (NC04)?	
4915	Check Step	NH	Yes				
1916	Retaining Wall	NH	Yes				
4933	Check Step	NH	Yes				
5410	Check Dam	NH	Yes			8372, 8373 (NC03)	
5504	Check Step	NH	Yes				
5510	Check Step	Historic					
5510	Switchback	Historic					
5510	Switchback	NH	Yes		8292 - 8294	8371 (NC02)	
6615	Check Step	NH	Yes				

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo
6620	Open Culvert	NH	Yes				
6630	Check Step	NH	Yes				
6627	Retaining Wall	Modified	Yes				
6796	Check Step	Historic			8295		
6796	Switchback	Historic					
7050	Check Step	NH	Yes		8296		
7060	Check Step	NH	Yes				
7070	Check Step	NH	Yes				
7321	Retaining Wall	Historic					
7335	Retaining Wall	Historic					
7494	Open Culvert	NH	Yes	Many of these open culverts from here and below are called dips in fmss			
7494	Tread Cut	Historic					
7571	Open Culvert	NH	Yes				
7619	Open Culvert	NH	Yes				
7657	Open Culvert	NH	Yes				
7763	Open Culvert	NH	Yes				
7884	Retaining Wall	Historic			8297		
7925	Open Culvert	NH	Yes				
8136	Open Culvert	NH	Yes				
8183	Tread Cut	Historic					
8283	Open Culvert	NH	Yes		8298		
8307	Open Culvert	NH	Yes		.		
8363	Open Culvert	NH	Yes				
8427	Open Culvert	NH	Yes				
8688	Open Culvert	NH	Yes				
9055	Open Culvert	NH	Yes				
9197	Retaining Wall	Historic			8299		
9211	Retaining Wall	Historic					
9296	Open Culvert	NH	Yes				
9330	Retaining Wall	Historic			8300-04		9338
9798	Open Culvert	NH	Yes		8304		9400
9904	Open Culvert	NH	Yes				
10011	Retaining Wall	Historic					
10021	Open Culvert	NH	Yes				
10023	Tread Cut	Historic			8905		10142

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo
10258	Open Culvert	NH	Yes				
10470	Open Culvert	NH	No		8306		
10979	Retaining Wall	Historic			8307		11496
11662	Retaining Wall	Historic					
11724	Retaining Wall	Historic			8308		11988
12095	Retaining Wall	Historic		Blasted to side	8309,10		
12357	Open Culvert	NH	Yes				
12732	Sign	NH			8311		
12738	Gate	NH					
12738	Tread Cut	NH	Yes				
13397	Sign	NH			8313,14		
13440	Tread Cut	Lost Integrity	No	Road over trail			
14785	Spike Camp	Lost Integrity			8315,16		
15136	Quarry	NH	Yes		8317,18		
15964	Gate	NH			8319-21		
15997	Tread Cut	NH					
17000	Junction - Trail	Historic					
17077	Access Trail	NH	Yes				
17077	Sign	NH					
17089	Retaining Wall	Historic					
17096	Kiosk	NH					
17190	Retaining Wall	Modified	Yes				
17270	Access Trail	NH	Yes		8322-8356	8349 & 8350, (NC07) & (NC06)	
17270	Retaining Wall	NH	Yes	Series of retaining walls in vicinity of fire lookout.		8351, 8352 (SC02)	
17270	Trail Remnant	Historic	Yes	Portion of North Chalone Peak Trail retained just below the fire lookout tower.			
17270	Comfort Station	Historic	Yes				

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo

South Chalone Peak Trail
Start Location: Junction with North Chalone Peak Trail Near Fire Lookout
End Location: Saddle between North and South Chalone Peaks

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo
0	Gate	NH					
0	Sign	NH					
0	Retaining Wall	Historic			8357		
113	Retaining Wall	Historic			8358		
218	Curbing	Historic					
451	Retaining Wall	Historic				8359 - 8361 (SC01)	
1000	Retaining Wall	Historic					
1502	Retaining Wall	Historic					
1561	Retaining Wall	Historic			8362		
1856	Retaining Wall	Historic			8363		
1905	Retaining Wall	Historic			8364		2128
2295	Retaining Wall	Historic					
2394	Retaining Wall	Historic					
2459	Curbing	Historic					
2566	Retaining Wall	Historic			8365		
3163	Retaining Wall	Historic					
3206	Retaining Wall	Historic			8366		
3605	Causeway	Historic			8367		
3784	End of Trail	Historic			8368,69		
3893	Sign	NH					
3980	Stake	Historic		Redwood Stake marking original alignment to South Chalone Peak	8370		

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo

Juniper Canyon Trail
Start Location: Scout Peak
End Location: Junction with Tunnel Trail
This is the historic upper portion of the Juniper Canyon Trail historically known as the High Peaks Trail Bridle Path.

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo
0	Sign	NH					
0	Sign	NH					
17	Tread Cut	Historic					
37	Retaining Wall	Historic					
76	Retaining Wall	Historic					
156	Retaining Wall	Historic			8214,15		
210	Tread Cut	Historic					
220	Retaining Wall	Historic					
283	Switchback	Modified	Yes		8216-18		
351	Retaining Wall	Historic					
397	Sign	NH					
480	Switchback	Modified	Yes				
543	Tread Cut	Historic					
594	Retaining Wall	Historic					
681	Retaining Wall	Historic			8219		
721	Retaining Wall	Historic					
756	Switchback	Modified		Heavy damage. Needs repair.	8220,21		
782	Check Step	NH	Yes				
904	Retaining Wall	Modified	Yes				
900	Barrier Fence	NH					
914	Sign	NH					
914	Sign	NH					
991	Switchback	Modified	Yes				
1127	Retaining Wall	NH	No	Eroded area.	8222,23		
1235	Check Step	Historic			8224		
1415	Retaining Wall	Historic					
1420	Retaining Wall	NH	Yes				

