

# Pinnacles National Monument

U.S. Department of the Interior  
National Park Service



**Draft General Management Plan  
and Environmental Assessment  
October 2012**





#### Photo Credits:

**Front cover:** Square Block at sunset, photo by Gavin Emmons © 2011.

**Back cover:** West side event, NPS photo.

#### Inside covers:

**Front (left to right):** Pacific chorus frog, photo by Paul G. Johnson; park visitors during Memorial Day weekend, NPS photo; and Flowing creek in upper Bear Gulch, photo by Gavin Emmons © 2011.

**Back (left to right):** High water inundates the Bear Gulch Cave Trail, reflecting the color of the moss beyond, photo by Paul G. Johnson; a volunteer restoration crew pulls exotic plants, with the High Peaks in the background, NPS photo; Chalone Annex group campground, 1965, NPS photo.

**Bottom:** Panoramic view of the high peaks from the Chalone Peak Trail, NPS photo.





IN REPLY REFER TO:

## United States Department of the Interior

NATIONAL PARK SERVICE  
Pinnacles National Monument  
5000 Highway 146  
Paicines, California 95043-9770

D-18

October 2012

Dear Friends of Pinnacles National Monument,

It is with great pleasure that we submit to you the *Draft General Management Plan and Environmental Assessment of Pinnacles National Monument* (GMP/EA). When completed, this plan will guide our management of the monument with a 15-20 year vision for its operation and protection.

However, before the GMP/EA can be completed, it is important that we receive comments on this draft. Please take the time to review the draft and provide us with any comments you may have.

The *Draft General Management Plan* offers four alternative approaches to public use and enjoyment of the monument, protection of natural and cultural resources, and the overall management of this unique unit of the National Park System. The environmental consequences section of the document provides an understanding of the effect each alternative may have on the environment.

This plan represents your involvement and input into planning processes. The preferred alternative addresses concepts many of you proposed or supported.

Your input into this plan is important and will make it a better guide for the monument's future. You are invited to attend public meetings where you can discuss with the planning team any questions you may have as well as provide public comments. These meetings will be held in November 2012. Dates, times and locations of these meetings will be published in a newsletter, in local newspapers, and on our webpage at [www.nps.gov/PINN](http://www.nps.gov/PINN). You can submit comments or receive updates on the GMP/EA online through the NPS Planning, Environment and Public Comment System (PEPC) at <http://parkplanning.nps.gov/PINN>. An electronic public comment form is provided through this website. The public comment period for this draft GMP/EA will extend through January 11, 2013.

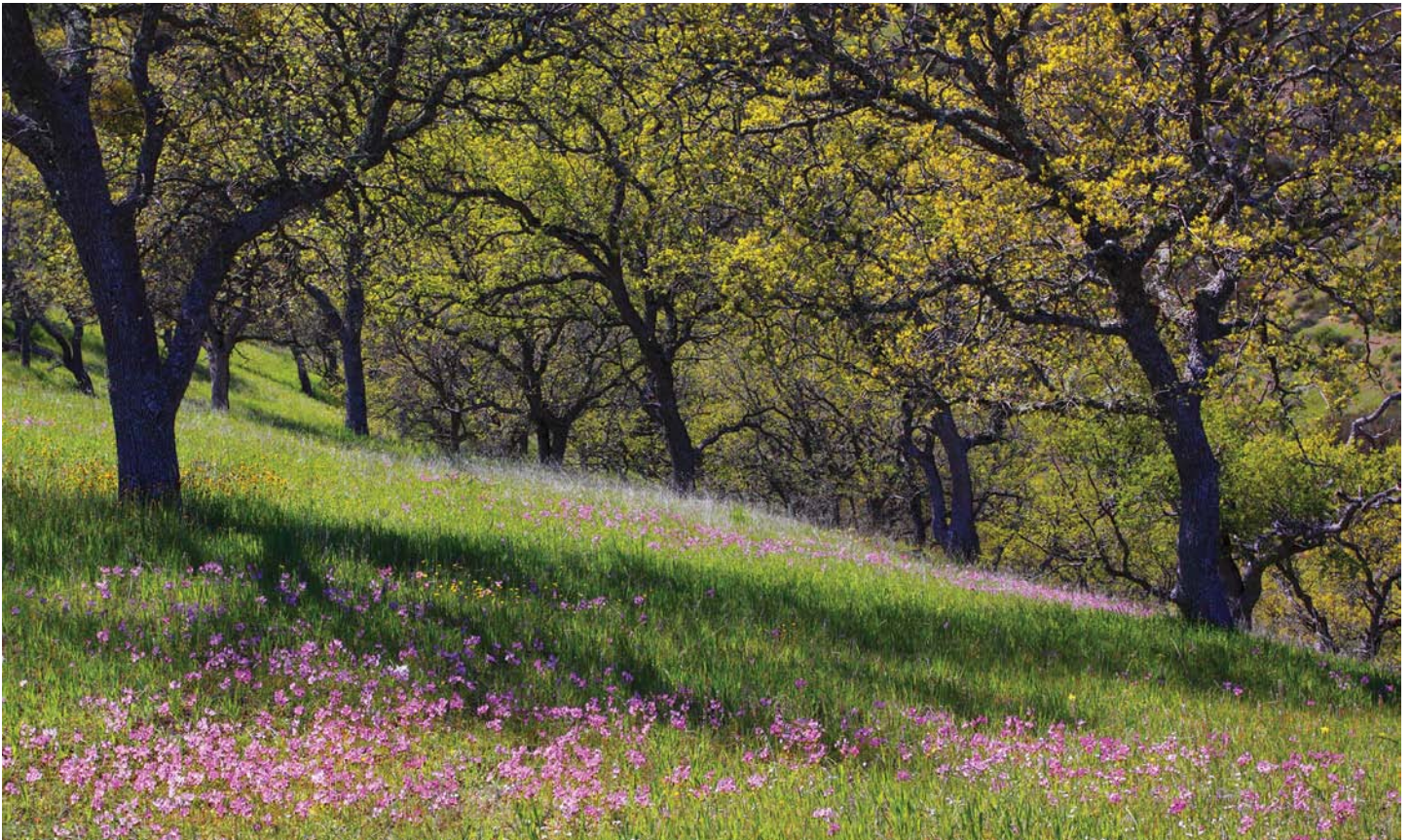
If you choose not to submit comments online, please send your written comments to:

Superintendent  
Pinnacles National Monument  
5000 Highway 146  
Paicines, CA 95043

Our planning effort has benefited from your participation and involvement. We thank you for taking the time to make this the best plan possible for such a special place.

Karen Beppler-Dorn, Superintendent





Photos (top to bottom): 1. Prairie falcon fledgling flaring wings. 2. Blue oak woodland with shooting stars in bloom. Photos by Gavin Emmons © 2011.



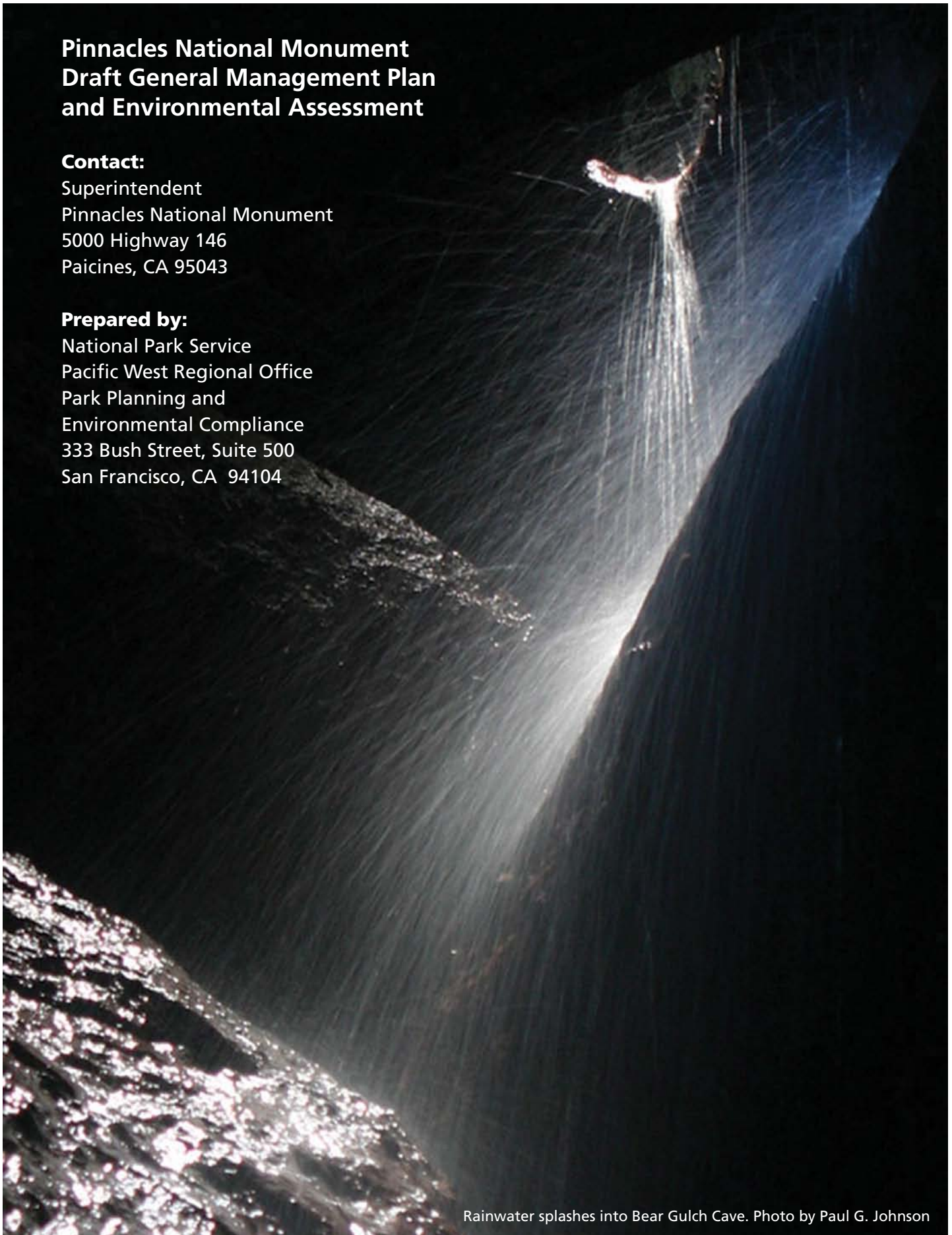
# Pinnacles National Monument Draft General Management Plan and Environmental Assessment

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Rainwater splashes into Bear Gulch Cave. Photo by Paul G. Johnson



Watercolor painting by Liz Clayton, Artist in Residence Program.



## Draft General Management Plan / Environmental Assessment

The National Park Service (NPS) planning team identified four alternatives for managing Pinnacles National Monument for the next 15 to 20 years. These alternatives respond to National Park Service planning requirements, and the issues identified during public scoping. The alternatives establish desired future conditions for administration and management, cultural and natural resource protection, research, education, and opportunities for visitor enjoyment. The alternatives also respond to comments received through public scoping and the ongoing involvement of public agencies, tribes, local communities, organizations, and individuals. Alternative D, Link People and Resources, is the preferred alternative of the NPS to guide future management of Pinnacles National Monument.

**Alternative A, No Action**, would continue existing management, programming, facilities, staffing, and funding at current levels.

**Alternative B, Emphasize Backcountry Experience**, would provide high quality backcountry experiences, including solitude, quiet, and views of natural settings. Integrated management of resources and visitor use opportunities would protect, restore, and maintain natural and cultural resources and backcountry experiences.

**Alternative C, Expand Visitor Experiences**, would provide an expanded array of visitor use opportunities, including recreation, interpretation, and education. Opportunities would be provided on the new lands and other areas with low visitor use.

**Alternative D, Link People and Resources (the preferred alternative)**, would engage a broad range of visitors in the enjoyment, understanding, and stewardship of natural and cultural resources and values of the Gabilan Mountains ecoregion by focusing on ways to connect diverse audiences and resources, to acknowledge the interrelationship between natural and cultural resources, and to protect, preserve, and restore ecological communities and processes.

The environmental consequences of the alternatives are examined in the Environmental Assessment. Results of public involvement, consultation, and coordination conducted throughout the planning process are included in Chapter 6: Consultation and Coordination.

View of the high peaks from the Condor Gulch Trail.  
NPS photo.

## How to Comment on this Document

This *Draft General Management Plan / Environmental Assessment* (GMP/EA) has been distributed to agencies and interested organizations and individuals for their review and comment. The public comment period for this document will extend through January 11, 2013.

This document is available online at the NPS Planning, Environment, and Public Comment website at <http://parkplanning.nps.gov/pinn>. An online public comment form is provided at this website.

Comments may also be made in person at one of the public meetings that will be conducted during the public review period. The specific dates and times for these workshops will be announced in local newspapers, in the Draft GMP newsletter, and online at the above site.

For further information or to send written letters or comment forms on this draft plan, contact or write:

Karen Beppler-Dorn, Superintendent  
Pinnacles National Monument  
Attn: General Management Plan Team  
5000 Highway 146  
Paicines, CA 95043

*Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment - including your personal identifying information - may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.*



## A Guide to This Document

This Draft GMP/EA is organized in accordance with the Council on Environmental Quality's regulations for implementing the National Environmental Policy Act, the National Park Service's "*Park Planning Program Standards*," and Director's Order 12 and Handbook, "*Conservation Planning, Environmental Impact Analysis, and Decision-making*."

**Chapter 1: Introduction** sets the framework for the document. It provides an overview of the monument, describes why the plan is being prepared and what needs it must address. This chapter also details the planning opportunities and issues raised during internal and public scoping meetings. The alternatives in Chapter 3 address these issues and concerns. Next is a statement of the scope of the environmental assessment—specifically what impact topics are or are not analyzed in detail. This chapter concludes with an overview of other related planning efforts.

**Chapter 2: Foundation for Planning and Management** provides guidance for the management alternatives that are being considered. This guidance is based on the national monument's establishing proclamation, subsequent legislation, its purpose, the significance of its resources, fundamental resources and values, special mandates, and administrative commitments. This chapter concludes with a list of servicewide laws and policies that are applicable to the alternatives presented in this plan.

**Chapter 3: Alternatives** begins with an overview of the individual components included in the General Management Plan alternatives. Management zones and specific actions that are common to all the alternatives are described. Next is a description of the four alternatives, including the continuation of current management practices and trends (Alternative A, No Action – Continue Current Management). Three additional action alternatives for managing the monument, Alternative B, Emphasize Backcountry Experience; Alternative C, Expand Visitor Experiences; and Alternative D, Link People and Resources (preferred alternative) are also presented. This section is followed by a discussion of user capacity indicators and standards, a summary of the alternatives; a summary of the environmental consequences of implementing the alternatives, and discussions of the Environmentally Preferable Alternative, Actions/Alternatives Considered But Dismissed From Detailed Consideration, and Implementation of the General Management Plan.



High Peaks Trail in the fog. NPS photo.

**Chapter 4: Affected Environment** describes those areas and resources that could be affected by implementing the actions contained in the alternatives.

**Chapter 5: Environmental Consequences** analyzes the impacts of implementing the alternatives on resources based on topics described in the "Affected Environment" chapter. The chapter includes a description of measures that would avoid, minimize or mitigate the impacts. Methods used for assessing the impacts in terms of the intensity, type, and duration are described for each impact topic.

**Chapter 6: Consultation and Coordination** describes the history of public and agency coordination during the planning effort and any future compliance requirements. It also lists agencies and organizations that will be receiving copies of the document.

The preparers, appendices, glossary, acronyms, and list of references are found at the end of the document.



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Mariposa lilies furred near sunset, Pinnacles National Monument. Photo by Gavin Emmons © 2011.

## Executive Summary



Photo by Debbie Delatour, Artist in Residence Program.



## Introduction

Pinnacles National Monument is located in the southern portion of the Gabilan Mountains in California's central Coast Ranges. Pinnacles lies about 40 miles inland from the Pacific Ocean and about 80 miles south of the San Francisco Bay Area (See *Park Map* - Regional Context Inset). The monument was set aside in 1908 by President Theodore Roosevelt under the Antiquities Act to preserve and protect the remnants of ancient volcanic processes that formed a portion of the Gabilan Mountain Range.

The last comprehensive planning effort for Pinnacles was the 1975 Master Plan. Since then, Pinnacles has grown from 16,271 acres to over 27,000 acres. In 2006, the monument acquired the 2,000 acre Pinnacles Ranch, along with its resources, infrastructure, recreational opportunities, and management challenges. Other changes include the reintroduction of the endangered California condor and a related rise in the monument's regional and national visibility. Substantial floods have destroyed many facilities, including the camping facilities on the west side. Development of housing and maintenance facilities on the east side displaced traditional picnicking areas. There are transportation and parking challenges today, and many facilities and services are inadequate to meet visitor demand and monument operations.

Since the 1975 Master Plan, the population of Hollister, San Benito County's largest community, has more than doubled. The population of Soledad, the closest city on the west side of the monument in Monterey County, has also doubled. The region has been changing, from a quiet ranching and agricultural-based economy to a more urban and technology-based economy. A new general management plan (GMP), reflecting contemporary and future issues and challenges facing Pinnacles, is essential.

This *Draft General Management Plan / Environmental Assessment* (GMP/EA) was developed in consultation with NPS staff and program managers, local communities, government agencies, California Indian tribes, stakeholder groups, and individuals. The GMP articulates a vision and overall management philosophy for Pinnacles that will guide decision-making for the foreseeable future. The GMP includes management strategies for resource protection and preservation; potential visitor use opportunities; interpretation and education; use of facilities and the need for new facilities; and long-term operations and management of Pinnacles.