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo
1430	Check Step	Historic					
1436	Tread Cut	Historic					
1440	Retaining Wall	Historic					
1540	Check Step	Historic					
1547	Switchback	Historic			8225,26		
1576	Switchback	Historic			8227		
1558	Retaining Wall	Historic					
1586	Check Step	Historic					
1622	Check Step	Historic					
1645	Retaining Wall	Historic					
1773	Sign	NH					
1773	Sign	NH					
1786	Tread Cut	Historic					
1792	Retaining Wall	Historic					
1802	Check Dam	Historic					
1815	Barrier Fence	NH		Split Rail.			
1871	Switchback	Historic			8228-30		
1952	Retaining Wall	NH	Yes				
1915	Check Step	NH	Yes				
1973	Retaining Wall	Modified	Yes				
2001	Switchback	Historic					
2093	Retaining Wall	NH	Yes				
2122	Retaining Wall	Historic					
2157	Retaining Wall	Historic			8231		
2179	Retaining Wall	Historic					
2236	Retaining Wall	Historic					
2275	Retaining Wall	Historic					
2296	Check Step	NH	Yes				
2307	Check Step	NH	Yes				
2308	Retaining Wall	Modified	Yes				
2333	Switchback	Historic					
2365	Switchback	Modified	Yes				
2401	Check Step	NH	Yes				
2419	Check Step	NH	Yes		8232,33		
2504	Tread Cut	Historic					
2512	Retaining Wall	Historic					

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo
2537	Retaining Wall	Historic					
2565	Retaining Wall	Historic					
2593	Retaining Wall	Historic			8234		
2647	Tread Cut	Historic					
2663	Check Step	NH	Yes				
2680	Retaining Wall	Historic					
2715	Tread Cut	Historic					
2728	Retaining Wall	Historic					
2777	Retaining Wall	Historic					
2860	Sign	NH					
2898	Switchback	Historic					
3005	Sign	NH					
3043	Switchback	Historic					
3139	Sign	NH					
3139	Sign	NH					
3157	Check Step	NH	Yes				
3169	Social Trail	NH					
3170	Switchback	Modified	Yes				
3221	Check Step	NH	Yes				
3240	Tread Cut	Historic					
3263	Switchback	Historic					

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo

Tunnel Trail
Start Location: Junction with Juniper Canyon Trail
End Location: Trail junction with Steep and Narrow Trail at Hawkins Peak
The waypoints start from junction with Juniper Canyon Trail.

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo
0	Sign	NH			8235,36		
0	Sign	NH					
169	Retaining Wall	Historic			8239-42	8243 (T03)	
207	Tunnel	Historic					
341	Retaining Wall	Historic					
342	Retaining Wall	Historic					
349	Bridge	Historic		Includes concrete footings and concrete decking.			
349	Handrail	Historic		Metal pipe			
375	Tread Cut	Historic					
390	Retaining Wall	Historic					
406	Retaining Wall	Historic					
417	Check Dam	NH	Yes				
463	Check Step	NH	Yes				
477	Check Step	NH	Yes				
499	Check Step	NH	Yes				
508	Check Dam	NH			8244	8244 (T04)	
554	Tread Cut	Historic					
608	Retaining Wall	Historic			8245-47	8245 - 8247 (T06)	
649	Tread Cut	Historic					
710	Retaining Wall	Historic					
711	Check Step	NH	Yes				
723	Tread Cut	Historic					
749	Retaining Wall	NH					
755	Switchback	Modified	Yes				
774	Retaining Wall	NH	Yes				
835	Retaining Wall	Modified	Yes				

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo
844	Switchback	Modified			8249,50		
850	Check Step	NH	Yes				
865	Retaining Wall	Historic					
868	Check Step	NH	Yes				
922	Retaining Wall	Historic					
951	Switchback	Modified	Yes				
1007	Retaining Wall	Historic					
1009	Check Dam	NH	Yes				
1011	Check Step	NH	Yes				
1105	Retaining Wall	Historic			8251-54	8251, 8252 (T09)	
1129	Retaining Wall	Historic					
1207	Tread Cut	Historic					
1222	Retaining Wall	Historic					
1233	Retaining Wall	Historic					
1233	Retaining Wall	Historic					
1265	Tread Cut	Historic					
1339	Check Dam	NH	Yes				
1349	Check Step	NH	Yes				
1359	Retaining Wall	Historic					
1377	Tread Cut	Historic					
1398	Check Dam	NH	Yes		8255,56	8256 (T08)	
1440	Switchback	Modified	Yes				
1458	Check Step	NH					
1509	Switchback	Historic			8257		
1643	Retaining Wall	Historic					
1698	Retaining Wall	Historic					
1758	Switchback	Modified	Yes				
1768	Check Step	NH	Yes				
1788	Retaining Wall	Historic					
1821	Switchback	Historic					
1902	Retaining Wall	Modified	Yes				
1932	Retaining Wall	Historic					
1966	Switchback	Modified	Yes				
1981	Check Step	NH	Yes				
2003	Switchback	Historic					
2011	Check Step	NH	Yes				

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo
2062	Retaining Wall	Historic					
2182	Switchback	Historic					
2221	Retaining Wall	Historic					
2242	Retaining Wall	Historic					
2278	Switchback	Historic			8258		
2394	Retaining Wall	Historic			8259-63		
2514	Retaining Wall	Historic					
2568	Check Dam	Historic			8264		
2580	Retaining Wall	Historic					
2667	Switchback	Historic			8265		
2731	Switchback	Historic					
2759	Check Step	NH	Yes				
2796	Switchback	Historic					
2801	Check Step	NH	Yes				
2812	Check Step	NH	yes				
2867	Switchback	Historic					
2872	Check Step	NH	Yes				
2927	Retaining Wall	NH	Yes				
2935	Switchback	Historic					
3011	Retaining Wall	Historic					
3060	Switchback	Historic					
3120	Switchback	Historic			8266 (205)		
3167	Check Step	NH	Yes				
3189	Retaining Wall	Historic					
3214	Retaining Wall	Historic					
3226	Sign	NH			8267		

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo

Rim Trail
Start Location: Bear Gulch Reservoir
End Location: High Peaks Trail

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo
0	Steps	Historic					
18	Retaining Wall	Modified	Yes		2918,19		
18	Check Step	NH	Yes				
34	Check Step	NH	Yes				
41	Check Step	NH	Yes				
44	Switchback	Historic					
59	Tread Cut	Historic					
78	Check Step	NH	Yes				
80	Check Step	NH	Yes				
78	Retaining Wall	NH	Yes				
90	Tread Cut	Historic					
105	Check Step	NH	Yes				
132	Tread Cut	Historic					
140	Check Step	NH	Yes				
145	Check Step	NH	Yes				
149	Tread Cut	Historic			2920-22		
149	Retaining Wall	Modified	Yes				
188	Retaining Wall	Historic					
222	Sign	NH					
225	Tread Cut	Historic					
279	Sign	NH					
279	Retaining Wall	Historic					
279	Social Trail	NH	Yes	Rock discourages use of social trail			
302	Tread Cut	Historic			2923-25	2923, 2924 (MS21)	
315	Retaining Wall	Historic					
322	Open Culvert	Historic		Cut Rock			
328	Retaining Wall	NH	No				
328	Retaining Wall	Historic					

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo
338	Tread Cut	Modified	Yes	Re-aligned trail off of tread cut.			
338	Retaining Wall	NH	No				
338	Retaining Wall	Historic					
338	Tread Cut	Historic					
392	Retaining Wall	Historic					
416	Tread Cut	Historic					
592	Tread Cut	Historic			2926		
662	Social Trail	NH					
744	Tread Cut	Historic					
785	Tread Cut	Historic					
822	Barrier Fence	NH					
833	Tread Cut	Historic					
843	Sign	NH					
893	Social Trail	NH					
914	Tread Cut	Historic			2927-29		
967	Tread Cut	Historic			2930	2930 (MS23)	
1088	Tread Cut	Historic					
1099	Retaining Wall	Historic			2931		
1375	Tread Cut	Historic					
1397	Tread Cut	Historic					
1417	Tread Cut	Historic					
1653	Tread Cut	Historic					
1801	Sign	NH					
1801	Tread Cut	Historic					
1821	Tread Cut	Historic					
1839	Tread Cut	Historic					
1925	Tread Cut	Historic					
1955	Retaining Wall	Historic					
1955	Barrier Fence	NH					
1965	Sign	NH					
1971	Tread Cut	Historic					
2007	Tread Cut	Historic					
2047	Tread Cut	Historic					
2056	Retaining Wall	Historic			2932		

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo

Wall Trail
Start Location: High Peaks Trail
End Location: Moses Spring Trail

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo
0	Sign	NH					
0	Retaining Wall	NH	Yes				
0	Tread Cut	Historic					
68	Retaining Wall	Historic					
118	Retaining Wall	Historic					
128	Sign	NH					
180	Sign	NH					
338	Retaining Wall	NH	Yes		2933,34		
402	Retaining Wall	Historic					
434	Retaining Wall	Historic					
491	Retaining Wall	NH	Yes				
519	Sign	NH					
519	Switchback	Historic					
547	Sign	NH					
557	Check Dam	NH	Yes				
570	Switchback	Historic					
584	Check Dam	NH	Yes				
587	Check Step	NH	Yes				
593	Retaining Wall	Historic					
625	Check Step	NH	Yes				
631	Check Step	NH	Yes				
681	Retaining Wall	Historic					
710	Retaining Wall	Historic					
730	Retaining Wall	Historic					
736	Tread Cut	Historic					
747	Retaining Wall	Historic					
774	Tread Cut	Historic					
798	Retaining Wall	Historic			2936,37		

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo
820	Check Step	NH	Yes				
822	Check Step	NH	Yes				
825	Check Step	NH	Yes				
826	Retaining Wall	NH	Yes		2938		
837	Check Step	NH	Yes				

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo

Moses Spring Trail
Start Location: Junction with Bear Gulch Caves Trail
End Location: Dam
Bear Gulch Caves Trail up to waypoint 989 is actually the Moses Springs Trail.

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo
0	Sign	NH			2939		
0	Retaining Wall	Historic					
72	Retaining Wall	Historic					
84	Sign	NH					
139	Check Step	NH	Yes				
145	Check Step	NH	Yes				
151	Check Step	NH	Yes				
151	Retaining Wall	Historic					
174	Sign	NH					
174	Sign	NH					
174	Check Step	NH	Yes				
178	Check Step	NH	Yes		2940		
178	Retaining Wall	Historic					
210	Steps	Historic					
223	Steps	Historic					
233	Check Step	NH	Yes				
234	Check Step	NH	Yes				
235	Check Step	NH	Yes				
249	Check Step	NH	Yes				
252	Rip Rap Trail Tread	NH	Yes	Rip Rap			
259	Check Dam	NH	Yes				
264	Sign	NH					
268	Retaining Wall	Historic					
348	Retaining Wall	Historic				2941, 2961-2962 (MS04)	344
367	Tread Cut	Historic					
394	Retaining Wall	Historic					

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo
394	Open Culvert	Historic		Unknown material			
428	Check Step	NH	Yes				
430	Check Step	NH	Yes				
445	Sign	NH					
461	Sign	NH					
488	Steps	Historic		Bad Design	2944	2942 (MS06), 2943 (MS05)	
512	Steps	Historic		Bad Design			
526	Retaining Wall	Historic					
589	Retaining Wall	Historic					
626	Tread Cut	Historic			2945,46		
686	Tread Cut	Historic					
726	Sign	NH					
749	Retaining Wall	Historic					
840	Check Step	NH	Yes				
846	Check Step	NH	Yes				
854	Check Step	NH	Yes				
941	Sign	NH					
949	Retaining Wall	Modified	Yes				
950	Tread Cut	Historic					
999	Sign	NH					
1012	Retaining Wall	Historic					
1036	Check Step	NH					
1038	Check Step	NH					
1049	Check Step	NH					
1053	Steps	Historic			2948		
1061	Steps	Historic			2947		
1093	Steps	Historic					
1100	Retaining Wall	Historic					
1112	Tread Cut	Historic					
1117	Tread Cut	Historic					
1121	Retaining Wall	Historic					
1131	Retaining Wall	Historic					
1151	Bridge	Historic		Rustic-style. Steel reinforced wet stone.	2951,52		
1156	Tread Cut	Historic					
1164	Steps	Historic					

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo
1175	Retaining Wall	Historic					
1175	Retaining Wall	Historic					
1197	Tread Cut	Historic					
1209	Retaining Wall	Historic					
1210	Retaining Wall	Historic					
1217	Access Trail	NH			2951,52?, 59,60	2949?, 2959?	
1229	Sign	NH					
1239	Retaining Wall	NH	Yes	Start of Trail Reroute			
1251	Steps	NH	Yes				
1264	Retaining Wall	NH	Yes				
1288	Social Trail	NH					
1305	Switchback	NH	Yes				
1311	Sign	NH					
1395	Sign	NH					
1401	Retaining Wall	NH	Yes				
1409	Sign	NH					
1460	Sign	NH					
1495	Retaining Wall	Historic					
1609	Retaining Wall	NH	Yes			2957 (MS09)	
1622	Retaining Wall	NH	Yes				
1628	Steps	NH	Yes				
1637	Steps	Historic					
1651	Steps	NH	Yes				
1660	Steps	NH	Yes				
1688	Steps	NH	Yes				
1700	Steps	NH	Yes				
1722	Steps	NH	Yes				
1728	Retaining Wall	Historic					
1737	Check Step	NH	Yes				
1740	Check Step	NH	Yes				
1749	Check Step	NH	Yes				
1753	Check Step	NH	Yes				
1760	Check Step	NH	Yes				
1760	Retaining Wall	NH	Yes				
1760	Retaining Wall	NH	Yes				