Return of the Condor. Stained Glass. By Linda Bjornson, Artist in Residence Program.

## Issues

The general public, NPS staff, and representatives from various organizations and county, state, and federal agencies identified issues and concerns about monument management during the scoping phase (early information gathering) for this general management plan. An issue is an opportunity, conflict, or problem regarding the use or management of public lands. Issues and concerns raised during public scoping generally involved suggestions for the types and levels of services and activities offered at the monument (particularly interpretive and educational programs). Many identified a desire to ensure a high degree of protection of the monument's sensitive resources. The GMP alternatives provide strategies for addressing these issues within the context of the monument's purpose, significance, and special mandates.

### NATURAL RESOURCES

- Defined priorities and management direction for natural resources protection, research, and monitoring is needed while addressing the balance between visitor enjoyment and natural resource protection. Management guidance from desired conditions, management zoning and indicators and standards for user capacity is needed.
- A comprehensive management approach is needed that addresses the desire for protection and restoration of sensitive plant and wildlife species and eradication of nonnative invasive species.
- The balance between existing historic and visitor-serving structures in wetland, floodplain and fire-prone areas, and the health of the riparian environment needs to be addressed.

### CULTURAL RESOURCES

- Lands acquired since the Master Plan added cultural resources to the monument's responsibilities. The appropriate balance between protection of historic resources and visitor uses, resource management practices, and natural processes needs to be examined.
- Priorities and management direction for cultural resources protection, research and monitoring need to be defined. The balance between visitor use and enjoyment and resource protection also needs to be addressed. Management guidance from desired conditions, management zoning, and indicators and standards for user capacity is needed.

## WILDERNESS

- Over 16,000 of the monument's 27,000 acres are in designated wilderness. A vision for wilderness preservation needs to be established that will be addressed later in more detail in the monument's wilderness plan. This includes determining the desired resource conditions and visitor experiences in wilderness and the appropriate balance of wilderness values with other public values.

## CLIMATE CHANGE

- Global climate change can be expected to have direct and indirect impacts on Pinnacles National Monument, including natural and cultural resources, visitor use, facilities, administration and operations.

## COLLECTIONS

- The monument has been implementing recommendations from its 2005 Museum Management Plan. Several recommendations still need resolution including professional upkeep and improved storage of collections to meet NPS standards and a plan for collections development following the updated Scope of Collections direction.

## VISITOR USE AND FACILITIES

- Changing demographics and appropriate uses and facilities to serve visitors throughout the monument need to be addressed. Specific issues include determining the desired visitor experience throughout the monument (east side, west side, High Peaks, Bear Gulch, bottomlands, campground, backcountry, wilderness).
- Visitor services and opportunities need to be addressed.
- Appropriate uses in different parts of the monument, potential conflicts among these uses, potential resource impacts, and visitor safety need to be addressed.
- The appropriateness of the current location/facility of the east side visitor center needs to be addressed. Law enforcement and visitor safety needs need to be identified, considering infrastructure, access, and staffing limitations. In addition, adaptive reuse of historic structures needs to be considered.
- Appropriate visitor orientation needs to be addressed, including interpretive themes, resource education opportunities within the monument and in gateway communities, in a manner that includes the new lands and addresses the changing demographics.
- The appropriate long term management approach for camping at Pinnacles needs to be



determined. Pinnacles Campground, formerly privately owned and managed, is now within the monument boundary. The appropriate balance between protection of natural resources at the campground and visitor use needs to be explored.

- The reduction of crowding at popular locations needs to be addressed, along with opportunities for dispersal or areas where increased use is appropriate.
- Indicators and standards for user capacity are needed to define the types and levels of visitor and other public uses that can be accommodated while sustaining the desired resource and social conditions for each management zone. Monitoring strategies will be developed to test the effectiveness of management actions and to provide a basis for informed adaptive management of public use.

## ACCESS AND TRANSPORTATION

- Access to both sides of the monument is limited by the amount of available parking. Current parking and facilities cannot accommodate peak levels of visitation. Alternatives for parking and access need to be considered and the appropriate balance between visitor access and the protection of resources needs to be determined.



Reflections on Bear Gulch Reservoir. Photo by Gavin Emmons © 2011.

- The monument's trail system provides a variety of opportunities, but does not provide access to newer lands. The enhancement of this system, including the integration of new lands and the types of abilities and uses that should be accommodated needs to be addressed, including consideration of Architectural Barriers Act (ABA), differing levels of trail difficulty and length, and equestrian use.

## ADMINISTRATIVE AND OPERATIONAL FACILITIES

- The appropriate levels of development in different parts of the monument and which areas are appropriate for administration and operations activities need to be determined. Removal of facilities and infrastructure to support effective operations, improve facility condition index and invest available funds wisely, need to be examined. Long-term sustainability and cost-effective approaches to providing for office / administrative space, law enforcement operations, emergency service operations, interpretive operations, resource management, maintenance, meeting and training space, and housing need to be considered.

## LAND USE AND REGIONAL ISSUES

- An examination is needed of how the monument can work with nearby communities to promote understanding of the Gabilan Mountain ecoregion and its resources and how to find common ground in regional stewardship of ecological, scenic and monument wilderness values.
- The GMP explores a range of management approaches including partnerships with surrounding neighbors, communities, local agencies, associated tribes, and organizations to protect the rural character and benefits of open working landscapes.

## Development of the GMP

The GMP is based on an analysis of existing and predicted natural and cultural resource conditions, visitor experiences, environmental impacts, and costs.

It primarily provides a framework for administration and management and a vision to be realized through future actions. This document also includes an environmental assessment (EA), which considers at a general qualitative level the impacts that each of the alternatives could have on the monument environment. The EA sets the framework for future compliance with the National Environmental Policy Act (NEPA) and the National Historical Preservation Act (NHPA) for the monument. It also assists decision makers and the public in assessing the relative merits and effects of the alternatives.

## Alternatives

Four alternatives for future management of Pinnacles National Monument are presented in the GMP. The alternatives, which are consistent with the monument's purpose, significance, and special mandates, present different ways to manage resources and visitor use and improve facilities and infrastructure. These four alternatives represent the range of ideas the public and NPS staff have identified regarding natural and cultural resource conditions, visitor use and experience conditions, and management at Pinnacles National Monument.

Alternative A: the No Action Alternative presents a continuation of current management direction and is required under NEPA. The action alternatives are Alternative B: Emphasize Backcountry Experience, Alternative C: Expand Visitor Experiences, and Alternative D: Link People and Resources (the preferred alternative).

Several other actions and alternatives were also considered, but were eventually dismissed from further analysis. These actions and alternatives, along with the rationale for their dismissal, are described near the end of Chapter 3 *Alternatives*.

**Management zones** are a component of the alternatives. They describe a range of desired conditions for resources and visitor experiences and/or management approaches to be achieved and maintained in particular areas. These zones form the basis for the alternatives and depending on the action alternative are applied to different geographic areas of Pinnacles. The five management zones are primitive, semi-primitive, front-country, cultural interpretation, and special research. Each zone description includes a zone concept, desired natural and cultural resource conditions, visitor experience, facilities, access and transportation.

**Actions Common to All Alternatives** are management actions or guidance that would apply to all the alternatives. This section is included before the detailed descriptions of the four alternatives. Under all four alternatives the existing monument boundary would be maintained, and would include potential future minor administrative boundary adjustments. The existing designated wilderness boundary would be maintained unless changed through legislation.

**Alternative A, No Action, (Continue Current Management)** would continue existing management, programming, facilities, staffing, and funding at current levels. The “no action” alternative provides a baseline for evaluating changes and impacts in other alternatives.



View from the High Peaks Trail. NPS photo.



*Resource Management:* Existing natural resource management activities would continue, including the raptor monitoring program, re-establishment of the California condor, and removal of nonnative invasive species. Cultural resources would be documented as needed; however, Pinnacles would continue to lack in-park cultural resource expertise, resulting in continued dependence on regional staff to assist the monument in maintaining a minimum level of cultural resource management and compliance.

*Visitor Experience:* Current recreational opportunities, including hiking, camping, picnicking, rock climbing, and viewing scenery would continue. Current interpretive services would be provided. Limited education programs would continue as funding allows.

*Facilities:* Existing facilities and trails would be maintained.

**Alternative B, Emphasize Backcountry Experience,** would provide visitors with high quality backcountry experiences, including solitude, quiet, and immersion in natural settings. Natural and cultural resources and visitor use opportunities would be managed in an integrated fashion for protection, restoration, and maintenance of natural and cultural resources and backcountry experiences, in cooperation with the surrounding communities and neighbors.

*Resource Management:* Natural resources protection would emphasize conserving and restoring natural functions, protecting watershed values, and protecting sensitive wildlife areas with a focus on providing visitors with a backcountry experience where natural processes predominate. Cultural resources would continue to be protected. Significant historic resources would be maintained, while some documented structures that do not contribute to the historical significance of the monument and are not being used for monument operations could be removed.

*Visitor Experience:* Visitors would be provided with a range of high quality backcountry experiences, including opportunities for solitude within natural settings. Visitor use would be dispersed. Traditional recreational uses would continue. Some new trails would be built to provide access to new areas within the monument including the newly added lands. Small scale interpretive and educational facilities and guided programs would be provided. Formal interpretation and education would be focused on wilderness values.

*Facilities:* Facilities would be minimized and located in existing developed areas. On the east side, facilities would be concentrated in the campground area. A small replacement visitor center would be constructed

to replace the current visitor center/campground store when the current structure reaches the end of its useful life. There would be an emphasis on determining whether infrastructure located in the primitive zone should be removed. The Chaparral parking lot, North Chalone Peak, the bottomlands and riparian areas along Sandy Creek would be restored. The Moses Spring area would also be studied to determine how to improve natural functions.

**Alternative C, Expand Visitor Experiences,** would provide an expanded array of visitor use opportunities, including recreation, interpretation, and education. Opportunities would be provided on the new lands and other areas that receive lower visitor use. A greater diversity of activities and groups would be encouraged.

*Resource Management:* Natural resources protection would emphasize the importance of a natural setting and resource integrity for the visitor experience. Cultural resources would be protected and managed with a focus on providing visitors with opportunities to experience the broader history of the region.

*Visitor Experience:* Pinnacles would reach out to a broad audience by offering a wider range of recreational opportunities and learning experiences. New visitor uses like equestrian use and backcountry camping would be provided where such uses do not detract from resource or social values. New trails would be built to provide a wide variety of experiences. Additional interpretive and educational facilities and guided programs would also be provided. The monument would increase partnership efforts and outreach programs focused on visitor use stewardship opportunities.

*Facilities:* Facilities would be focused on supporting an expanded array of visitor use opportunities. A larger visitor center would be constructed between the campground and Highway 25 entrance to replace the current visitor center/campground store when the current structure reaches the end of its useful life. On the east side, most visitor facilities would be concentrated in the campground area.

**Alternative D, Link People and Resources (preferred alternative),** would engage a broad range of visitors in the enjoyment, understanding, and stewardship of natural and cultural resources and values of the Gabilan Mountains ecoregion. Pinnacles would focus on ways to connect diverse audiences and resources, to acknowledge the interrelationship between natural and cultural resources, and to protect, preserve, and restore ecological communities and processes.



*Resource Management:* Natural resources would be protected to a high degree and natural ecosystem functions would be restored when practicable and beneficial. Natural resources protection would be enhanced by a strong education and research emphasis. Cultural resources would be managed to protect and interpret their significance, connect those resources within their broader regional history, and to provide visitors with opportunities to experience and learn about the interrelationship between humans and the environment. The monument would increase partnership efforts and outreach programs focused on regional protection of significant resources, habitat connectivity, and open rural working landscapes.

*Visitor Experience:* Pinnacles would connect visitors, communities, and resources in a variety of ways. New opportunities, such as backcountry camping, would be provided where these uses do not detract from resource or social values. New trails could be built to provide a wide variety of experiences. Interpretation and education would focus on science and history learning. There would be opportunities to learn about the monument's significant resources and its broader context within the Gabilan Mountains ecoregion. The monument could participate in developing and staffing regional visitor and interpretation centers.

*Facilities:* Facilities would be used to support increased visitor understanding of natural and cultural resources and/or would serve management, operational, and administrative functions. On the east side, most visitor facilities would be concentrated in the campground area. A replacement visitor center would be built in the vicinity of the existing visitor center to replace the current visitor center/campground store when the current structure reaches the end of its useful life.

## Environmental Consequences

The potential effects of the four alternatives are analyzed for impacts to visitor use, natural resources, wilderness, cultural resources, NPS operations, and the socioeconomic environment. This analysis is the basis for comparing the advantages and disadvantages of the alternatives. Impacts are described in terms of whether they are beneficial or adverse. If adverse, their intensity and duration are described. In addition, cumulative impacts are described. Cumulative impacts result from the incremental (i.e., additive) impact of an action when added to other past, present, and reasonably foreseeable future actions, regardless of who undertakes such actions. Finally, conclusions for each topic area are provided, comparing each action alternative to the no-action alternative.

### SUMMARY OF IMPACTS

The following discussion summarizes the impacts of all alternatives considered, in accordance with the National Environmental Policy Act.

#### *Impacts from Alternative A*

Implementation of alternative A would generally result in minor to moderate adverse impacts on natural and cultural resources from continued activities associated with visitor use, infrastructure maintenance, and NPS operations. Continuing resource management activities would result in long-term benefits to resources. Impacts to wilderness qualities would continue to be minor to moderate. Some existing impacts on the untrammeled and the undeveloped qualities of wilderness, such as the pig fence and reservoir, also have a beneficial effect on the natural quality of wilderness. Implementation of alternative A would not substantially change visitor services or programs and a full spectrum of recreation opportunities would continue resulting in overall long-term benefits to visitor use and opportunities. The monument would continue to face minor to moderate impacts to operational efficiency and efficacy. This alternative would also contribute minor adverse impacts to the socioeconomic environment, along with beneficial impacts.

#### *Impacts from Alternative B*

Alternative B would provide the monument with a wilderness and backcountry focus, resulting in numerous beneficial impacts for visitors seeking natural quiet and solitude and for natural resource management. Visitors would benefit from an expanded trail system, providing access into new areas, and a replacement east side visitor facility and day use area. Natural resources, cultural resources, and NPS operations would benefit greatly from increased staffing in several program areas. Adverse impacts to



cultural resources would result from removal of the North Chalone Peak fire lookout. Wilderness qualities would benefit, especially due to the removal of some development and more opportunities for solitude as more areas are zoned for such purposes. Visitors would also experience some adverse impacts from removal of two parking areas.

### *Impacts from Alternative C*

Implementation of alternative C would result in many beneficial impacts to visitors. The expanded trail system, new access opportunities, and east side facilities described in alternative B would also be provided in this alternative. In addition, equestrian opportunities, west-side camping, and backcountry camping would increase the breadth of opportunities available to visitors. Natural and cultural resources would benefit from increased staffing and restoration efforts, but minor to moderate adverse impacts would occur with the addition of new facilities throughout the monument. Wilderness could benefit from the provision of backcountry camping opportunities and new access opportunities. This alternative brings the greatest amount of disturbance due to new construction and access, creating the greatest amount of long-term and short-term adverse impacts to resources.

### *Impacts from Alternative D*

Adverse impacts resulting from the implementation of alternative D would be very similar to alternative C with several key differences. Equestrian uses would not occur, eliminating the adverse and beneficial impacts associated with this activity. Also, removal of the North Chalone Peak fire lookout could occur under this

alternative, with the same impacts as described in alternative B. The beneficial impacts resulting from new opportunities for solitude and unconfined recreation due to backcountry camping and enhanced access, increased staffing in multiple programs, and improved visitor facilities on the east side would be nearly the same as those described under alternative C.

## **Environmentally Preferable Alternative**

The environmentally preferred alternative is “the alternative that promotes the national environmental policy expressed in the National Environmental Policy Act (NEPA) (Sec. 101(b)).” After the environmental consequences of the alternatives were analyzed, each alternative was evaluated to see how well the goals from NEPA section 101(b) are met. Section 101 of the National Environmental Policy Act” states that it is the continuing responsibility of the federal government to

1. fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
2. assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
3. attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;
4. preserve important historic, cultural, and natural aspects of our national heritage; and maintain, wherever possible, an environment which supports



Chalone Creek bridge under construction, 1932. NPS photo.

diversity, and a variety of individual choices;

5. achieve a balance between population and resource use which would permit high standards of living and a wide sharing of life's amenities; and
6. enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

The Council of Environmental Quality states that the environmentally preferable alternative is “the alternative that causes the least damage to the biological and physical environment; it also means the alternative which best protects, preserves, and enhances historic, cultural, and natural resources (46 FR 18026 – 46 FR 18038).” According to the NPS NEPA Handbook (DO-12), through identification of the environmentally preferable alternative, the NPS decision-makers and the public are clearly faced with the relative merits of choices and must clearly state through the decision-making process the values and policies used in reaching final decisions.

The environmentally preferable alternative for Pinnacles National Monument is Alternative B: Emphasize Backcountry Experience. This alternative best satisfies the national environmental goals—it provides the highest level of protection of natural and cultural resources while concurrently providing for a wide range

of neutral and beneficial uses of the environment. This alternative maintains an environment that supports a diversity and variety of individual choices, and it integrates resource protection with an appropriate and preexisting range of visitor uses and understanding.

This alternative surpasses the other alternatives in realizing the full range of the Section 101 national environmental policy goals.