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo
1768	Culvert	NH					
1786	Sign	NH					
1800	Sign	NH					
1802	Steps	NH	Yes				
1802	Retaining Wall	NH	Yes				
1806	Tread Cut	Historic					
1809	Bridge	Historic		Rip Rap mortared on top of existing boulders.	2908,2955-60		
1814	Tread Cut	Historic					
1819	Sign	NH					
1819	Sign	NH					
1819	Retaining Wall	NH	Yes				
1852	Check Step	NH	Yes				
1892	Tread Cut	Historic					
1894	Handrail	Historic					
1900	Steps	Historic			2910-14,2917		
1941	Tread Cut	Historic					
1960	Steps	Historic					
1986	Tread Cut	Historic			2915,16		
2001	Steps	Historic					
2029	Gate	NH		Metal Pipe			
2033	Sign	NH					
2033	Sign	NH					
2035	Sign	NH					
2035	Sign	NH					
2029	Sign	NH					
4049	Sign	NH					
4049	Sign	NH					

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo

Bear Gulch Caves Trail 1
Start Location: Junction of Moses Springs Trail with High Peaks Trail
End Location: Area between upper and lower caves
Bear Gulch Caves Trail up to waypoint 989 is actually the Moses Springs Trail.
Only includes data from lower cave, does not include upper cave.

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo
0	Retaining Wall	NH	Yes		2866		
15	Sign	NH					
15	Sign	NH					
42	Retaining Wall	Historic					
79	Retaining Wall	Historic					
105	Sign	NH					
109	Retaining Wall	Historic					
247	Retaining Wall	Historic					
270	Retaining Wall	Historic					
378	Retaining Wall	Historic			2867-69		
427	Retaining Wall	Historic					
461	Retaining Wall	Historic					
501	Retaining Wall	Historic					
524	Retaining Wall	Historic					
552	Open Culvert	NH	Yes		2870		
563	Check Step	NH	Yes				
563	Retaining Wall	Historic					
662	Bridge	Historic	Yes	Stone footings on former trail alignment near tunnel.			
665	Retaining Wall	Historic					
713	Retaining Wall	Historic					
800	Tunnel	Historic			2871		
848	Retaining Wall	Historic					
876	Tread Cut	Historic			2873-75		
877	Sign	NH					
888	Retaining Wall	Historic					

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo
936	Retaining Wall	Historic					
984	Retaining Wall	Historic					
989	Gate	NH					
989	Sign	NH					
989	Sign	NH					
996	Retaining Wall	Historic					
1072	Retaining Wall	Historic					
1087	Retaining Wall	Historic					
1202	Retaining Wall	Historic					
1290	Retaining Wall	Historic			2876-80		
1339	Retaining Wall	NH	Yes				
1290	Brush Clearing	NH					
1357	Check Step	NH	Yes				
1367	Rip Rap Trail Tread	Historic		Rip Rap			
1408	Retaining Wall	NH	No	Sloppy Work	2881-2884		
1497	Retaining Wall	Historic					
1506	Retaining Wall	Historic					
1509	Retaining Wall	Historic					
1521	Bridge	Modified	Yes	Steel reinforced concrete.	2885		
1531	Retaining Wall	Historic					
1531	Retaining Wall	Historic					
1572	Bridge	NH		Galvanized steel.	2887		
1589	Gate	NH					

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo or Photo

Bear Gulch Caves Trail 2
Start Location: Bear Gulch Reservoir
End Location: South entrance to upper cave

Waypoint	Feature Type	Historic/ Modified/ Non Historic	Compatible	Notes	Photos	Repeat Photos (Historic Photo #)	Approximate Waypoint of Repeat Photo
0	Gate	NH		Steel.			
2	Tread Cut	Historic					
13	Retaining Wall	NH		Stone Pins, not compatible?			
22	Retaining Wall	Historic					
38	Steps	Historic					
41	Tread Cut	Historic					
53	Check Step	NH	Yes				
59	Tread Cut	Historic					
67	Tread Cut	Historic					
75	Retaining Wall	Historic		Also a bridge footing.	2889-91		
77	Bridge	Historic		Steel reinforced concrete.			
87	Steps	Historic					
93	Tread Cut	Historic					
95	Sign	NH					

SUMMARY OF COLLECTED FIELD DATA
HIGH PEAKS TRAIL SYSTEM CULTURAL LANDSCAPES INVENTORY
PINNACLES NATIONAL MONUMENT
2008

Definitions:

"Total #" is the number of features of a particular type.
"# Contributing" is the number of historic and modified historic features that contribute to the trail system.
"# Contributing" is calculated by adding the "# Historic" and "# Modified Historic" and subtracting the "# of Modified Historic that have Lost Integrity".
"# Historic" is the number of features that date to the historic period (1923-1942) and have not been modified since the historic period.
"# Modified Historic" is the number of features that date to the historic period but have been modified since the historic period.
"# of Modified Historic that have Lost Integrity" are the modified historic features that have lost integrity (A subset of the "# Modified Historic").
"# Non Historic (Non Contributing)" is the number of features that have been constructed since the end of the historic period.
Non Historic features, by definition, do not contribute to the High Peaks Trail System.
"Total #" is equal to the sum of the "# Historic", the "# Modified Historic", and the "# Non Historic (Non Contributing)".
Percentages are calculated by dividing by the # by the "Total #".

CIRCULATION FEATURES						
Rock Climbing Access Trails	**Total #**	**# Contributing**	**# Historic**	**# Modified Historic**	**# of Modified Historic that have Lost Integrity**	**# Non Historic (Non Contributing)**
	5	0	0	0	0	5
	100%	0%	0%	0%	0%	100%
Social Trails	**Total #**	**# Contributing**	**# Historic**	**# Modified Historic**	**# of Modified Historic that have Lost Integrity**	**# NonHistoric**
	21	0	0	0	0	21
	100%	0%	0%	0%	0%	100%
Overlooks	**Total #**	**# Contributing**	**# Historic**	**# Modified Historic**	**# of Modified Historic that have Lost Integrity**	**# NonHistoric**
	1	1	1	0	0	0
	100%	100%	100%	0%	0%	0%

Handrails	Total #	# Contributing	# Historic	# Modified Historic	# of Modified Historic that have Lost Integrity	# NonHistoric
	15	15	15	0	0	0
	100%	100%	100%	0%	0%	0%
Gates	**Total #**	**# Contributing**	**# Historic**	**# Modified Historic**	**# of Modified Historic that have Lost Integrity**	**# NonHistoric**
	7	0	0	0	0	7
	100%	0%	0%	0%	0%	100%
Temporary Fences	**Total #**	**# Contributing**	**# Historic**	**# Modified Historic**	**# of Modified Historic that have Lost Integrity**	**# NonHistoric**
	8	0	0	0	0	8
	100%	0%	0%	0%	0%	100%
Benches	**Total #**	**# Contributing**	**# Historic**	**# Modified Historic**	**# of Modified Historic that have Lost Integrity**	**# NonHistoric**
	2	1	1	0	0	1
	100%	50%	50%	0%	0%	50%
Interpretation Kiosks	**Total #**	**# Contributing**	**# Historic**	**# Modified Historic**	**# of Modified Historic that have Lost Integrity**	**# NonHistoric**
	2	0	0	0	0	2
	100%	0%	0%	0%	0%	100%
Wayfinding Signs	**Total #**	**# Contributing**	**# Historic**	**# Modified Historic**	**# of Modified Historic that have Lost Integrity**	**# NonHistoric**
	98	0	0	0	0	98
	100%	0%	0%	0%	0%	100%
POTENTIAL HISTORIC ARCHEOLOGICAL FEATURE - NOT LISTED ON CLI FEATURE LIST						
Trail Remnants	**Total #**	**# Contributing**	**# Historic**	**# Modified Historic**	**# of Modified Historic that have Lost Integrity**	**# NonHistoric**
	1	0	1	0	0	0
	100%	0%	100%	0%	0%	0%

BUILDINGS AND STRUCTURES						
Tunnels	**Total #**	**# Contributing**	**# Historic**	**# Modified Historic**	**# of Modified Historic that have Lost Integrity**	**# NonHistoric**
	3	3	3	0	0	0
	100%	100%	100%	0%	0%	0%
Bridges	**Total #**	**# Contributing**	**# Historic**	**# Modified Historic**	**# of Modified Historic that have Lost Integrity**	**# NonHistoric**
	9	7	6	1	0	2
	100%	78%	67%	11%	0%	22%
Causeways	**Total #**	**# Contributing**	**# Historic**	**# Modified Historic**	**# of Modified Historic that have Lost Integrity**	**# NonHistoric**
	2	2	2	0	0	0
	100%	100%	100%	0%	0%	0%
Retaining Walls	**Total #**	**# Contributing**	**# Historic**	**# Modified Historic**	**# of Modified Historic that have Lost Integrity**	**# NonHistoric**
	424	351	324	28	1	72
	100%	83%	76%	7%	0%	17%
Steps	**Total #**	**# Contributing**	**# Historic**	**# Modified Historic**	**# of Modified Historic that have Lost Integrity**	**# NonHistoric**
	62	47	37	11	1	14
	100%	76%	60%	18%	2%	23%
Check Steps	**Total #**	**# Contributing**	**# Historic**	**# Modified Historic**	**# of Modified Historic that have Lost Integrity**	**# NonHistoric**
	184	8	8	0	0	176
	100%	4%	4%	0%	0%	96%
Check Dams	**Total #**	**# Contributing**	**# Historic**	**# Modified Historic**	**# of Modified Historic that have Lost Integrity**	**# NonHistoric**
	24	2	2	0	0	22
	100%	8%	8%	0%	0%	92%

Open Culverts	Total #	# Contributing	# Historic	# Modified Historic	# of Modified Historic that have Lost Integrity	# NonHistoric
	36	5	4	1	0	31
	100%	14%	11%	3%	0%	86%
Culverts	**Total #**	**# Contributing**	**# Historic**	**# Modified Historic**	**# of Modified Historic that have Lost Integrity**	**# NonHistoric**
	2	1	1	0	0	1
	100%	50%	50%	0%	0%	50%
Diversion Ditches	**Total #**	**# Contributing**	**# Historic**	**# Modified Historic**	**# of Modified Historic that have Lost Integrity**	**# NonHistoric**
	1	0	0	0	0	1
	100%	0%	0%	0%	0%	100%
Terraces	**Total #**	**# Contributing**	**# Historic**	**# Modified Historic**	**# of Modified Historic that have Lost Integrity**	**# NonHistoric**
	5	0	0	0	0	5
	100%	0%	0%	0%	0%	100%
Comfort Stations	**Total #**	**# Contributing**	**# Historic**	**# Modified Historic**	**# of Modified Historic**	**# NonHistoric**
	2	0	2	0	2	0
	100%	0%	100%	0%	100%	0%
ONLY A FRACTION OF THE CURBING FEATURES DOCUMENTED - DESCRIBED IN NARRATIVE						
Curbing	**Total #**	**# Contributing**	**# Historic**	**# Modified Historic**	**# of Modified Historic that have Lost Integrity**	**# NonHistoric**
	4	2	2	0	0	1
	100%	50%	50%	0%	0%	25%

TOPOGRAPHY FEATURES						
Switchbacks	**Total #**	**# Contributing**	**# Historic**	**# Modified Historic**	**# of Modified Historic that have Lost Integrity**	**# NonHistoric**
	76	64	43	27	6	6
	100%	84.2%	56.6%	35.5%	8%	7.9%
Tread Cut	**Total #**	**# Contributing**	**# Historic**	**# Modified Historic**	**# of Modified Historic that have Lost Integrity**	**# NonHistoric**
	219	212	207	6	1	6
	100%	97%	95%	3%	0%	3%
Rip Rap Trail Treads	**Total #**	**# Contributing**	**# Historic**	**# Modified Historic**	**# of Modified Historic that have Lost Integrity**	**# NonHistoric**
	2	1	1	0	0	1
	100%	50%	50%	0%	0%	50%

OTHER FEATURES - NOT ON FEATURE LISTS						
Stakes						
Quarries						
Potential Archeological Sites						
Spike Camp						
Vegetation Management						
Brush Clearing						
Scientific Equipment						
Weather Station						

Repeat Photos

Historic Photos

- **Date to the period of significance (1923-1942).**
- **Black and White Images.**

Contemporary Photos

- **Date to the summer of 2008.**
- **Color Images.**

See the supplemental information folder of the included disk for the scanned historic photographs, contemporary photographs, and repeat photographs. See the park or the Pacific West Regional Office – Oakland for digital copies of the photographs.