Alternative D, Link People and Resources, the preferred alternative, also meets many of the criteria. The enhancement of educational opportunities, research, and restoration of resources at the monument would result in a better understanding of the monument's resources, thus better equipping the monument in fulfilling criteria 3, 4, and 5.

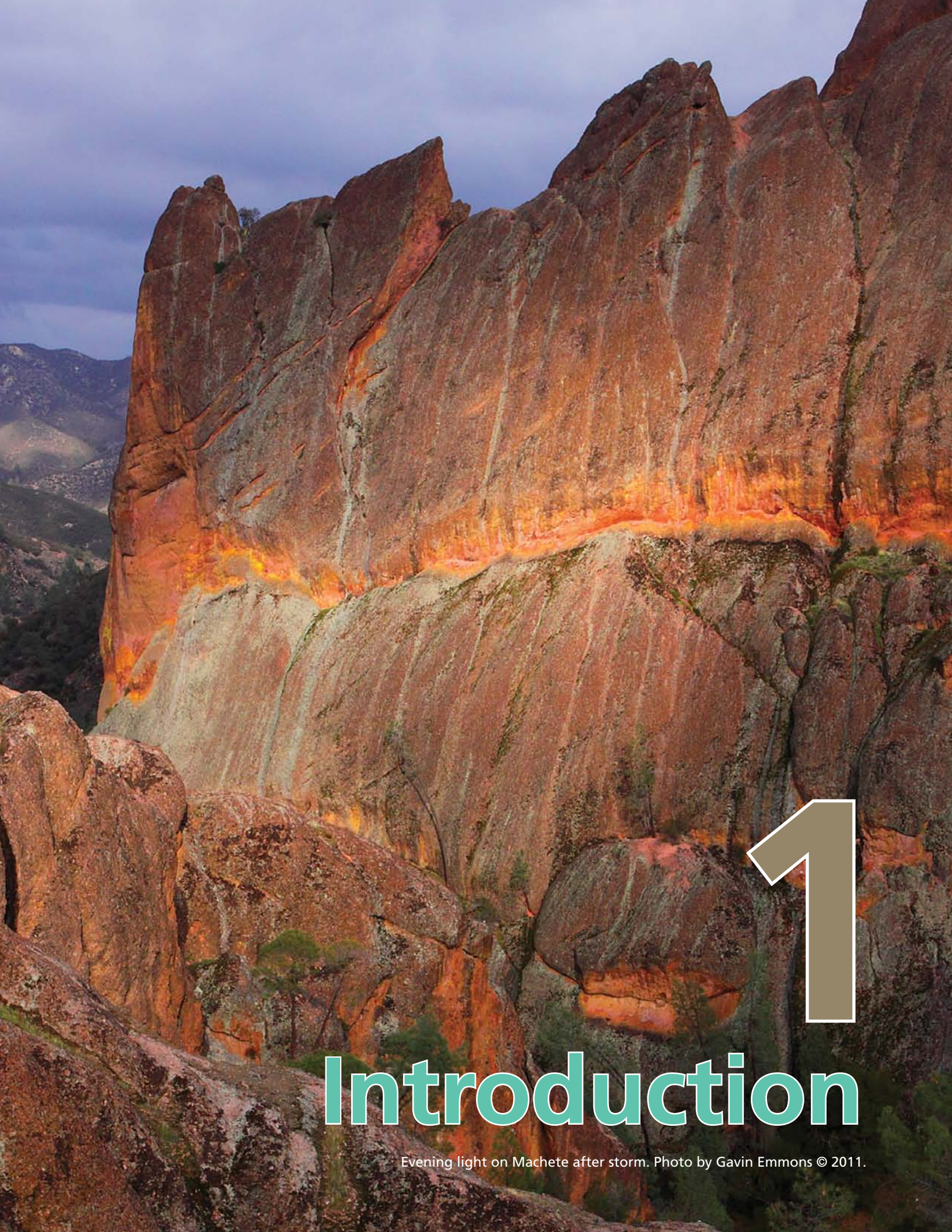
## Implementation

The implementation of the proposed action will depend on future funding, NPS priorities, and partnership efforts. The approval of a GMP does not guarantee that funding and staffing needed to implement the plan will be forthcoming. Full implementation of the GMP could be many years into the future.



California condor juvenile sunning. Photo by Gavin Emmons © 2011.





1

# Introduction

Evening light on Machete after storm. Photo by Gavin Emmons © 2011.







# Chapter 1: Introduction

## Background on Pinnacles National Monument

Pinnacles National Monument is located in central coastal California and was set aside in 1908 by President Theodore Roosevelt under the Antiquities Act to preserve and protect the remnants of ancient volcanic processes that formed a portion of the Gabilan Mountain Range. Pinnacles was initially managed by the United States Forest Service (USFS) in 1906 and was ultimately transferred to the National Park Service (NPS) in 1916. Several boundary expansions over the years increased the monument's size from its original 2,080 acres to over 27,000 acres today.

## Location and Access

The monument is located in the southern portion of the Gabilan Mountains, part of the series of parallel northwest-trending ridges and valleys that make up the central Coast Ranges in California. Pinnacles lies about 40 miles inland from the Pacific Ocean and about 80 miles south of the San Francisco Bay Area. The monument is in the 17th Congressional District of California. The monument is bordered entirely by private land, much of it in agricultural use.

The primary access points to Pinnacles National Monument are on Highway 146 on both the east and west sides of the monument. Highway 146, however, does not connect the two sides, nor does any other road. The shortest route from the east entrance to the west entrance (or from west to east) is through the town of King City on Highway 101 or by hiking. Both entrances are open year round. Currently, and historically, the east side receives higher visitation and provides more visitor services.

## Overview of Monument Resources and History

Pinnacles National Monument, located near the San Andreas Fault along the boundary of the Pacific Plate and the North American Plate, is an excellent example of tectonic plate movement. The Pinnacles Rocks are believed to be part of the Neenach Volcanic Field that occurred 23 million years ago near present-day Lancaster, California, some 195 miles (314 km) southeast. The extensive San Andreas Fault split the volcano and the Pacific Plate crept north, carrying the volcanic field. The work of water and wind on these erodible volcanic rocks formed the unusual and dramatic rock features seen today.

Geologic activity also accounts for the talus caves, another Pinnacles attraction. Deep, narrow gorges or shear fractures were transformed into caves when huge boulders toppled from above and wedged in the fractures before reaching the ground. These boulders became the ceilings of the talus caves that entice not only visitors but also several kinds of bats and cave-dependent species.

The topography of Pinnacles is not all spire and crag, however. Elevations range from 790 feet along South Chalone Creek to 3,304 feet atop North Chalone Peak, and much of the monument consists of rolling hills.

Pinnacles has a Mediterranean climate of hot, dry summers and cool winters with moderate rainfall. Although the monument is only 40 miles from the Pacific Ocean, the Santa Lucia Mountains to the west strongly modify the ocean influence before it reaches inland to Pinnacles. Consequently, while the coastal summer temperatures might be a fairly steady 60 degrees Fahrenheit, the temperature at Pinnacles can swing from 50 degrees at night to 100 degrees in the day. Similarly, due to the absence of the ocean's warming effect, winter temperatures at Pinnacles often drop below freezing while coastal temperatures remain moderate.

Weather profoundly influences vegetation, and broadleaf chaparral is one of the vegetation types adapted to the monument's daily temperature extremes and summer drought. Comprising about 80% of the monument's vegetation, the chaparral ecosystem is not one entity, but many, with subtly varied vegetation composition quilted together over the land. Along with chaparral there are woodland, riparian, grassland, and rock and scree habitats here, all also subtly intergraded. It is the variability of Pinnacles' topography, weather and microclimate, and the location of the monument at the edge of intersecting ecosystem zones, that allows for the diverse vegetation and intricate mix of habitats found here. These diverse habitats in turn support a rich fauna – especially of birds, reptiles and bees.

Pinnacles is a refuge for species representative of the central California coastal mountains, not only because of the many ecological niches here, but also because of its long-term protected status. Chaparral vegetation at Pinnacles is an excellent example of this ecosystem that is losing ground elsewhere through urban expansion and intentional conversion for annual grasslands. Pinnacles retains relatively abundant wildlife populations and is one of five current release sites in the United States for the continuing recovery of the California condor.

Visitors are drawn to Pinnacles for other reasons, too. In the spring wildflowers decorate the land and the bird population swells with migrants. Solitude, dark night skies, and deep quiet are found here, especially in the 16,048 acres of federally designated wilderness within the monument – one of the two federal wilderness areas nearest to the San Francisco Bay Area. The surrounding private agricultural/ranching lands contribute to these conditions as well. Rock-climbers and hikers, both solitary and social, are regulars to Pinnacles.

Pinnacles was occupied by small groups of Native Americans, particularly the Chalon and Mutsun subgroups of the Ohlone (Costanoan) people. Evidence in the form of arrowheads, grinding stones, and bedrock mortars among other resources have been discovered within the monument. The Spanish had a dramatic impact on Native Americans in the region. They traveled into California from Mexico and eventually established 21 religious missions between 1769 and 1823, stretching from San Diego to Sonoma. Many of the Chalon and Mutsun people became baptized mission workers (“neophytes”). The mission way of life was devastating to California Indian people. A combination of diseases brought by the Spaniards and dramatic changes to their way of life decimated many Chalon and Mutsun people and their cultures. By the time Anglo-American settlers arrived during the middle of the nineteenth century, most native lifeways associated with the area had been lost.

Between 1810, when the last of the Chalon are believed to have disappeared from the area around Pinnacles, and 1865, when permanent Anglo-American settlers

first arrived, this landscape was largely abandoned to wilderness, probably for the first time in millennia.

In 1891 Schuyler Hain, a homesteader, arrived in the Pinnacles area from Michigan. During the next twenty years he became known as the “Father of Pinnacles” leading tours up through Bear Valley and into the caves. Hain spoke to groups and wrote articles urging preservation of the area and acted as unofficial caretaker for many years. His efforts proved fruitful with the establishment of Pinnacles as a national monument in 1908 by President Theodore Roosevelt.

In 1933, the Civilian Conservation Corps (CCC) established a camp in what is now the Old Pinnacles trailhead area. From 1933 to 1942, during cooler winter months, the CCC accomplished many projects. The dirt road up to Bear Gulch was widened, paved and completed in 1934. The CCC improved many of the trails that had been established by the early homesteaders, including the exciting steep and narrow trail that winds through the High Peaks. They constructed the dam that forms the Bear Gulch reservoir and improved the trail into the caves, adding concrete steps and guard rails. Beginning in 1936 the CCC boys guided visitors through the caves using lanterns.

The post-war years were characterized by rapid population growth in the California Central Coast Region and increasing visitation to Pinnacles. The Mission 66 initiative, a nation-wide park modernization effort corresponding to the 50th anniversary of the National Park Service, gave Pinnacles the funds needed to purchase several private inholdings in the monument. This allowed for development of visitor facilities, trails,



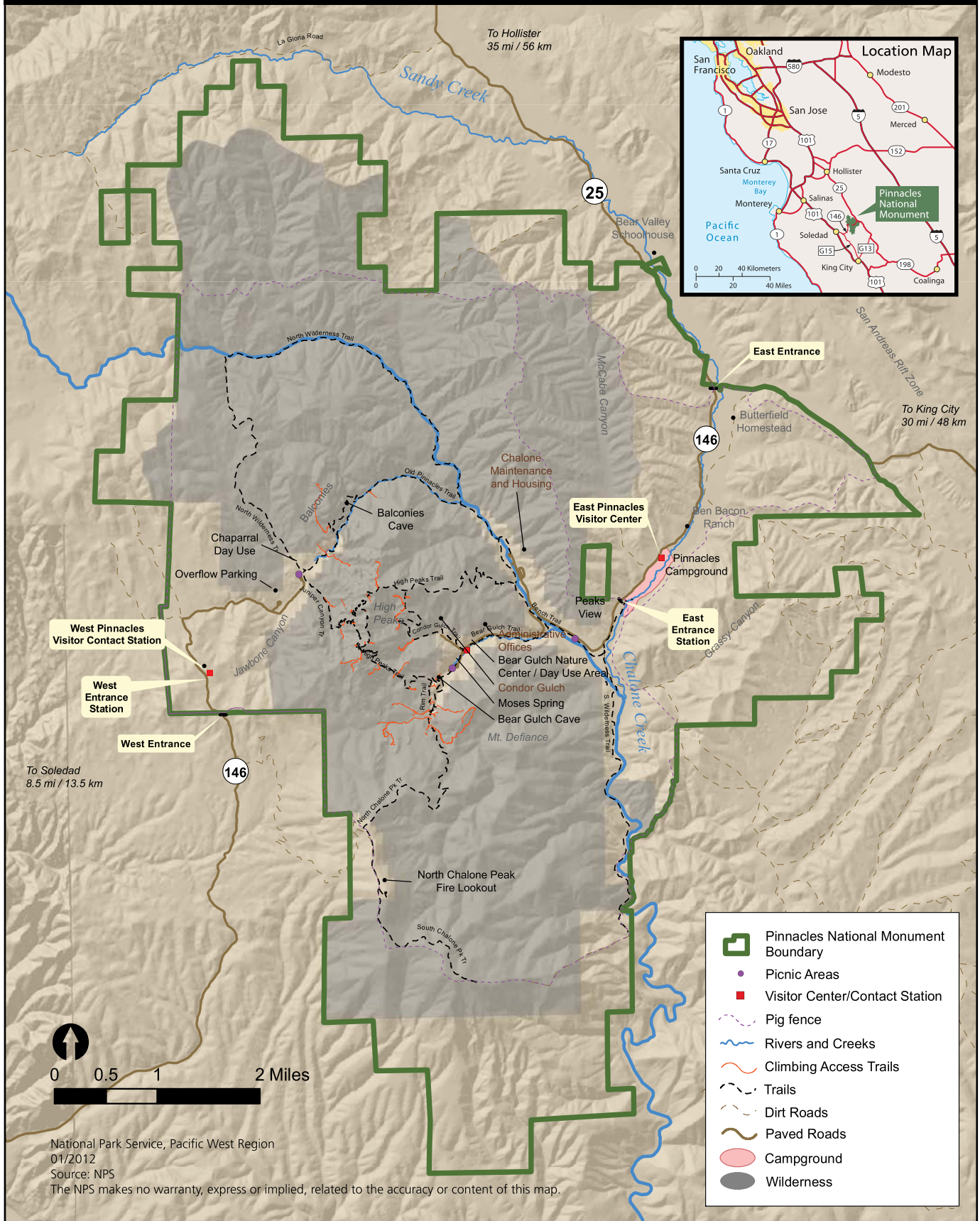
Looking north from the High Peaks Trail. NPS photo.



# Park Map

## Pinnacles National Monument

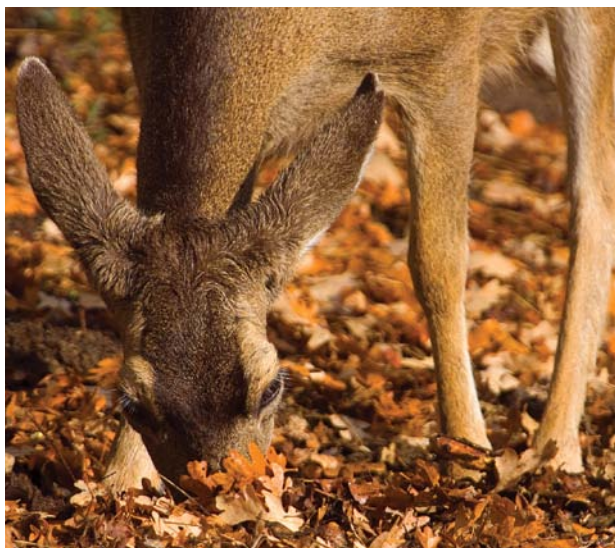
National Park Service  
U.S. Department of the Interior



and roads on the west side from 1963 to 1966. The 1964 Wilderness Act resulted in approximately 13,000 acres of the monument being designated as wilderness in 1975, nearly the entire undeveloped area at that time. In response to increased visitation and the new wilderness designation, Pinnacles produced a master plan in 1976 emphasizing the concentration of development away from the most sensitive and scenic areas of the monument. Major flooding in 1998 caused significant damage to monument buildings and infrastructure, but also provided the impetus to relocate west side facilities. However, many of the monument's facilities, particularly on the east side, remain in sensitive areas and vulnerable to flooding.

Pinnacles has expanded its boundaries eight times since it was first established as a national monument in 1908. In 2000, approximately 11,000 acres were added including land transferred from the Bureau of Land Management and nearly 3,000 acres of privately owned land on the park's east side. The former Pinnacles Ranch land acquired in 2006, includes the Ben Bacon Ranch Historic District. Notable as a dry-land subsistence farming area, the Ben Bacon Ranch Historic District has greatly expanded Pinnacle's cultural resources. Newly acquired lands also include McCabe Canyon, notable for its valley oak woodlands and intact native grasslands, including extensive stands of basket weaving species highly valued by Mutsun and other California Indian peoples. In 2002, 2,700 additional acres of wilderness were designated. The Bear Valley School property and several surrounding parcels were added to the boundary in 2010. See Chapter 3 *Alternatives, Boundaries* and Chapter 4 *Affected Environment, Cultural Resources* for more information about the monument's history and discussion about boundaries.

Mule deer foraging in oak leaves. Photo by Gavin Emmons © 2011.



## Overview of the National Park Service Planning Process

### General Management Plans and the National Park System

The National Parks and Recreation Act of 1978 requires each unit of the national park system to have a general management plan (GMP); and NPS Management Policies 2006 (§2.3.1) states “The National Park Service will maintain a general management plan for each unit of the national park system.”