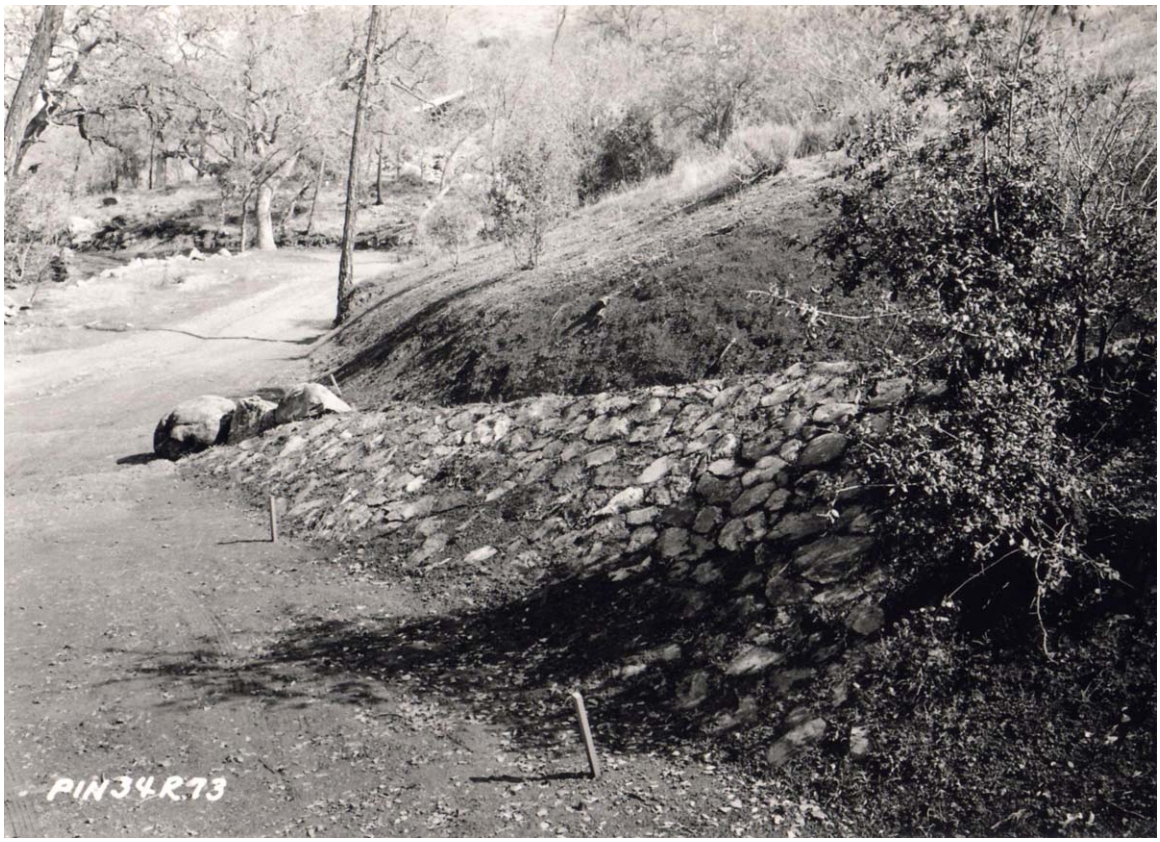
Sources for the Historic Photos:

1. Folder Name:
   DC_Box_3_CCC - 1934
   What:
   Includes many photos of trails before, during and after CCC construction. 1934 - 1935. These summary reports are written by the CCC (ECW – Emergency Conservation Work). Overlaps with the photos and records taken by the NPS Landscape Architects.
   Location:
   These reports are located in the DC archives.
   Citation:
   CCC (?). 1935. Emergency Conservation Work: Pinnacles National Monument: Final Narrative Reports (1934-1935). CCC (?). Both Narrative and Graphics.
2. File Folder Name:
   Final_Report_Trails_1933
   What:
   Final Report on Trail Construction. Dated May 10, 1933. This report summarizes the Trail Work completed by the NPS before the CCC involvement. Numerous photos.
   Location:
   This report is located in PWRO Oakland Archives in Box 5, Folder 4.
   Citation:
   Diehl, John H. 1933. Pinnacles National Monument: Final Report on trail Construction: Account No. 501. NPS: San Francisco. Both Narrative and Graphic.
3. Folder Name:
   LAReports_CCC_Photos_Archives_Unlabelled_Box
   What:
   Includes many photos of trails before, during and after CCC construction. 1930 to 1939. Some text from 1930-1931 pre-dates the CCC: 1932-1939.
   Location:
   These reports are written by NPS Landscape Architects (Landscape Engineers) and summarize the work of the CCC for each year from 1930 to 1939. They are located in PWR Oakland Archives in an unlabelled box.
   Citation:
   NPS. 1939. Landscape Architecture Reports (1930-1939). PINN. Graphics.

Source for Contemporary Photos:

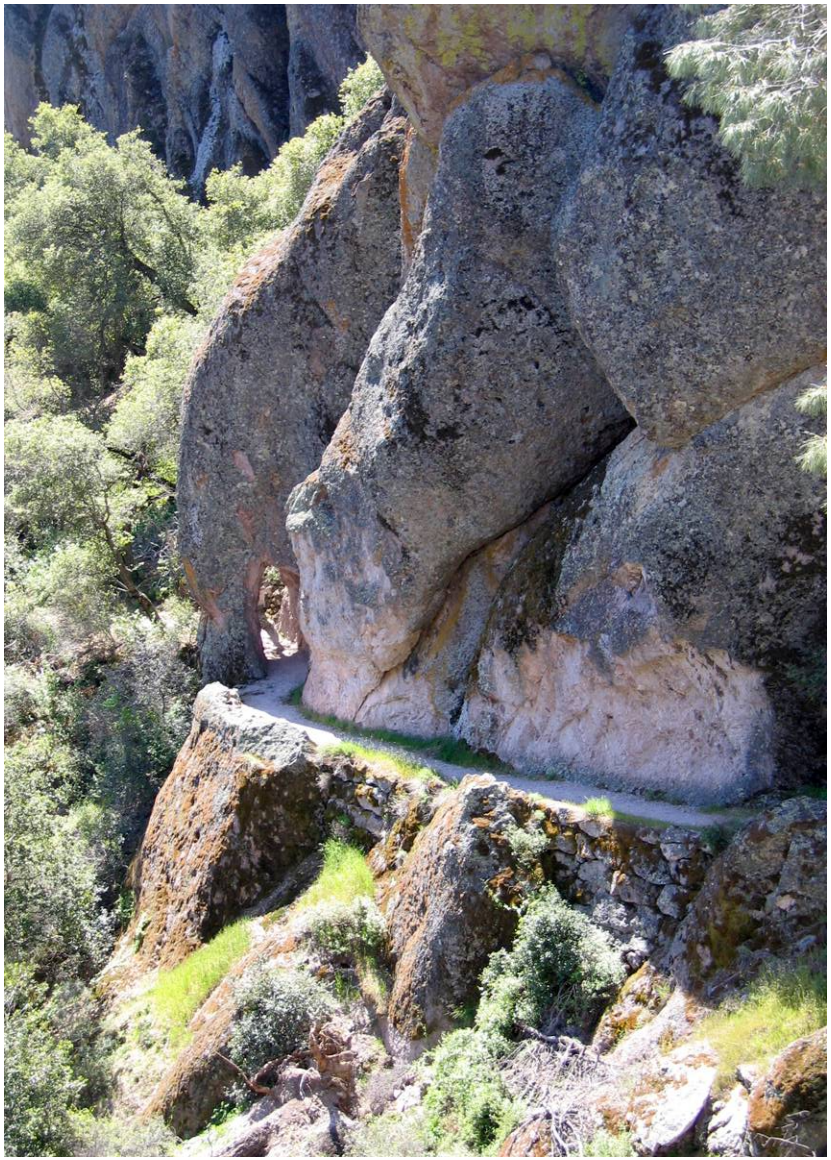
Pacific West Regional Office – Oakland

High Peaks Trail – Bear Gulch to Steep and Narrow










PN 31D4



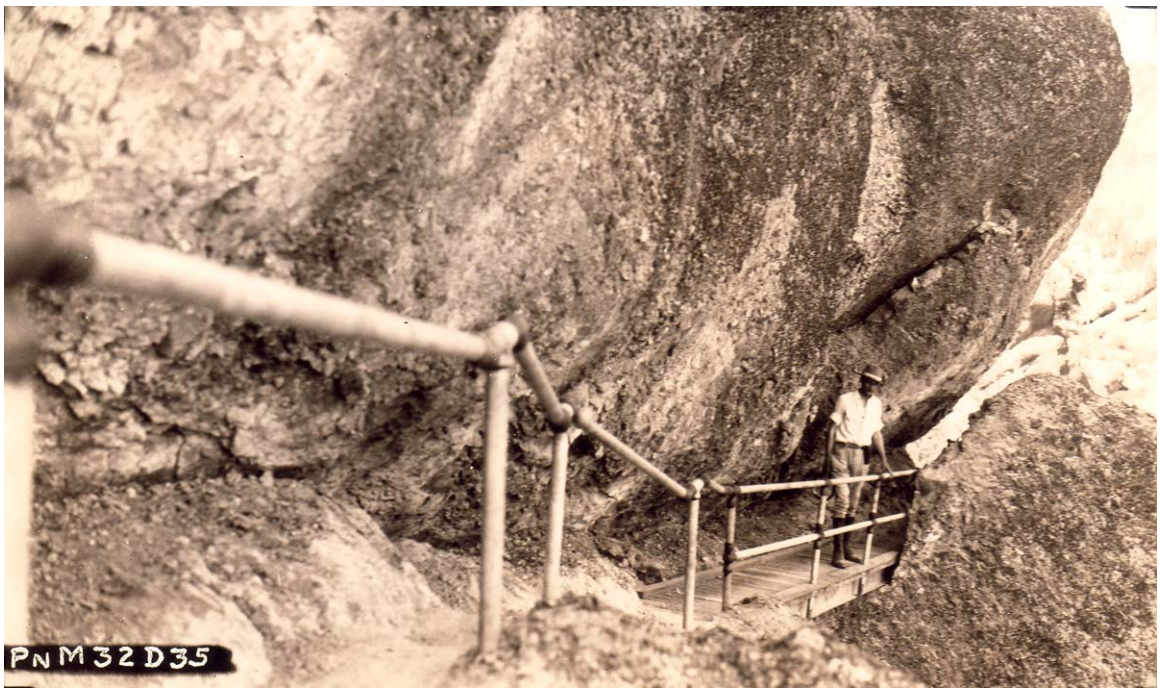




High Peaks Trail – Steep and Narrow





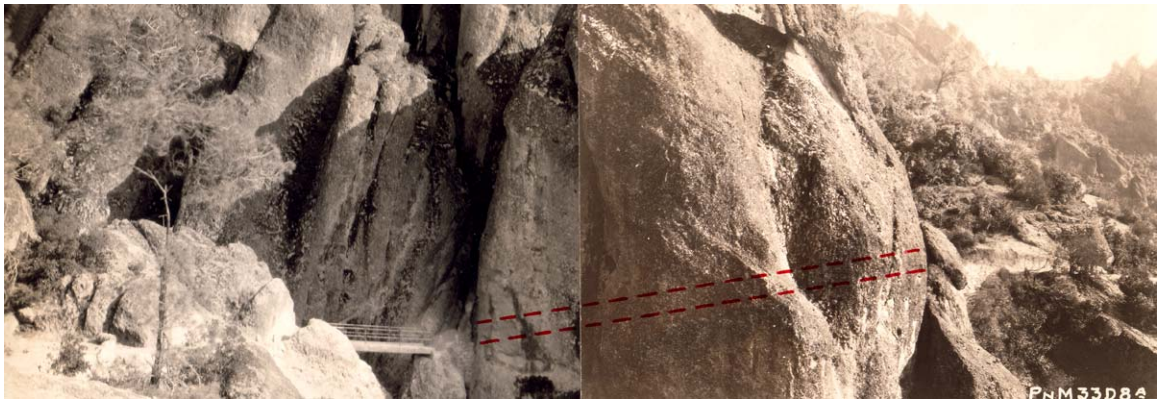

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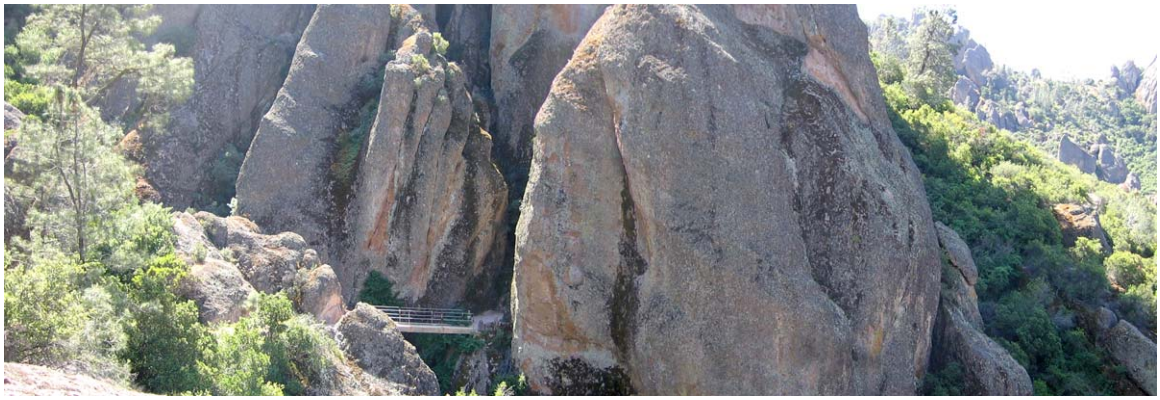