The purpose of a GMP is to ensure that a national park system unit (park unit) has a clearly defined direction for resource preservation and visitor use that will best achieve the NPS mandate to preserve resources unimpaired for the enjoyment of future generations.

The ultimate outcome of general management planning for park units is an agreement among the National Park Service, its partners, and the public on why each area is managed as part of the national park system, what resource conditions and visitor experience should exist, and how those conditions can best be achieved and maintained over time. General management plans are intended to be long-term documents that establish and articulate a management philosophy and framework for decision making and problem solving in the parks.

The National Environmental Policy Act (NEPA) requires federal agencies to fully consider the environmental costs and benefits of their proposed actions before they make any decision to undertake those actions. NEPA, and the Council on Environmental Quality (CEQ) regulations implementing NEPA, put two important mechanisms in place to achieve this goal. One is the requirement that all agencies make a careful, complete, and analytical study of the impacts of any proposal that has the potential to affect the human environment, and alternatives to that proposal, well before any decisions are made. The other is the mandate that agencies be diligent in involving any interested or affected members of the public in the NEPA process.

As plans that focus on desired conditions to be achieved and maintained over a relatively long period of time, GMPs are generally large in scope, implemented in phases over many years, and contain little or no detail about specific actions. As a result, the NEPA analysis for GMPs is typically a programmatic, or broad-scale analysis, rather than a site-specific analysis. As decision making moves from general management planning into program planning, strategic planning,



and implementation planning, the need for information becomes increasingly focused and specific, requiring additional analysis at those levels.

Public involvement provided critical input into this plan. Several opportunities for involvement, from the scoping phase to the release of preliminary alternatives to the draft general management plan were provided and comments were solicited from visitors, local community members, and other interested stakeholders. See Chapter Six *Consultation and Coordination* for more details on this process.

## Purpose and Need for the General Management Plan

### Purpose of the Plan

The approved general management plan will be the foundational document guiding management of Pinnacles National Monument for the foreseeable future. The purposes of this general management plan are to:

- confirm the purpose, significance, and special mandates of Pinnacles National Monument
- clearly define resource conditions and visitor uses and experiences to be achieved in the monument
- provide a framework for managers to use when making decisions about how to best protect the

monument's resources, how to provide quality visitor uses and experiences, how to manage visitor use, and what kinds of facilities, if any, to develop in the monument

- ensure that this foundation for decision making has been developed in consultation with interested stakeholders and adopted by the NPS leadership after an analysis of the benefits, impacts, and economic costs of alternative courses of action

Legislation establishing the National Park Service as an agency and governing its management provides the fundamental direction for the administration of Pinnacles National Monument (and other units and programs of the national park system). This general management plan builds on these laws and the proclamation that established Pinnacles National Monument to provide a vision for the monument's future.

This *Draft General Management Plan and Environmental Assessment* presents and analyzes four alternative future directions for the management and use of Pinnacles National Monument. Alternative D is the National Park Service's preferred alternative (see Chapter 3, Alternatives). The potential environmental impacts of all alternatives have been identified and assessed (see Chapter 5 *Environmental Consequences*).

Actions directed by general management plans or in subsequent implementation plans are accomplished over time. Budget restrictions, requirements



Sunset over Pinnacles National Monument. Photo by Paul G. Johnson.

for additional data or regulatory compliance, and competing priorities may delay implementation of many actions. Major or especially costly actions could be implemented 10 or more years into the future.

The general management plan does not describe how particular programs or projects should be prioritized or implemented. Those decisions will be addressed in future, more detailed planning efforts. All future plans should be consistent with the approved general management plan.

## Need for the Plan

The last comprehensive planning effort for Pinnacles was a master plan developed in 1975. Since then, Pinnacles has grown from 16,271 acres to over 27,000 acres. In 2000, Proclamation No. 7266 authorized expansion of the monument to include approximately 10,939 acres. Approximately 8,008 acres were federal lands transferred from the Bureau of Land Management. In 2006, the monument acquired the 2,000 acre Pinnacles Ranch, along with its substantial resources, infrastructure, recreational opportunities, and management challenges. Other changes include the reintroduction of endangered California condors and a related rise in the monument's regional and national visibility. Substantial floods since the 1975 Master Plan destroyed many facilities, including all camping facilities on the monument's west side. Development of housing and maintenance facilities on the east side displaced traditional picnicking areas. There are transportation and parking challenges today, and many facilities and services are inadequate to meet visitor demand. Separate development concept plans for both the west and east districts were approved in the early 1990s, but do not reflect today's landscape or issues.

Since the Master Plan, the population of Hollister, San Benito County's largest community, has more than doubled. The population of Soledad, the closest city on the west side of the monument in Monterey County, has also doubled. Similarly, the region has been changing, from a quiet, small-scale ranching and agricultural-based economy to a more urban and technology-based economy. Hollister has become a bedroom community for the Silicon Valley, and Soledad is actively marketing itself for industrial and residential development. A new general management plan, reflecting contemporary and future issues and challenges facing Pinnacles, is essential.

# Scope of the General Management Plan

## Introduction

The following topics describe some of the preliminary needs and challenges the general management plan (GMP) must address for the monument to preserve resources while providing for public use and enjoyment. The general public, NPS staff, and representatives from various organizations and county, state, and federal agencies identified issues and concerns about monument management during the scoping phase (early information gathering) for this general management plan. An issue is an opportunity, conflict, or problem regarding the use or management of public lands. Comments were solicited at public meetings, through planning newsletters, and at meetings with agencies and community stakeholders (see Chapter 6 *Consultation and Coordination* for more information about the scoping efforts).

Comments received during scoping demonstrated that the public is generally pleased with current management and resources at Pinnacles National Monument. The public values the monument's diverse resources, viewsheds, solitude, visitor opportunities, and facilities. Issues and concerns raised during public scoping generally involved suggestions for the types and levels of services and activities offered at the monument (particularly interpretive and educational programs). Many identified a desire to ensure a high degree of protection of the monument's sensitive resources. The general management plan alternatives provide strategies for addressing these issues within the context of the monument's purpose, significance, and special mandates presented in Chapter 2 *Foundation for Planning and Management*.

## Issues

### NATURAL RESOURCES

New lands recently added to the monument include lands formerly used for ranching and dryland farming. A comprehensive management approach is needed that addresses the desire for protection and restoration of sensitive plant and wildlife species (red-legged frogs, condors) and eradication of non-native/invasive species (exotic pigs, non-native plants).

Native and endemic ecosystems are subject to positive and negative impacts from within and outside the monument, including overuse and vegetative trampling, agricultural practices and development within and beyond the monument. The balance between existing historic and visitor-serving



structures in wetland, floodplain and fire-prone areas (CCC buildings, parking lots, water reservoir, housing), and the health of the riparian environment needs to be addressed.

Defined priorities and management direction for natural resources protection, research, and monitoring is needed while addressing the balance between visitor enjoyment and natural resource protection. Management guidance from desired conditions, management zoning and indicators and standards for user capacity is needed.

## CULTURAL RESOURCES

Newly acquired lands added cultural resources to the monument's responsibilities. Cultural resources include: Native American archeological and ethnographic resources; archeological, structural and landscape resources representing exploration and homesteading by Spanish and American colonizers and settlers; development of the monument by NPS and Depression era programs such as the CCC; later NPS Mission 66 buildings and structures; archives and museum objects; and other resources. The appropriate balance between protection of historic resources and visitor uses, resource management practices, and natural processes such as flooding and fire needs to be examined. In addition, adaptive reuse of historic structures needs to be considered.

Priorities and management direction for cultural resources protection, research and monitoring need to be defined. The balance between visitor use and enjoyment and resource protection also needs to be addressed. Management guidance from desired conditions, management zoning and indicators and standards for user capacity is needed.

## WILDERNESS

Over 16,000 of the monument's 27,000 acres are designated wilderness. Visitors highly value the wild character of Pinnacles, including solitude and ecological diversity. The surrounding working landscapes contribute to the protection of these values. Development and other activities, both within and beyond the monument, may impact wilderness through viewshed obstruction, light pollution, noise, and air pollution.

The potential for visitors to experience wilderness throughout the monument needs to be explored. The new monument lands provide potential access opportunities to wilderness, including trail connections.

A vision for preservation of wilderness character needs to be established that will be addressed later in more

detail in the monument's wilderness stewardship plan. This includes determining the desired resource conditions and visitor experiences in wilderness and the appropriate balance of wilderness values with other public values.

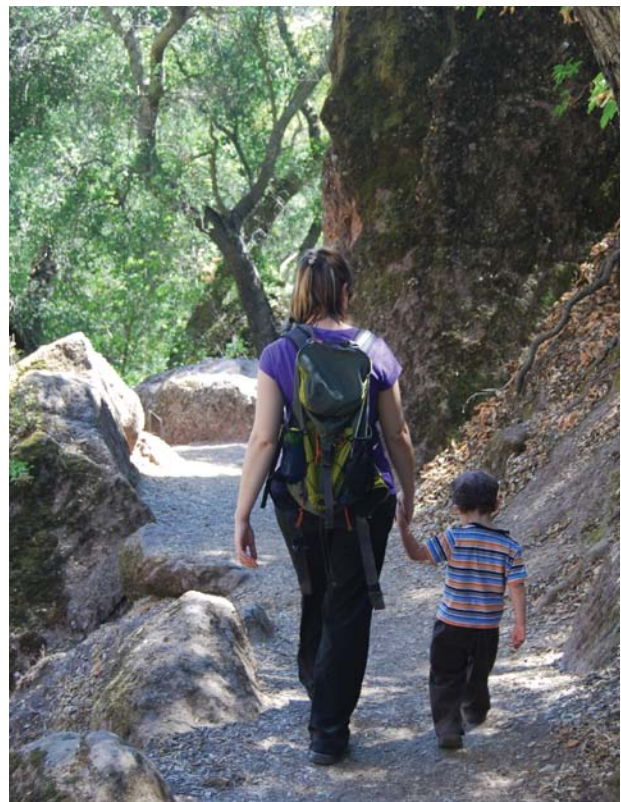
## CLIMATE CHANGE

Global climate change can be expected to have direct and indirect impacts on Pinnacles National Monument, including natural and cultural resources, visitor use, facilities, administration and operations.

## COLLECTIONS

The monument completed a Museum Management Plan in 2005. Many of the key recommendations have been addressed, but other recommendations still need to be resolved, including professional upkeep and improved storage of natural and cultural collections to meet NPS standards. A commitment of base funds for staffing assistance is needed. Identifying adequate space for collections at Pinnacles is challenging since many existing buildings are historic structures and are located within a floodplain.

Park visitors hike along the Bear Gulch Trail. NPS photo.





## VISITOR USE AND FACILITIES

Since the Master Plan, there have been changes in visitor use, activities, and facilities, and new lands have been added to the monument, offering new visitor opportunities. Changing demographics and appropriate uses and facilities to serve visitors throughout the expanded monument need to be addressed. Specific issues include determining the desired visitor experience throughout the monument and its many components (east side, west side, High Peaks, Bear Gulch, Chalone, bottomlands, campground, backcountry, wilderness).

The monument acquired the 2,000 acre Pinnacles Ranch property at the east entrance, now referred to as the bottomlands, in 2006. With this acquisition, monument land begins at Highway 25, while the east entrance station is several miles further up the road. New replacement west side facilities, including a visitor contact station, were completed in January 2012. Additional visitor services and opportunities need to be addressed.

Visitors to Pinnacles engage in many different activities and have expressed interest in new types of activities, including recreation, interpretation and education. Appropriate uses in different parts of the monument, potential conflicts among these uses, potential resource impacts, and visitor safety need to be addressed. The identification of further management planning is also needed to address specific use issues (e.g. climbing management plan).

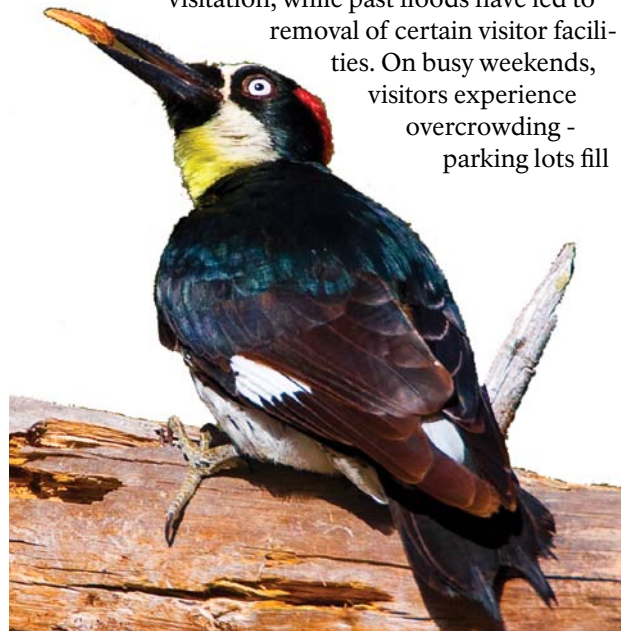
Some visitors have expressed a desire for more camping and picnic facilities, including family and group picnicking in shaded areas. Visitors have expressed interest in night hikes and programs, backpacking opportunities, camping, equestrian use, wheelchair accessible experiences, wilderness

access, and educational and interpretive experiences. (Also see discussion of trails under “Access and Transportation.”)

The appropriateness of the current location/facility of the East Pinnacles Visitor Center needs to be addressed. Law enforcement and visitor safety needs need to be identified, considering infrastructure, access and staffing limitations. Appropriate visitor orientation needs to be addressed, including interpretive themes, resource education opportunities within the monument and in gateway communities, interpretation of significant resources, and regulations, in a manner that includes the new lands and addresses the changing demographics of the region.

The long term management approach for camping at Pinnacles needs to be determined. Pinnacles Campground, formerly privately owned and managed, is now within the monument boundary. The appropriate balance between protection of natural resources at the campground and visitor use needs to be explored.

The growing regional population has increased visitation, while past floods have led to removal of certain visitor facilities. On busy weekends, visitors experience overcrowding - parking lots fill



Photos (top to bottom): 1. Panoramic view from the High Peaks Trail. NPS photo. 2. Acorn woodpecker, head detail. Photo by Gavin Emmons © 2011.



early, and visitors line up to get into the monument, waiting for vacant parking spaces or for shuttle buses. The reduction of crowding at popular locations needs to be addressed, along with opportunities for dispersal in areas where increased use is appropriate.

Indicators and standards for user capacity are needed to define the types and levels of visitor and other public uses that can be accommodated while sustaining the desired resource and social conditions for each management zone. Monitoring strategies will be developed to determine the effectiveness of management actions and to provide a basis for informed adaptive management of public use.

### **ACCESS AND TRANSPORTATION**

Access to both sides of the monument is limited by the amount of available parking during peak visitation times. Alternatives for parking and access need to be considered and the appropriate balance between visitor access and the protection of resources determined.

The monument's trail system provides a variety of opportunities, but does not provide access to newer lands. The enhancement of this system, including the integration of new lands and the types of abilities and uses that should be accommodated needs to be considered.

### **ADMINISTRATIVE AND OPERATIONAL FACILITIES**

Pinnacles staff offices, museum collections, and storage are currently located in inadequate facilities. Availability of housing near the park can be challenging for recruiting and retaining staff and volunteers. The appropriate levels of development in different parts of the monument need to be determined and areas appropriate for administration and operations activities need to be identified. Removal of facilities and infrastructure to support effective operations, improve facility condition index and invest available funds wisely, need to be examined. Long-term sustainability and cost-effective approaches to providing for office / administrative space, law enforcement operations, emergency service operations, interpretive operations, resource management, maintenance, meeting and training space, and housing need to be considered.

### **LAND USE AND REGIONAL ISSUES**

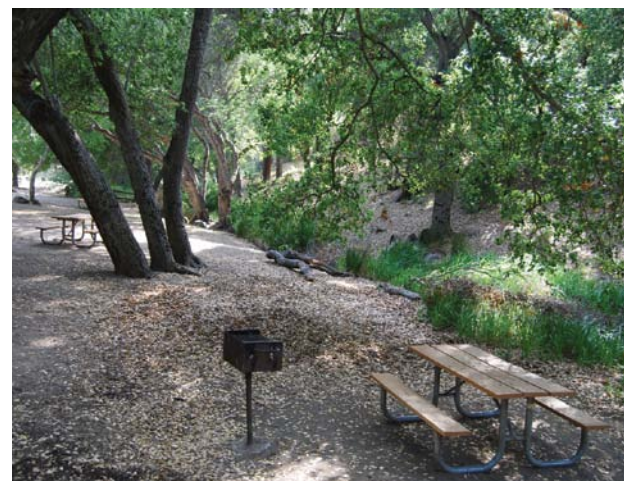
The boundary of the monument has changed considerably since the Master Plan. The expanded boundary is now surrounded by private land. Surrounding communities continue to grow, with potential impacts on monument resources. An examination is needed of how the monument can work with nearby communities

to promote understanding of the Gabilan Mountain ecoregion and its resources and how to find common ground in regional stewardship of ecological, scenic and monument wilderness values. The GMP explores a range of management approaches including partnerships with surrounding neighbors, communities, local agencies, associated tribes, and organizations to protect the rural character and benefits of open working landscapes.

### **Issues and Concerns not Addressed**

Not all of the issues or concerns raised by the public will be addressed in this GMP. Some issues raised by the public were not considered because they are already prescribed by law, regulation, or policy; would be in violation of laws, regulations, or policies; or were at a level that was too detailed for this GMP and are more appropriately addressed in subsequent planning documents. For example, during public scoping, some commenters provided detailed suggestions for interpretive programming. While the GMP does not address this level of detail, such comments can be considered by the monument in implementing the GMP.

Commercial services within designated wilderness, along with other detailed wilderness issues, will be addressed in a wilderness stewardship plan.



Moses Spring picnic area. NPS photo.

## Impact Topics: Resources and Values That Could be Affected by the Alternatives

The consequences of implementing each alternative evaluated in the general management plan are listed and compared using specific impact topics. These impact topics were identified based on federal laws and other legal requirements, the Council on Environmental Quality's guidelines for implementing the National Environmental Policy Act, NPS Management Policies (2006), subject-matter expertise and knowledge of limited or easily impacted resources, and issues and concerns expressed by other agencies or members of the public during scoping. Impact topics were developed to focus environmental analysis and to ensure that alternatives were evaluated against relevant topics. A detailed justification for dismissing any topics from further consideration is given below.

### Impact Topics to be Considered

The following impact topics will be retained for analysis because of the potential for management alternatives to affect these resources and values, either beneficially or adversely. Current conditions for each of these topics are described in Chapter 4, *Affected Environment*.

#### *Natural Resources*

- air quality
- natural sounds
- dark night skies
- viewsheds/visual resources
- hydrologic resources and processes, including wetlands and floodplains
- geological resources and processes
- soils
- vegetation
- wildlife and wildlife habitat
- special status species

#### *Cultural Resources*

- cultural landscapes, historic buildings and structures
- archeological resources
- ethnographic resources
- museum collections

#### *Wilderness Character*

#### *Visitor Opportunities*

- recreation opportunities
- visitor services
- visitor facilities
- interpretation and education opportunities

#### *Access and Transportation*

#### *Socioeconomic Environment*

#### *Management and Operations*

### Impairment of Resources

In addition to determining the potential environmental consequences of implementing the agency-preferred and other alternatives as required by NEPA, NPS Management Policies (2006) §1.4 requires a determination that no implementation of any actions would impair a park's resources and values.

The fundamental purpose of the national park system, established by the Organic Act and reaffirmed by the General Authorities Act, as amended, is the conservation of park resources and values. Park managers must always seek ways to avoid, or to minimize to the greatest degree practicable, adverse impacts on cultural and natural resources, as well as park values. However, these laws also afford park managers discretion to allow impacts on park resources and values when necessary and appropriate to fulfill the express purposes of the park. That discretion is limited by the statutory requirement that the NPS must leave resources and values unimpaired unless a particular law directly and specifically provides otherwise.

The prohibited impairment is any impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values. Whether an impact has such a result depends on the particular resources that would be affected; the severity, duration, and timing of the impact; the direct and indirect effects of the impact; and the cumulative effects of the actions in question combined with other impacts.

As noted in NPS Management Policies (2006) §1.4.7, in addition to the above potential environmental consequences, the park managers also takes into consideration consultations required under §106 of the NHPA, relevant scientific information, pertinent information from subject matter experts, and results of related civic engagement and public involvement activities.

A determination of non-impairment will be provided as an attachment to the approved Finding of No Significant Impact, if appropriate.

### Impact Topics Dismissed from Further Consideration

The following impact topics were considered and determined not relevant to the development of this general management plan because either they would have no



effect or a negligible effect on the topic or resource, or the resource does not occur in the monument. The topics dismissed from further analysis are as follows.

### ENERGY REQUIREMENTS AND CONSERVATION POTENTIAL

Alternatives in the general management plan, including the preferred alternative, could result in new facilities with inherent energy needs. In the proposed alternatives, new facilities would be designed with long-term sustainability in mind. The NPS has adopted the concept of sustainable design as a guiding principle of facility planning and development. The objectives of sustainability are to design facilities to minimize adverse effects on natural and cultural values, to reflect their environmental setting, and to require the least amount of nonrenewable fuels/energy.

Although the monument's share of carbon emissions may be negligible when compared to state and regional emissions, the cumulative nature of small carbon sources and the expectation of NPS leadership on environmental issues justify actions to mitigate emissions from monument activities. Additionally, implementation of the Climate Friendly Park Action Plan, finalized in 2010, is common to all alternatives and will reduce the consumption of non-renewable energy.

The action alternatives could result in an increased energy need, but this need is expected to be negligible when seen in a regional context and in light of sustainability initiatives adopted by the NPS and the monument. Thus, this topic is dismissed from further analysis.



Photos (top to bottom): 1. Interpretive talk at the Bear Gulch Reservoir. NPS photo. 2. Family picnic on Chalone Bench, 1912. Photo from Grace Robinson album, courtesy of Deborah Melendy Norman.



## ENVIRONMENTAL JUSTICE

The Environmental Protection Agency's Office of Environmental Justice defines environmental justice as "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies." Fair treatment means that no group of people, including racial, ethnic, or socioeconomic group, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies. The goal of this "fair treatment" is not to shift risks among populations, but to identify potentially disproportionately high and adverse effects and identify alternatives that may mitigate these impacts.

On February 11, 1994, President William J. Clinton signed Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. This order requires all federal agencies to incorporate environmental justice into their missions by identifying and addressing disproportionately high and adverse human health or environmental effects of their programs/policies on minorities and low-income populations and communities. The Secretary of the Interior established Department of the Interior policy under this order in an August 17, 1994, memorandum. This memorandum directs all bureau and office heads to consider the impacts of their actions and inactions on minority and low-income populations and communities; to consider the equity of the distribution of benefits and risks of those decisions; and to ensure meaningful participation by minority and low-income populations in the department's wide range of activities where health and safety are involved.

In responding to this executive order two questions are asked and answered as the major part of the analysis:

1. Does the potentially affected community include minority and/or low-income populations?
2. Are the environmental impacts likely to fall disproportionately on minority and/or low-income members of the community and/or tribal resources?

San Benito and Monterey counties contain both minority and low-income populations; however, environmental justice is dismissed as an impact topic for the following reasons:

- NPS staff and the planning team actively solicited public participation as part of the planning process and gave equal consideration to all input



Photos (top to bottom): 1. CCC enrollees at work, 1935. NPS photo. 2. Coast horned lizard. Photo by Paul G. Johnson. 3. CCC crew building the entrance pylons, 1935. NPS photo.



from persons regardless of age, race, income status, or other socioeconomic or demographic factors.

- Implementation of the proposed alternative would not result in any identifiable adverse human health effects. Therefore, there would be no direct or indirect adverse health effects on any minority or low-income population.
- The impacts associated with the preferred alternative would not result in any identified effects that would disproportionately affect any minority or low-income population community.

Based on the above information and the requirements of Executive Order 12898, further analysis of environmental justice was dismissed as an impact topic.

### INDIAN TRUST LANDS

The National Park Service does not manage or administer Indian trust assets. The overriding mandate for the National Park Service is to manage national park system units consistent with park laws and regulations. No lands comprising Pinnacles National Monument are held in trust by the Secretary of the Interior solely for the benefit of American Indians. Therefore, this topic was dismissed from further analysis.

### NATURAL OR DEPLETABLE RESOURCES REQUIREMENTS AND CONSERVATION POTENTIAL

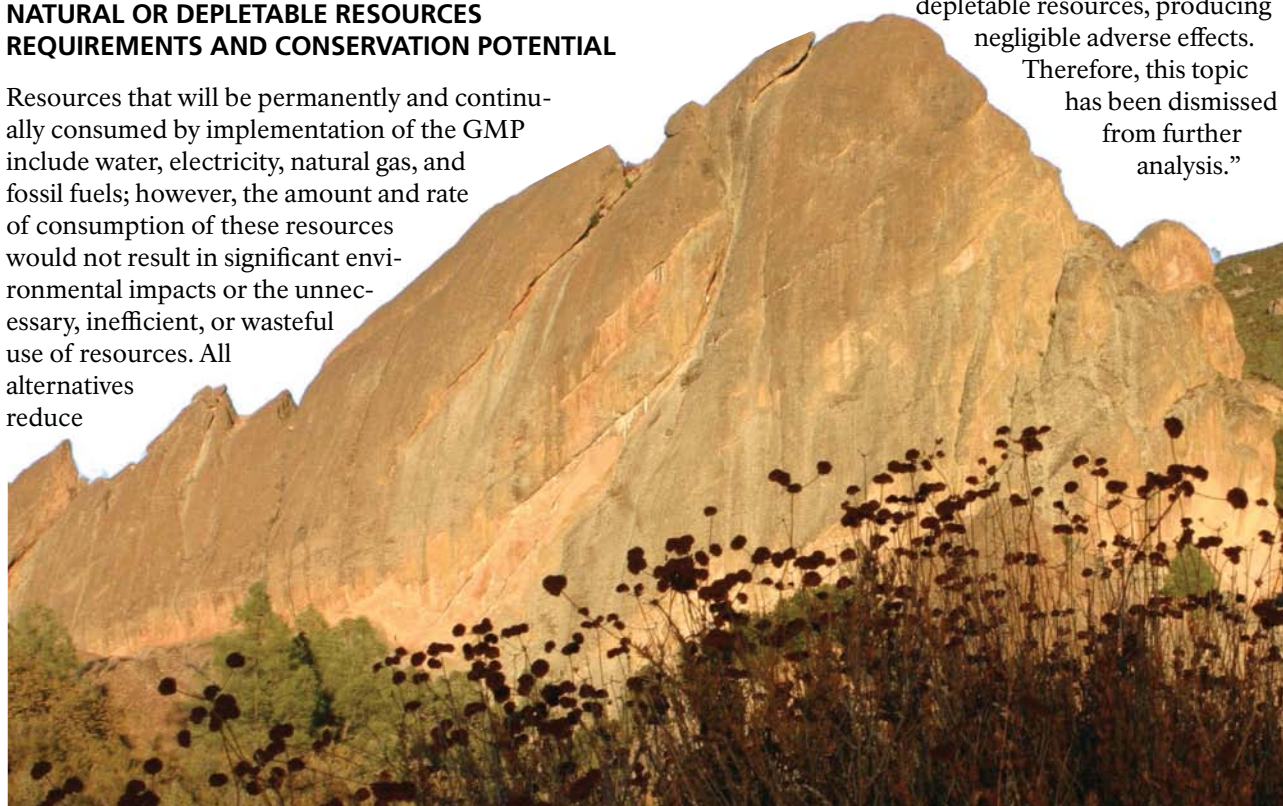
Resources that will be permanently and continually consumed by implementation of the GMP include water, electricity, natural gas, and fossil fuels; however, the amount and rate of consumption of these resources would not result in significant environmental impacts or the unnecessary, inefficient, or wasteful use of resources. All alternatives reduce

the use of fossil fuels through implementation of the common-to-all Climate Action Plan and regional sustainability initiatives.

Construction activities related to implementation of the alternatives would result in the irretrievable commitment of nonrenewable energy resources, primarily in the form of fossil fuels (including fuel oil), natural gas, and gasoline construction equipment. With respect to operational activities, compliance with all applicable building codes, as well as project mitigation measures, would ensure that all natural resources are conserved or recycled to the maximum extent feasible.

Consideration of these topics is required by 40 *Code of Federal Regulations* (CFR) 1502.16. The National Park Service has adopted the concept of sustainable design as a guiding principle of facility planning and development (NPS Management Policies 9.1.1.7). None of the alternatives would substantially affect the monument's energy requirements because any rehabilitated or new facilities would take advantage of energy conservation methods and materials. This, coupled with implementation of the monument's Climate Action Plan, would result in reduced energy consumption. Through sustainable design concepts and other resource management principles, the alternatives analyzed in this document would conserve natural or depletable resources, producing negligible adverse effects.

Therefore, this topic has been dismissed from further analysis."



Machete Ridge with California Buckwheat in the foreground. Photo by Paul G. Johnson.

## PRIME OR UNIQUE FARMLANDS

In 1980 the Council on Environmental Quality directed federal agencies to assess the effects of their actions on farmland soils classified by the U.S. Department of Agriculture's Natural Resource Conservation Service as prime or unique. Prime farmland is defined as soil that particularly produces general crops such as common foods, forage, fiber, and oil seed; unique farmland soils produce specialty crops such as specific fruits, vegetables, and nuts.

According to the National Resource Conservation Service, there are no prime or unique farmlands in Pinnacles National Monument. Private agriculture does not exist within the monument, so this type of land use would not be affected by this plan. Therefore, there would be no impacts on prime or unique farmlands and the topic is being dismissed from further analysis in the plan.

## URBAN QUALITY AND DESIGN OF THE BUILT ENVIRONMENT

Consideration of this topic is required by the *Code of Federal Regulations* (CFR) 1502.16. The quality of urban areas is not a concern in this planning project since the monument is not located in an urban area. Throughout the monument, vernacular architecture and compatible design would be taken into consideration for new structures built under all of the action alternatives. Emphasis would be placed on designs, materials, and colors that blend in, and do not detract from, the natural and built environment. Therefore adverse impacts are anticipated to be negligible and no further consideration of this topic is necessary.

## CONFORMITY WITH LOCAL LAND USE PLANS

The basic land use of the monument as a recreation and resource management area is in conformance with local land use plans. The creation of additional recreation and visitor service opportunities in the monument, as proposed in the alternatives, would be consistent with the existing land uses in the monument and local (non-NPS) land use plans. Therefore this topic is dismissed from further consideration.

## PUBLIC HEALTH AND SAFETY

Most actions and developments proposed in the alternatives would not result in any identifiable adverse impacts to human health or safety. A few actions are analyzed for public safety impacts under *Access and Circulation* in Chapter 5. These actions, including traffic congestion at the Bear Valley School turnoff and visitors walking along the road shoulder, were determined to present minor to moderate, long-term impacts. No other public health or safety issues have

been identified. Therefore this topic is dismissed from further consideration.

## Relationship of Other Planning Efforts to this General Management Plan

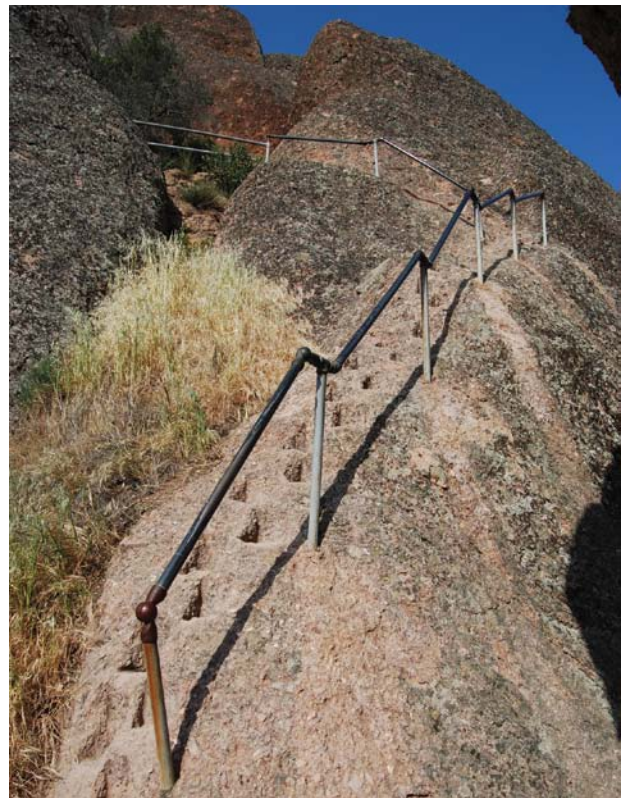
Several plans have influenced or would be influenced by the approved general management plan for Pinnacles National Monument. These plans have been prepared by the National Park Service and local counties. Some of these plans are described briefly here, along with their relationship to this general management plan.

## National Park Service Plans and Studies

### NATURAL AND CULTURAL RESOURCE MANAGEMENT PLAN (1999)

The 1999 Resource Management Plan (RMP) is an action plan which identifies and describes the natural and cultural resources preserved within the monument, threats to these resources, as well as the ongoing or potential management activities required to preserve these resources. A wide variety of research initiatives, baseline studies, and manipulative and

A portion of the High Peaks Trail with rock stairs and railing. NPS photo.





protective techniques are integrated into a comprehensive resource management program to meet management objectives. The RMP sets priorities for monument programs and projects and provides a rationale for allocating funding and staff. Although resource management plans are no longer being prepared by the National Park Service, information from the existing RMP was used in preparing this general management plan.

#### **LONG RANGE INTERPRETIVE PLAN (2004)**

The monument's interpretive staff completed a long range interpretive plan in 2004. The planning process required by this general management plan contains many of the elements that were also included in the interpretive plan, and many of the proposed actions in the GMP relate to interpretation and education. This plan would be modified as necessary to reflect any changes resulting from implementation of this general management plan.

#### **FIRE MANAGEMENT PLAN (2005)**

The Fire Management Plan (FMP) is an operational guide for managing the monument's wildland and prescribed fire program. It defines levels of protection needed to ensure personnel and public safety, protect facilities and resources, and restore and perpetuate natural processes. It is a detailed program of action to carry out fire management policies and objectives. This plan would be modified as necessary to reflect any changes resulting from implementation of this general management plan.

#### **HABITAT RESTORATION, INCLUDING UPDATE TO FIRE MANAGEMENT PLAN (2010)**

The Habitat Restoration Plan addresses a suite of management tools to restore degraded habitats throughout the monument with special emphasis on newly acquired lands of the former Pinnacles Ranch. The Habitat Restoration EA updated the monument's FMP to bring it into conformance with current federal policy requirements, evaluates proposed actions in addition to those that have already been articulated and evaluated in the FMP and provides the compliance documentation needed to complete the FMP update.