Tunnel Trail






PNM 33 D 84



High Peaks Trail – Hawkins Peak to Chalone Creek






T1N34R15E


04/09/2008


PIN 34R162



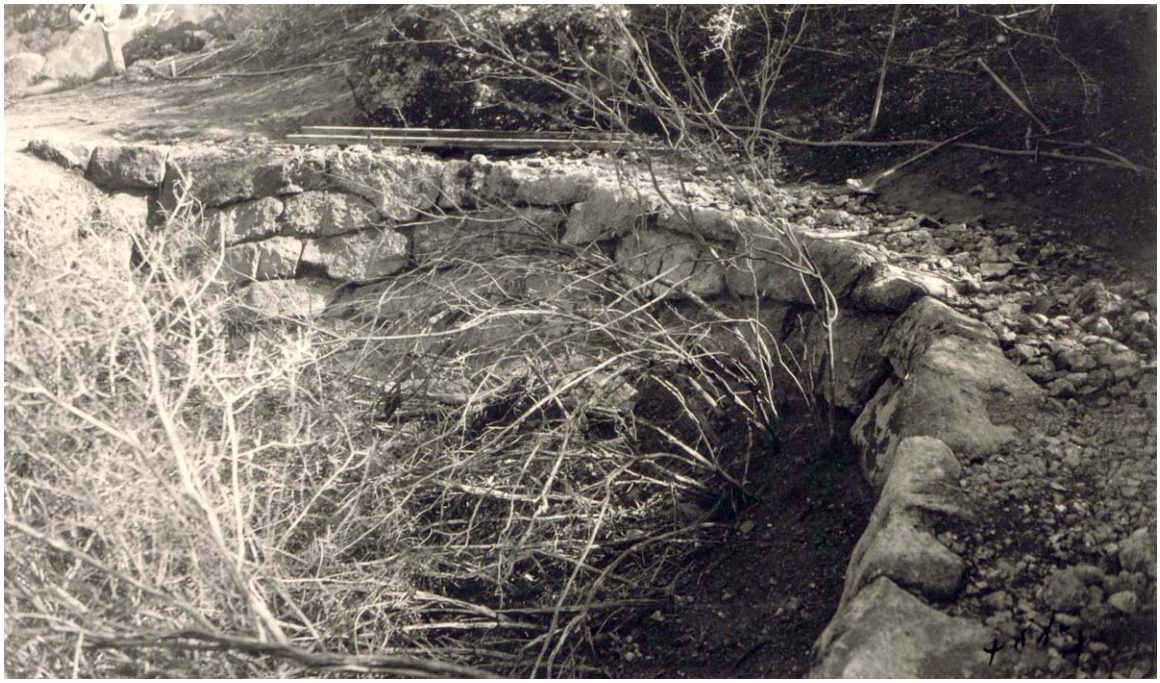

PIN 34 R166



High Peaks Cut-Off Trail









Condor Gulch Trail

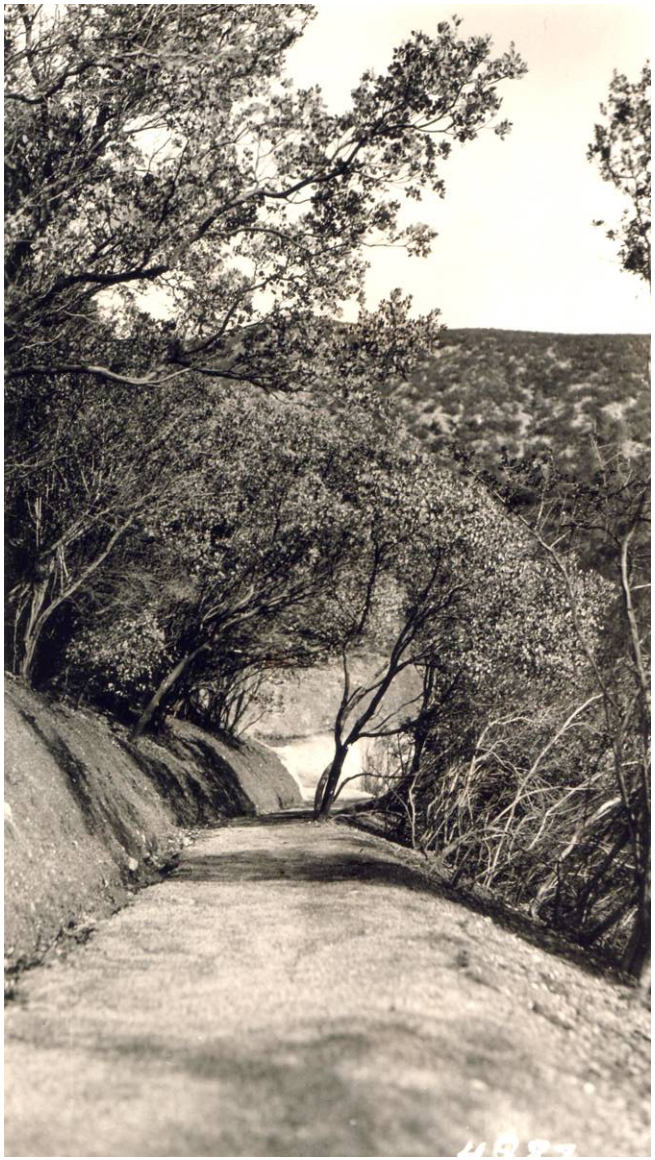




Moses Spring Trail









North Chalone Peak Trail













South Chalone Peak Trail