#### **CLIMATE FRIENDLY PARK ACTION PLAN (2010)**

The climate friendly park action plan identifies steps that the monument can undertake to reduce greenhouse gas (GHG) emissions and adapt to current and future impacts of climate change. The plan presents the monument's emission reduction goals, and associated reduction actions and adaptation strategies to achieve its goals. The climate action plan complements the general management plan by providing detailed actions

related to the common-to-all GMP alternatives goal of carbon footprint reduction.

#### **PINNACLES NATIONAL MONUMENT VISITOR STUDY (2002)**

This report described the results of a visitor study at Pinnacles National Monument collected in the spring of 2002. A total of 394 visitor questionnaires were returned (77.1% response rate). These responses provided a valuable profile of Pinnacles visitors. The important data and insights gained through this study were used in the development of alternatives for the general management plan.

#### **MUSEUM MANAGEMENT PLAN (2005)**

This plan identifies the museum management issues facing the monument and presents management recommendations to address these issues. Specific recommendations outlined in the plan focus on museum staffing, facilities, and procedures. These recommendations were useful in the consideration of staffing and facility needs for the general management plan.

#### **SCOPE OF COLLECTIONS (2010)**

The Scope of Collections Statement defines the scope of present and future museum collection holdings of Pinnacles that contribute directly to the understanding and interpretation of the monument's purpose, themes, and resources, as well as those objects that the Service is legally mandated to preserve. It is designed to ensure that the museum collection is clearly relevant to the monument; it serves to prevent arbitrary, unnecessary, and excessive growth of the museum collection while preserving the unique values associated with Pinnacles. The Long Range Interpretive Plan (2004) and draft general management plan were influential in the development of the Scope of Collections Statement.

#### **SAN FRANCISCO BAY AREA INVENTORYING AND MONITORING VITAL SIGNS (2006)**

This plan is produced by the Pacific West Region Inventorying and Monitoring Program. It identifies significant monument resources and the key processes and stressors affecting those resources, recommends monitoring questions to be addressed, and provides a prioritized list of vital signs to be monitored. This information was developed through scoping sessions, technical expert focus groups, and extensive analysis and discussion by NPS staff. As long-term data sets are assembled, trend analyses will inform management decisions.

## **NATURAL RESOURCE CONDITION ASSESSMENT (2012)**

This report is an assessment of condition of the natural resources of Pinnacles National Monument and an evaluation of the threats and stressors that act on these resources. This condition assessment was undertaken to provide NPS managers, interpreters, and planners with a synthesis of the most current information on the natural resources in and around the monument. The assessment followed an iterative process between NPS staff and the authors to identify the ultimate set of indicators of stressors and resources of greatest concern. The condition assessment identified a number of emerging issues that may become of greater management concern in the future.

## **TRANSPORTATION STUDY (2004) AND TRANSPORTATION STUDY REVIEW (2008)**

The 2004 Transportation Study includes an integrated analysis of parking management and shuttle system implementation options. The 2008 Transportation Study Review evaluates the transportation alternatives developed in the 2004 study and expands and adjusts the study's alternatives and recommendations based on changes at the monument, including the addition of new land on the east side.

## **Local and Regional Plans**

### **SAN BENITO COUNTY GENERAL PLAN (IN PROGRESS)**

San Benito County began their general plan update in 2009. The general plan guides land use, economic, transportation, infrastructure, agricultural, resource, environmental, and other decisions and provides for orderly growth based on the community's values and vision for the future. Monument staff has participated directly in the planning process and no conflicts with any of the alternatives outlined in the general management plan are anticipated.

### **MONTEREY COUNTY GENERAL PLAN (2010)**

The Monterey County general plan is a comprehensive, long-term plan for the physical development of the county. The policies of the general plan underlie most land use decisions within the county. Portions of the plan most relevant to the general management plan include policies related to agriculturally zoned lands. There appear to be no conflicts with any of the alternatives outlined in the general management plan.

## **Next Steps in the Planning Process**

After the distribution of the *Draft General Management Plan and Environmental Assessment* there will be a 60-day public review and comment period, after which the NPS planning team will evaluate comments from other agencies, organizations, California Indian tribes, and individuals regarding the draft plan. If no significant environmental impacts are identified and no major changes are made in the alternatives, then a Finding of No Significant Impact (FONSI) can be made and approved by the Pacific West Regional Director. Following a 30-day waiting period, the plan can then be implemented.

## **Implementation of the Plan**

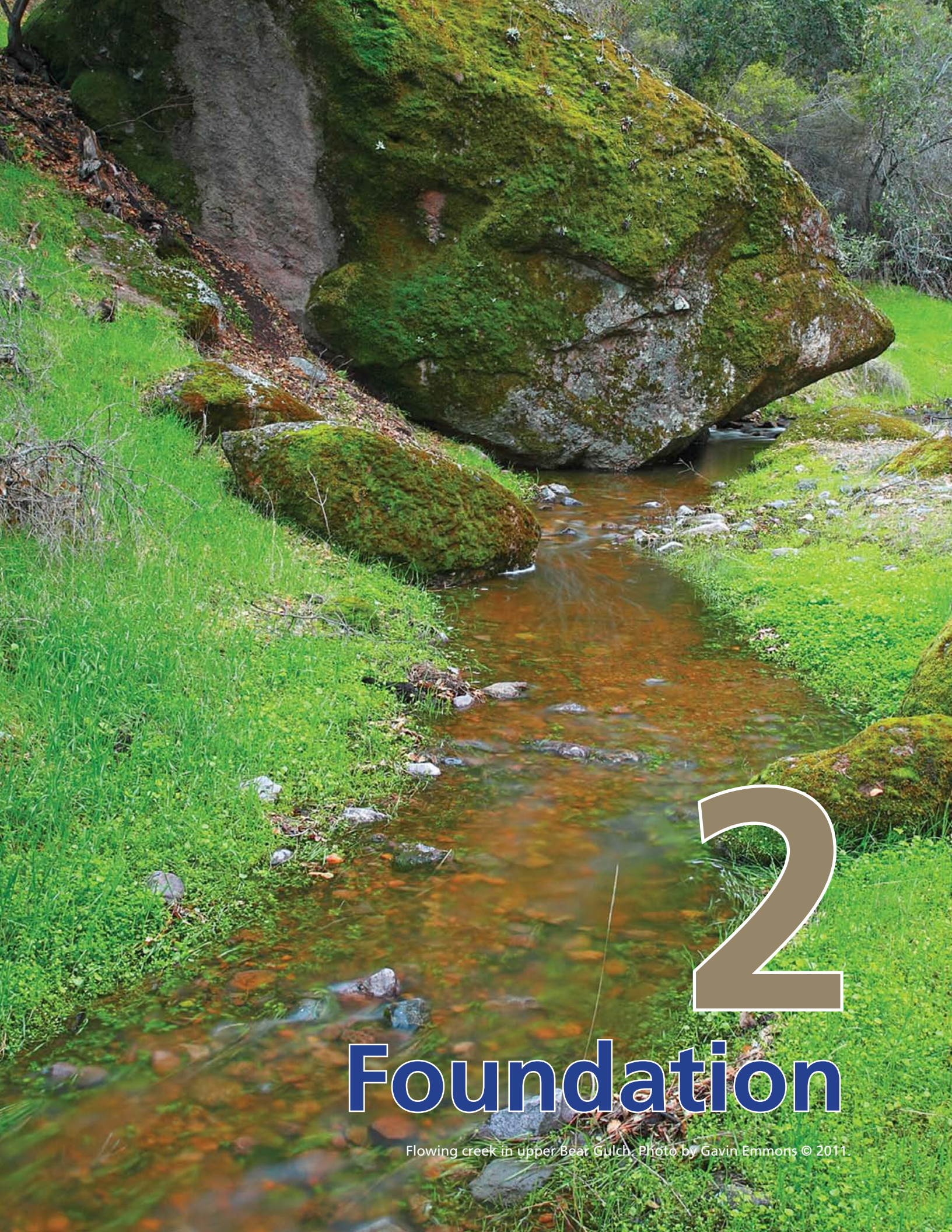
Implementation of the approved plan will depend on future funding. The approval of this plan does not guarantee that the funding and staffing needed to implement the plan will be forthcoming. Full implementation of the actions in the approved general management plan could be many years in the future. The implementation of the approved plan could also be affected by other factors, such as changes in NPS staffing, visitor use patterns, and unanticipated environmental changes.

Once the general management plan has been approved, additional feasibility studies and more detailed planning, environmental documentation, and consultations would be completed, as appropriate, before certain preferred alternative actions can be carried out. For example:

- additional environmental documentation may need to be completed
- appropriate permits may need to be obtained before implementing actions
- appropriate federal and state agencies would need to be consulted concerning actions that could affect threatened and endangered species
- The State Historic Preservation Officer would need to be consulted, as appropriate, on actions that could affect cultural resources

Future program and implementation plans, describing specific actions that managers intend to undertake and accomplish in the monument, will be guided by the desired conditions and long-term goals set forth in this general management plan.





2

# Foundation

Flowing creek in upper Bear Gulch. Photo by Gavin Emmons © 2011.







## Chapter 2: Foundation for Planning

There are two components that provide a foundation for this general management plan: the **foundation document** and the **desired conditions based on law and policy**. These components provide basic guidance for decision-making and management of Pinnacles National Monument.

### Foundation Document

A foundation for planning and management is provided for each unit of the national park system. The foundation document is a formal statement of the unit's core purpose and significance. This purpose provides a basis for all decisions made about a park unit. For Pinnacles the foundation document identifies the shared understanding of the monument's purpose, significance, resources and values, primary interpretive themes, special mandates, and the legal and policy requirements to which it must conform. The foundation document describes what is most important about Pinnacles National Monument.

The foundation for planning and management, or "foundation document," is generally developed early in the general management planning process, as part of agency scoping and data collection for the GMP.

The foundation document for Pinnacles National Monument was initiated during a planning team

workshop held in December 2005. It has been further refined throughout the GMP process, including consideration of public comments. The foundation document can be used in all aspects of management to ensure that the most important objectives are accomplished before turning to items that are also important but not directly critical to achieving the park purpose and maintaining its significance.

### Purpose

The purpose statement describes why Congress and/or the President established the park as a unit of the national park system. The purpose statement provides the most fundamental criteria against which the appropriateness of all planning recommendations, operational decisions, and management actions are tested. The purpose of the monument is based upon its establishment by Presidential proclamation and legislative history (See Appendix A: Pinnacles National Monument Legislative History).

### *Purpose of Pinnacles National Monument:*

The purpose of Pinnacles National Monument is to protect the Pinnacles Volcanic Formation, talus caves, associated lands and ecosystems for their scientific, educational and cultural values, by caring for their natural processes and wild character while providing opportunities for public enjoyment and understanding of these resources.



Photos (left to right): 1. Pinnacles viewed from the San Andreas Fault. 2. High water inundates the Bear Gulch Cave Trail. Photos by Paul G. Johnson.

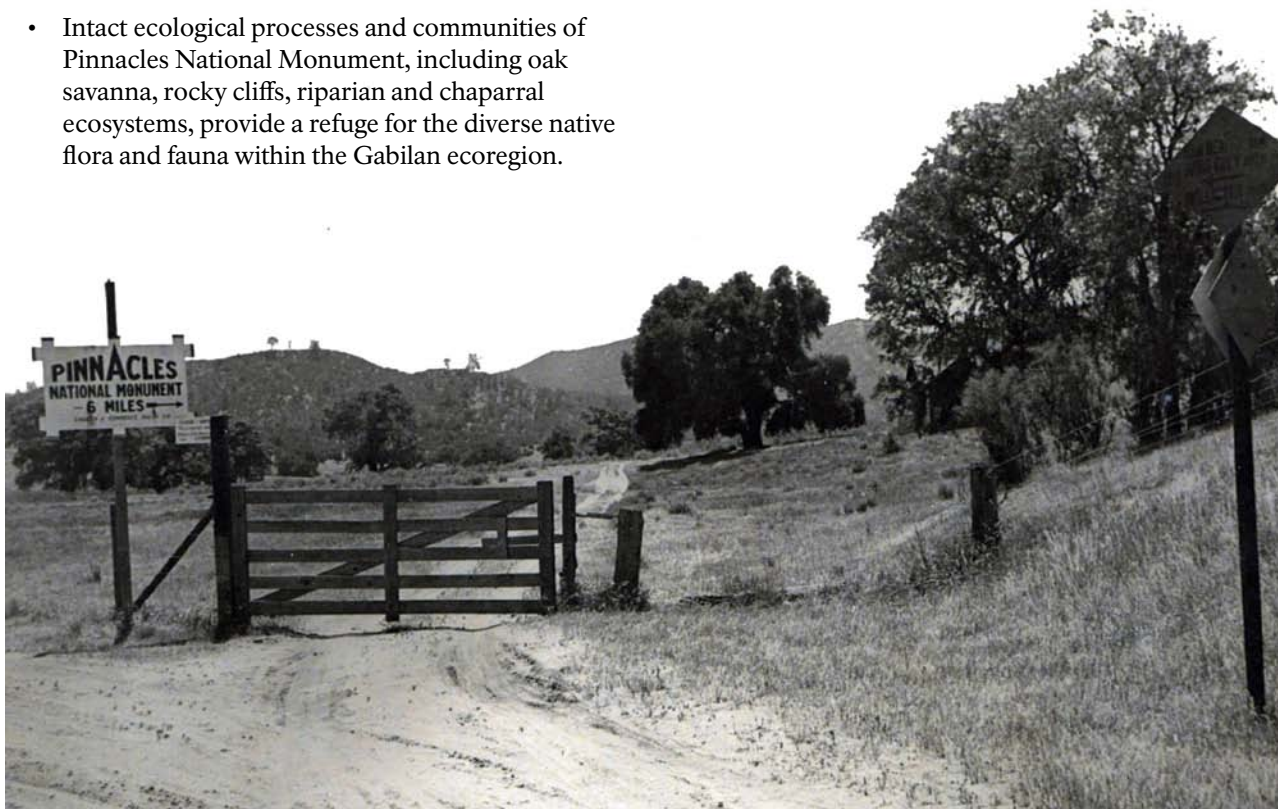
## Significance

Significance statements express why the park unit's resources and values are important enough to warrant national park unit designation. These statements describe why the park unit is important within a global, national, regional, and system-wide context and are directly linked to the purpose of the park. A park's significance statements are substantiated by data or consensus and reflect the most current scientific or scholarly inquiry and cultural perceptions, which may have changed since the park's establishment. The following statements describe the significance of Pinnacles National Monument:

- Pinnacles National Monument contains a remnant of an ancient volcanic field that was split and offset approximately 200 miles by the movement of two continental plates and provided key evidence for the theory of plate tectonics.
- Pinnacles National Monument contains the most extensive assemblage of accessible, rare talus caves within the national park system and cares for the natural processes and ecosystems within.
- Pinnacles Wilderness protects the natural character of central California's native ecosystems and provides opportunities to experience wildness in a region of expanding urban development.
- Intact ecological processes and communities of Pinnacles National Monument, including oak savanna, rocky cliffs, riparian and chaparral ecosystems, provide a refuge for the diverse native flora and fauna within the Gabilan ecoregion.

## Additional Significance

- The Native American archeological and ethnographically significant resources of Pinnacles National Monument are preserved within their ecological context and provide opportunities to study and continue traditional practices and resource management.
- Historic properties associated with early pastoral, resource extraction, and agricultural economies of the region are preserved within their rural context and provide opportunities for understanding aspects of life and land use practices from the early period of American settlement in California.
- The history of Pinnacles National Monument includes significant grassroots conservation efforts by local residents and the work of federal unemployment relief programs such as the Civilian Conservation Corps.
- Pinnacles National Monument plays a key role as a reintroduction site for the California condor, fostering public understanding and scientific research with the goal to one day remove this species from the federal Endangered Species List for the benefit of future generations.



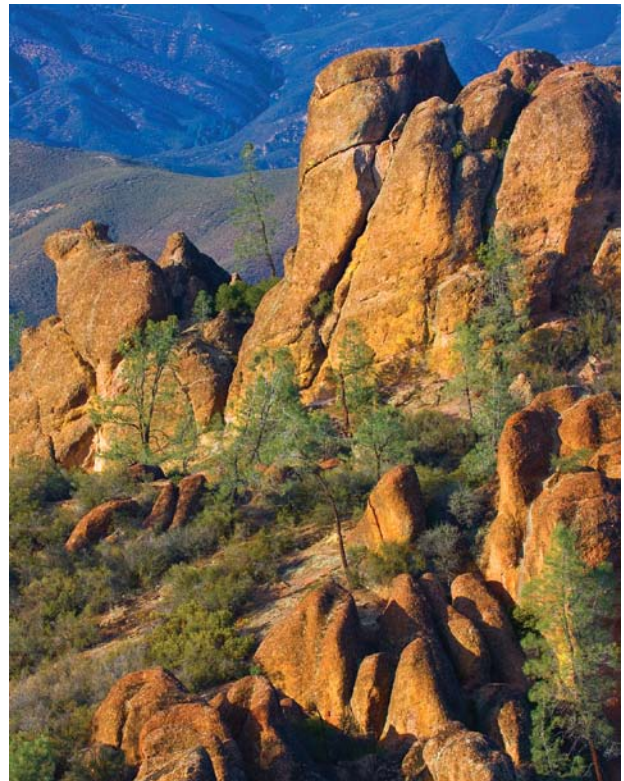
Road to Pinnacles National Monument in ca. 1920. This is the present east entrance to the monument. NPS photo.



## Primary Interpretive Themes

Primary interpretive themes are based upon the monument's purpose and significance. They provide the foundation on which the monument's educational and interpretive program is based. Primary interpretive themes connect monument resources to relevant ideas, meanings, concepts, contexts, beliefs, and values. They support the desired interpretive outcome of increasing visitor understanding and appreciation of the significance of the monument's resources.

- Over millions of years, the power of volcanism, erosion, and plate tectonics created and transformed the Pinnacles Volcanic Field into the dramatic canyons, monoliths, and rock spires seen today. The offset of the Pinnacles Volcanics from the identical Neenach Volcanics 200 miles to the south provides key evidence for the theory of plate tectonics.
- The enclosed dark spaces of Pinnacles' rare and extensive assemblage of talus caves, formed by massive rocks falling into narrow canyons, offer shelter, create habitat for bats and other specialized cave species, inspire legends and encourage exploration and adventure.
- Pinnacles' remote pristine central California wilderness beckons primitive recreation, solitude, adventure, challenge, and connections to the natural elements.
- Extreme diversity of moisture, temperature, and soil composition at Pinnacles support a remarkable complexity of biotic communities in unusual proximity; a relatively undisturbed ecosystem that allows natural processes to continue, providing sanctuary for present and future life.
- The Pinnacles landscape and resources reflect influences of a succession of people with diverse worldviews, cultures, and technologies.



Photos (top to bottom): 1. Square Block from High Peaks Trail. Photo by Gavin Emmons © 2011. 2. Hiker on the North Wilderness Trail. NPS photo. 3. A stairway and handrail built by the CCC descends into Bear Gulch Cave. Photo by Paul G. Johnson.

## Fundamental Resources and Values

Fundamental resources and values are the most important ideas or concepts to be communicated to the public about a park and merit primary consideration during planning and management because they are critical to achieving the monument's purpose and maintaining its significance. They may include systems, processes, features, visitor experiences, stories, scenes, sounds, smells or other resources and values. Fundamental resources and values provide a valuable focus throughout the planning process and the life of the plan. They are the reasons for data collection, planning issues, management prescriptions, impact assessments, and value analyses.

Other important resources and values or secondary significance statements are those that may not be fundamental to the purpose and significance but are nevertheless determined to be particularly important in general management planning.

Fundamental and other important resources and values, which link directly to the significance statements follow.

### LANDFORMS AND GEOLOGIC FAULTS REFLECTING PAST AND PRESENT TECTONIC FORCES

- The Pinnacles Volcanics – remnants of ancient volcanic layers, containing eroded rock spires, cliffs, ledges and grottos.
- Physical evidence of plate tectonics and faulting – steep terrains, uplifted and tilted layers, spires eroded from fractured rock, varied landscapes, springs, narrow canyons, landslides and associated features.

### SCENIC VIEWS AND WILD CHARACTER

- Wilderness attributes – undeveloped land with high quality viewsheds, natural soundscapes, dark night skies, Class 1 air quality, natural smells, and natural systems.
- Scenic viewsheds – dramatic views of the Pinnacle Rocks formation and the surrounding geologic landscapes.
- Inspiration and challenge provide varied opportunities for primitive recreation and solitude in wild settings.

### TALUS CAVES

- Talus caves – structures and physical processes.
- Ecosystems within the caves – including temperatures, water, plants, animals.

### OPPORTUNITIES FOR RESEARCH AND STUDY

- Knowledge about Pinnacles geology and plate tectonics – cumulative knowledge and opportunities for understanding the features and processes.
- Knowledge about the talus caves – cumulative knowledge and continued opportunities for understanding the geologic and ecologic features and processes.
- Cumulative knowledge of natural systems and stressors.
- Past and present human interactions with the landscape.

### NATIVE SPECIES AND ECOLOGICAL PROCESSES

- Diverse assemblage of native species.
- Integrity of native habitats, including living and nonliving components and the interactions among them.
- Dynamic natural processes including erosion, flooding, fire and tectonic activity.
- Pinnacles National Monument's role as a component of larger interdependent ecosystems.

## Special Mandates and Constraints

Special mandates are legal requirements and administrative commitments that apply to a specific unit of the national park system. They are mandated by Congress or by signed agreements with other entities. Special mandates and constraints provide direction for park planning and management. Mandates include the designation of an area in the park as wilderness or may also commit park managers to specific actions and limit their ability to modify land use in a park unit, such as long term cooperative agreements, or easements. All easements and rights-of-way are managed under the terms of federal law and NPS regulations. Based on NPS Management Policies (2006), all easements must be formal, legal titles or they will be extinguished.

Administrative commitments are agreements that have been reached through formal, documented processes. Examples include a memorandum of agreement to abide by the policies of an interagency management commission, or to manage fishing in cooperation with the state department of fish and game. Although agreements also identify park commitments they are not legally binding and are revocable by the superintendent



or regional director, or are subject to renegotiation or amendment.

The legislative and administrative mandates and constraints that may affect park management at Pinnacles National Monument include the following:

**Wilderness designation:** The total wilderness acreage is 16,048 acres (65 percent of the monument). On October 20, 1976 legislation (P.L. 94-567) designated 13,270 acres of Pinnacles National Monument as wilderness (Pinnacles Wilderness). On December 2002 (P.L. 107-370), 2,715 acres were added to the Pinnacles Wilderness. NPS must manage these Wilderness areas for the preservation of the wilderness character as well as for the physical wilderness resources.

**Grazing.** The boundary expansion proclamation of January 11, 2000 allowed grazing to continue on 2,561 acres of the former BLM-managed lands that were added to the monument.

*The Secretary of the Interior shall manage the area being added to the monument through the National Park Service, under the same laws and regulations that apply to the rest of the monument, except that livestock grazing may be permitted in the area added by this proclamation.*

This proclamation allows, but does not require the NPS to allow grazing on these lands. Thus, the NPS retains discretion on whether and how to allow grazing.

**California State Highway 146** extends for approximately three miles from the eastern side of the boundary at Highway 25, through the former Pinnacles Ranch to the entrance of the former boundary of the national monument. It is the main entrance road for the east side of Pinnacles. This right-of-way was never formalized between the State of California and the former landowner, but has been grandfathered over the years. The monument also has encroachment permits with California Department of Transportation (CalTrans) to allow the NPS to place signs within their easements associated with Highways 25 and 146.

**Pacific Gas and Electric (PG&E)** has an easement for the overhead electrical power line that parallels Highway 146, and provides electricity to NPS facilities, the campground, and neighboring ranches located south of the monument.

**Pinnacles Telephone Company** holds an easement through the former Pinnacles Ranch property in the vicinity of the PG&E service line. The “Pin Tel” line serves the same users as PG&E.

**A road access easement** through the former Pinnacles Ranch is used to access the Regan Ranch which is located within the boundary of the national monument.

Pinnacles National Monument has a memorandum of understanding (MOU) with California Department of Fire (CalFire) giving them primary response for

Photos (left to right): 1. Bitterroot blooms among the scree along the Rim Trail. Photo by Paul G. Johnson.  
2. CCC enrollees at work, 1935. NPS photo.

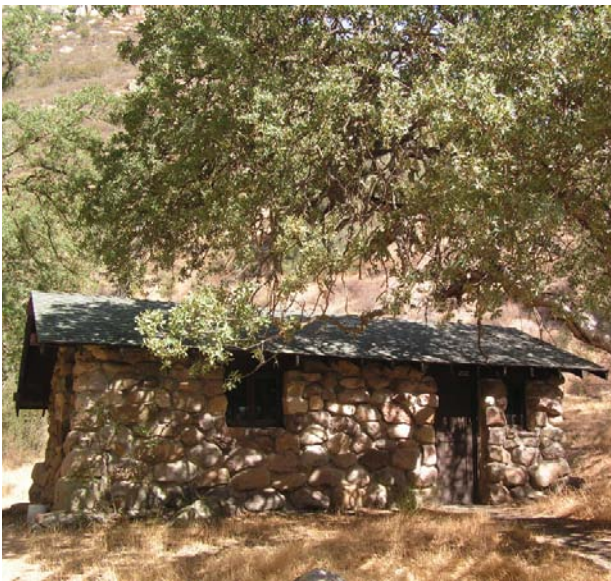


wildfire within the monument. After the first 24 hours the NPS decides how a fire within the monument will be managed.

A U.S. Fish and Wildlife Service permit is obtained and updated as needed for specific NPS staff and key partners to conduct specific activities relating to California condor management and care.

Although former BLM lands added to the monument in 2000 contain various roads, trails, infrastructure and other constructed land uses, there is no indication that any of these include legal rights that would constrain NPS planning. These uses include various jeep trails and at least one water pipeline for stock use on the southern addition.

The monument has some additional special use permits with surrounding landowners. These permits are not expected to constrain future NPS planning.



Condor Gulch former horse barn. NPS photo.

## Desired Conditions from Law and Policy

The desired conditions described in this section provide the broadest level of direction for management of Pinnacles National Monument and are based on federal laws, executive orders, and NPS Management Policies.

To understand the implications of the actions described in the GMP alternatives, it is important to describe the laws and policies that underlie the management actions. Many monument management directives are required based on law and/or policy and are therefore are not subject to alternative approaches. A GMP is not needed to decide, for instance, that it is appropriate to protect endangered species, control nonnative invasive species, protect archeological sites, conserve artifacts, or provide for universal access — laws and policies already require the NPS to fulfill these mandates. The NPS would continue to implement these requirements with or without a new general management plan.

The National Park System General Authorities Act affirms that while all national park system units remain “distinct in character,” they are “united through their interrelated purposes and resources into one National Park System as cumulative expressions of a single national heritage.” The act makes it clear that the NPS Organic Act and other protective mandates apply equally to all units of the system. Further, the Redwood Act of 1978 states that NPS management of park units should not “derogat[e]... the purposes and values for which these various areas have been established.” The NPS has established policies for all units under its stewardship that are explained in a guidance manual – NPS Management Policies 2006. The alternatives considered in this document incorporate and comply with the provisions of these laws and policies.

Table 1 includes the most pertinent laws and policies related to planning and managing Pinnacles National Monument. For each topic there are a series of desired conditions required by law and policy that Pinnacles National Monument would continue to work toward under all of the alternatives presented in this GMP/EA. The alternatives therefore address the desired future conditions that are not mandated by law and policy and that are appropriate to determine through a planning process. The table below cites the law or policy behind these desired conditions, and gives examples of the types of actions being pursued by the NPS at Pinnacles.



**TABLE 1: SERVICEWIDE LAWS, POLICIES AND DESIRED CONDITIONS**

Servicewide Laws, Policies and Desired Conditions	
Air Quality	
<p><b>Policy Guidance/ Sources</b></p> <p>Clean Air Act, 1970</p> <p>NPS Management Policies 2006</p> <p>Natural Resources Management Guidelines (NPS-77)</p>	<p>Pinnacles National Monument is a Class I air quality area under the Clean Air Act. Class I areas are afforded the highest degree of protection under the Clean Air Act. This designation allows very little additional deterioration of air quality.</p> <p><b>Desired Conditions</b></p> <ul style="list-style-type: none"> <li>• Air quality in the monument meets national ambient air quality standards (NAAQS) for specified pollutants. The monument's air quality is maintained or enhanced with no significant deterioration.</li> <li>• Nearly unimpaired views of the landscape both within and outside the park are present. Scenic views are substantially unimpaired (as meant by the Clean Air Act).</li> </ul> <p><b>Management Direction/Strategies</b></p> <p>Pinnacles National Monument would take the following kinds of actions to meet legal and policy requirements related to air quality:</p> <ul style="list-style-type: none"> <li>• Continue to cooperate with the California Commission on Environmental Quality and the U.S. Environmental Protection Agency to monitor air quality and ensure that park actions do not impair air quality. (Note: The NPS has very little direct control over air quality in the airshed encompassing the national monument.)</li> <li>• Inventory the air quality-related values (AQRVs) associated with the national monument.</li> <li>• Monitor and document the condition of air quality and related values.</li> <li>• Evaluate air pollution impacts and identify causes.</li> <li>• Minimize air pollution emissions associated with national monument operations, including the use of prescribed fire, management practices, and visitor use activities.</li> <li>• Conduct air quality monitoring in conjunction with other government agencies.</li> <li>• Conduct national monument operations in compliance with federal, state, and local air quality regulations.</li> <li>• Ensure healthful indoor air quality at NPS facilities.</li> <li>• Participate in federal, regional, and local air pollution control plans and drafting of regulations and review permit applications for major new air pollution sources</li> <li>• Work to reduce emissions associated with administrative and visitor uses.</li> <li>• Develop educational programs to inform visitors and regional residents about the threats of air pollution.</li> <li>• Participate in research on air quality and effects of air pollution. Determine changes in ecosystem function caused by atmospheric deposition and assess the resistance and resilience of native ecosystems in the face of these external perturbations.</li> <li>• Research effects of atmospheric deposition on plants, soils, and wetlands in the national monument.</li> </ul>

## Servicewide Laws, Policies and Desired Conditions

### Archeological Resources

#### Policy Guidance/ Sources

National Historic Preservation Act, 1966

Archaeological Resources Protection Act, 1979

Protection of Historic Properties (36 CFR 800)

Curation of Federally-Owned and Administered Archaeological Collections (36 CFR 79)

Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation, 1983

NPS Management Policies 2006

NPS Cultural Resource Management Guideline (Director's Order 28, 1996)

Programmatic Agreement among the National Park Service, the National Conference of State Historic Preservation Officers, and the Advisory Council on Historic Preservation, 2008

#### Desired Conditions

- Archeological sites are identified and inventoried, their significance is evaluated and documented, and they are in good condition.
- Significant archeological sites are nominated for listing in the National Register of Historic Places either individually or in districts.
- Archeological sites are protected in an undisturbed condition unless it is determined through formal processes that disturbance is unavoidable or that ground disturbing research or stabilization is desirable.

#### Management Direction/Strategies

Pinnacles National Monument would take the following kinds of actions to meet legal and policy requirements related to archeological sites:

- Continue the process of parkwide archeological survey and inventory until all archeological resources have been identified, documented and evaluated.
- Conduct archeological fieldwork and research in accordance with the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation, by qualified individuals and organizations.
- Curate archeological collections in accordance with federal standards.
- Record all archeological sites including new discoveries in the Archeological Resources Management Information System (ASMIS).
- Monitor all archeological sites on a regular basis and record their current conditions in ASMIS.
- Regularly update archeological baseline documents including but not limited to GIS base maps and the archeological overview and assessment.
- Protect archeological site locations and other sensitive archeological information and keep confidential as required or appropriate.
- Implement the research and management recommendations of the archeological overview and assessment as feasible to provide direction for identifying and preserving archeological resources.
- Partner with colleges, universities, and other appropriate organizations to encourage preservation and appropriate research for the public benefit.



## Servicewide Laws, Policies and Desired Conditions

### Cultural Landscapes

#### Policy Guidance/ Sources

National Historic Preservation Act, 1966

Advisory Council on Historic Preservation's implementing regulations regarding the Protection of Historic Properties (36 CFR 800)

Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes, 1996

NPS Management Policies 2006

NPS Cultural Resource Management Guideline (Director's Order 28, 1996)

According to the NPS's Cultural Resource Management Guideline (DO-28), a cultural landscape is a reflection of human adaptation and use of natural resources and is often expressed in the way land is organized and divided, patterns of settlement, land use, systems of circulation, and the types of structures that are built. The character of a cultural landscape is defined both by physical materials, such as roads, buildings, walls, and vegetation, and by use reflecting cultural values and traditions.

#### Desired Conditions

- Cultural landscape inventories are conducted to identify landscapes potentially eligible for listing in the National Register and to assist in future management decisions for landscapes and associated resources, both cultural and natural.
- The management of cultural landscapes focuses on preserving the landscape's physical attributes, biotic systems, and use when that use contributes to its historical significance.
- The preservation, rehabilitation, restoration, or reconstruction of cultural landscapes is undertaken in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guideline's for the Treatment of Cultural Landscapes.

#### Management Direction/Strategies

Pinnacles National Monument would take the following kinds of actions to meet legal and policy requirements related to cultural landscapes:

- Complete a survey, inventory, and evaluation of cultural landscapes under national register criteria.
- Submit the inventory and evaluation results to the state or tribal historic preservation officer for review and comment; forward final nomination form with recommendations for eligibility to the Keeper of the National Register.
- Determine the appropriate level of preservation for each landscape formally determined to be eligible for listing or actually listed on the national register, subject to the Secretary of the Interior's Standards.
- Implement and maintain the appropriate level of preservation for such resources.
- Prepare cultural landscape inventories and reports for cultural landscapes to determine historical significance, to support preservation needs and guide the rehabilitation and maintenance of cultural landscapes.

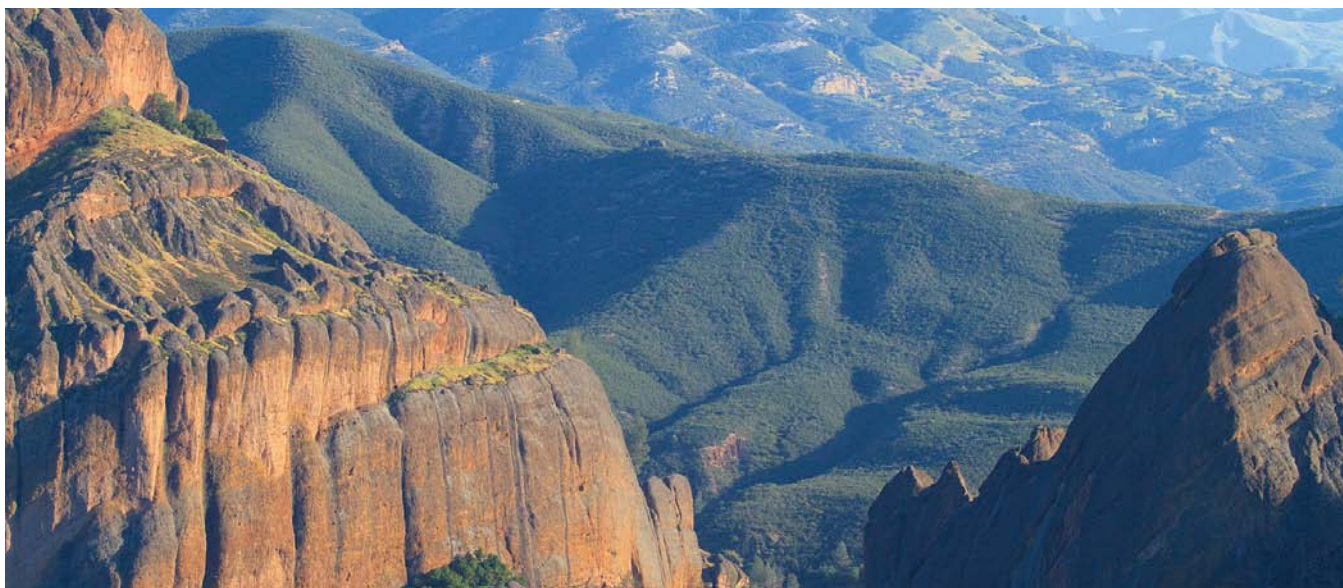


Harvesting cereal grains with a mechanical header on George Butterfield's Shorthorn Ranch ca.1900. Two-story house visible in left background. Photo from Grace Robinson album, courtesy of Deborah Melendy Norman.

<b>Values, Traditions, and Practices of Traditionally Associated Peoples (also referred to as ethnographic resources)</b>	
<p><b>Policy Guidance/ Sources</b></p> <p>National Historic Preservation Act, 1966</p> <p>American Indian Religious Freedom Act, 1978</p> <p>Archaeological Resources Protection Act, 1979</p> <p>National Environmental Policy Act, 1969</p> <p>Indian Sacred Sites (Executive Order 13007, 1996)</p> <p>NPS Management Policies 2006</p> <p>NPS Cultural Resource Management Guideline (Director's Order 28, 1996)</p> <p>Nationwide Programmatic Agreement for Section 106 of the National Historic Preservation Act, 2008</p>	<p>As defined in NPS <i>Management Policies</i> 2006, these resources and values (ethnographic resources) are objects and places, including sites, structures, landscapes, and natural resources, with traditional cultural meaning and value to associated peoples. Research and consultation with associated people identifies and explains the places and things they find culturally meaningful. Ethnographic resources eligible for the National Register of Historic Places are called traditional cultural properties. Traditionally associated peoples are social/cultural entities such as tribes, communities, and kinship units, as well as park neighbors, traditional residents, and former residents who remain attached to a park area despite having relocated, are “traditionally associated” with a particular park when (1) the entity regards park resources as essential to its development and continued identity as a culturally distinct people; (2) the association has endured for at least two generations (40 years); and (3) the association began prior to establishment of the park.</p> <p><b>Desired Conditions</b></p> <ul style="list-style-type: none"> <li>• The NPS acknowledges that Native American Indian tribes treat specific places containing certain natural and cultural resources as sacred places and as locales for private ceremonial activities. Pinnacles National Monument will strive to allow Native American groups and other traditionally associated peoples access to, and use of, these places.</li> </ul> <p><b>Management Direction/Strategies</b></p> <p>Pinnacles National Monument would take the following kinds of actions to meet legal and policy requirements related to values, traditions, and practices of traditionally associated peoples:</p> <ul style="list-style-type: none"> <li>• Allow for continued access to and use of resources and areas essential to the survival of family, community, or regional cultural practices and behaviors. The NPS may not allow access and use, however, if it would violate the visitor use criteria listed in section 8.2 of NPS <i>Management Policies</i> (2006).</li> <li>• Exercise reasonable control over the times when and places where specific groups are provided exclusive access to particular areas of the monument.</li> <li>• Allow for consumptive use of monument resources as provided for in regulations published at 36 CFR 2.1. These regulations allow superintendents to designate certain fruits, berries, nuts, or unoccupied seashells which may be gathered by hand for personal use or consumption if it will not adversely affect park wildlife or the reproductive potential of a plant species, or otherwise adversely affect park resources. The regulations do not authorize the taking, use, or possession of fish, wildlife, or plants for ceremonial or religious purposes, except where specifically authorized by federal statute or treaty rights, or where hunting, trapping, or fishing are otherwise allowed. These regulations are currently under review, and NPS policy is evolving.</li> <li>• Protect sacred resources to the extent practicable, consistent with the goals of the traditionally associated Native American groups when authorized under NHPA.</li> <li>• Withhold the location and character of sacred sites from public disclosure, if disclosure will cause effects, such as invasion of privacy, risk harm to the resource, or impede the use of a traditional religious site by practitioners.</li> <li>• Allow members of Native American groups to enter the monument for traditional non-recreational activities without paying an entrance fee.</li> <li>• Develop a record about such places in consultation with appropriate groups, and identify any treatments preferred by the groups. This information will alert superintendents and planners to the potential presence of sensitive areas, and will be kept confidential to the extent permitted by law.</li> <li>• Collaborate with affected groups to prepare mutually agreeable strategies for providing access to ordinarily gated or otherwise inaccessible locales, and for enhancing the likelihood of privacy during religious ceremonies. Any strategies that are developed must comply with constitutional and other legal requirements.</li> <li>• Make accommodations for access to, and the use of, sacred places when interest is expressed by traditionally associated peoples who have a long standing connection and identity with Pinnacles.</li> </ul>



Geologic Resources	
<b>Policy Guidance/ Sources</b>  NPS Management Policies 2006  Natural Resources Management Guidelines (Reference Manual 77)	<b>Desired Conditions</b>  The national monument's geologic resources are preserved and protected as integral components of the natural systems. Natural geological processes are unimpeded.  <b>Management Direction/Strategies</b>  Pinnacles National Monument would take the following kinds of actions to meet legal and policy requirements related to geologic resources: <ul style="list-style-type: none"> <li>• Assess the impacts of natural processes and human-related events on geologic resources.</li> <li>• Integrate geologic resource management into NPS operations and planning to maintain and restore the integrity of existing geologic resources.</li> <li>• Interpret geologic resources for visitors.</li> <li>• Develop programs to educate visitors about geologic resources.</li> <li>• Update geologic interpretations of localities that are the subject of interpretive venues.</li> <li>• Collect baseline information on surficial geology.</li> <li>• Partner with the U.S. Geological Survey (USGS) and others to identify, address, and monitor geologic hazards.</li> <li>• Partner with USGS to develop a plan to address geologic research, inventory, and monitoring.</li> <li>• Update geologic map of the Pinnacles National Monument in digital format that can be used in the geographic information system (GIS).</li> <li>• Update geologic history using modern theory and techniques.</li> <li>• Prepare a geologic inventory, including the identification of the significant geologic processes that shape ecosystems and the identification of the human influences on those geologic processes (i.e., "geoindicators"); identification of geologic hazards; inventory of type sections or type localities within the monument; inventory of "textbook" localities that provide particularly well-exposed examples of geologic features or events, and that may warrant special protection or interpretive efforts; and, identification of interpretive themes or other opportunities for interpreting the significant geologic events or processes that are preserved, exposed, or occur in the monument.</li> </ul>



View of Balconies and Machete, Pinnacles National Monument. Photo by Gavin Emmons © 2011.

Historic Structures	
<p><b>Policy Guidance/ Sources</b></p> <p>National Historic Preservation Act, 1966</p> <p>Archeological and Historic Preservation Act, 1974</p> <p>The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation, 1983</p> <p>Secretary of the Interior's Standards for the Treatment of Historic Properties, 1995</p> <p>NPS Management Policies 2006</p> <p>NPS Cultural Resource Management Guideline (Director's Order 28, 1996)</p> <p>Programmatic Agreement among the National Park Service, the National Conference of State Historic Preservation Officers, and the Advisory Council on Historic Preservation, 2008</p>	<p><b>Desired Conditions</b></p> <ul style="list-style-type: none"> <li>Historic structures are inventoried and their significance and integrity are evaluated under National Register of Historic Places criteria. The qualities that contribute to the listing or eligibility for listing of historic structures on the national register are protected in accordance with the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation (unless it is determined through the Section 106 process (including a signed MOA) that disturbance or natural deterioration is unavoidable).</li> </ul> <p><b>Management Direction/Strategies</b></p> <p>Pinnacles National Monument would take the following kinds of actions to meet legal and policy requirements related to historic structures:</p> <ul style="list-style-type: none"> <li>Update and certify the list of classified structures (LCS).</li> <li>Determine the appropriate level of preservation for each historic structure formally determined to be eligible for listing or listed on the National Register of Historic Places (subject to the Secretary of the Interior's Standards).</li> <li>Implement and maintain the appropriate level of preservation for such properties.</li> <li>Analyze the design elements (e.g., materials, colors, shape, massing, scale, architectural details, and site details) of historic structures in the park (e.g., intersections, curbing, signs, and roads and trails) to guide the rehabilitation and maintenance of sites and structures.</li> <li>Prepare historic preservation plans to guide maintenance.</li> <li>Document history through oral histories of individuals, groups, and others who have ties to the park.</li> <li>Consult with the SHPO and the Advisory Council for Historic Preservation (as appropriate) before modifying any historic structure on the National Register of Historic Places.</li> <li>Complete a survey, inventory, and evaluation of historic properties.</li> <li>Submit the inventory and evaluation results to the state historic preservation officer for review and comment. Forward the final nomination with recommendations for eligibility to the Keeper of the National Register.</li> <li>Implement and maintain the appropriate level of preservation for such structures.</li> </ul>



California condor adult in flight, Pinnacles National Monument. Photo by Gavin Emmons © 2011.



<b>Lightscape Management/Dark Night Sky</b>	
<b>Policy Guidance/ Sources</b>  NPS Management Policies 2006	<b>Desired Conditions</b> <ul style="list-style-type: none"> <li>Excellent opportunities to experience the night sky are available. Artificial light sources both within and outside the national monument do not unacceptably adversely affect opportunities to see the night sky.</li> </ul> <b>Management Direction/Strategies</b>  Pinnacles National Monument would take the following kinds of actions to meet legal and policy requirements related to lightscape management/dark night sky: <ul style="list-style-type: none"> <li>Cooperate with visitors, neighbors, and local government agencies to find ways to prevent or minimize the intrusion of artificial light into the night scene in Pinnacles National Monument.</li> <li>Limit artificial outdoor lighting in the monument to basic safety requirements and shield it when possible.</li> <li>Evaluate impacts on the night sky caused by park facilities. If light sources within the monument are affecting night skies, alternatives such as shielding lights, changing lamp types, or eliminating unnecessary light sources would be used.</li> </ul>
<b>Museum Resources</b>	
<b>Policy Guidance/ Sources</b>  National Historic Preservation Act, 1966  Archeological and Historic Preservation Act, 1974  Archaeological Resources Protection Act, 1979  Native American Graves Protection and Repatriation Act, 1990  Management of Museum Properties Act, 1955  Curation of Federally-Owned and Administered Archeological Collections (36 CFR 79)  NPS Management Policies 2006  NPS Cultural Resource Management Guideline (Director's Order 28, 1996)  NPS Museum Collections Management (Director's Order 24, 2008)  NPS Museum Handbook  Programmatic Agreement among the National Park Service, the National Conference of State Historic Preservation Officers, and the Advisory Council on Historic Preservation, 2008	<b>Desired Conditions</b> <ul style="list-style-type: none"> <li>Pinnacles National Monument would collect, protect, preserve, provide access to, and use objects, specimens, and archival, and manuscript collections. These collections contribute to advancing knowledge in the humanities and sciences in many disciplines, including but not limited to archeology, ethnography, history, biology, geology, and paleontology to improve understanding by park visitors, staff and researchers.</li> </ul> <b>Management Direction/Strategies</b>  Pinnacles National Monument would take the following kinds of actions to meet legal and policy requirements related to museum resources: <ul style="list-style-type: none"> <li>Continue to ensure adequate conditions for the climate control of collections and means for fire detection and suppression, integrated pest management, and research and interpretation access are maintained.</li> <li>Inventory and catalog all monument museum collections in accordance with standards in the NPS Museum Handbook.</li> <li>Develop and implement a collection management program according to NPS standards to guide the protection, conservation, and use of museum objects.</li> <li>Develop documentation for all specimens in the natural and cultural resource collections.</li> <li>Ensure that the qualities that contribute to the significance of collections are protected and preserved in accordance with established NPS museum curation and storage standards.</li> <li>Maintain a curator-of-record.</li> </ul>

Natural Resources: Ecological Communities	
<b>Policy Guidance/ Sources</b>  Endangered Species Act, 1973  National Invasive Species Act, 1996  Lacey Act, 1900  Federal Noxious Weed Act, 1974  Invasive Species, Executive Order 13112, 1999  NPS Management Policies 2006  Natural Resources Management Guidelines (Reference Manual 77)	<b>Desired Conditions</b> <ul style="list-style-type: none"> <li>• The national monument will maintain as parts of the natural ecosystem, all native plants and animals in the monument.</li> <li>• Natural abundance, diversity, dynamics, distribution, and habitat of native plant and animal populations are preserved and restored.</li> <li>• Populations of native plant and animal species function in as natural a condition as possible except where special considerations are warranted (such as with rare species management).</li> <li>• Native species populations that have been severely reduced or extirpated from the monument are restored where feasible and sustainable.</li> <li>• Potential threats to the monument's native plants and wildlife are identified early and proactively addressed through inventory and monitoring.</li> <li>• Sources of air, water, and noise pollution and visitor uses adversely affecting plants and animals are limited to the greatest degree possible.</li> <li>• Visitors and staff recognize and understand the value of the monument's native plants and wildlife and the role that surrounding open working landscapes play in habitat connectivity.</li> <li>• NPS staff uses the best available scientific information and technology to manage these resources.</li> <li>• State and federally listed threatened and endangered species and their habitats are protected and sustained. NPS staff prevents the introduction of nonnative species and provides for their control to minimize the economic, ecological, and human health impacts that these species cause.</li> </ul> <b>Management Direction/Strategies</b>  Pinnacles National Monument would take the following kinds of actions to meet legal and policy requirements related to native wildlife and vegetation: <ul style="list-style-type: none"> <li>• Continue to inventory and monitor plants and animals in the monument. Collected data will be used as a baseline to regularly monitor the distribution and condition of selected species, including indicators of ecosystem condition and diversity, rare and protected species, and nonnative species. Management plans will be modified to be more effective, based on the results of monitoring.</li> <li>• Develop methods to restore native biological communities.</li> <li>• Participate in regional ecosystem efforts to restore native species and ecosystem processes.</li> <li>• Support research that contributes to management of native species.</li> <li>• Minimize negative human impacts on native plants, animals, populations, communities and ecosystems and the processes that sustain them.</li> <li>• Restore native plant and animal populations in the park that have been extirpated by past human-caused action, where feasible.</li> <li>• Rely upon natural processes whenever possible, to maintain native plant and animal species, and to influence natural fluctuations in populations of these species.</li> <li>• Protect a full range of genetic types (genotypes) of native plant and animals populations in the park by perpetuating natural evolutionary processes and minimizing human interference with evolving genetic diversity.</li> <li>• Manage populations of exotic plant and animal species using integrated pest management techniques, up to and including eradication, when control is prudent and feasible.</li> <li>• Use best available scientific information and technology to manage these resources.</li> <li>• Work cooperatively with other public and private land managers to conserve open space connectivity and native species, both common and rare. Work cooperatively with park neighbors regarding best management practices inside and outside the monument to conserve native species and habitats.</li> <li>• Continue to provide interpretive and educational programs on the preservation of native species for visitors.</li> <li>• Avoid, minimize, or otherwise mitigate any potential impacts on state or federally listed species. Should it be determined through informal consultation that an action might adversely affect a federally listed or proposed species, NPS staff would initiate formal consultation with the USFWS under Section 7 of the Endangered Species Act.</li> <li>• Implement the fire management plan, and update when necessary, consistent with federal law and departmental management policies that also addresses the need for adequate funding and staffing to support the planned fire management program.</li> </ul>



<b>Natural Sounds</b>	
<p><b>Policy Guidance/ Sources</b></p> <p>Executive memorandum signed by President Clinton on April 22, 1996</p> <p>NPS Management Policies 2006</p> <p>Sound Preservation and Noise Management (Director's Order 47, 2000)</p>	<p>An important component of NPS management is to preserve or restore the natural sounds associated with national park system units. The sounds of nature are among the intrinsic elements that combine to form the environment of national park system units.</p> <p><b>Desired Conditions</b></p> <ul style="list-style-type: none"> <li>• The NPS preserves the natural ambient soundscapes, restores degraded soundscapes to the natural ambient condition wherever possible, and protects natural soundscapes from degradation due to human-caused noise.</li> <li>• Disruptions from recreational uses are managed to provide a high-quality visitor experience in an effort to preserve or restore the natural quiet and natural sounds.</li> </ul> <p><b>Management Direction/Strategies</b></p> <p>Pinnacles National Monument would take the following kinds of actions to comply with policy requirements related to soundscapes:</p> <ul style="list-style-type: none"> <li>• Take actions to monitor and minimize or prevent unnatural sounds that adversely affect monument resources and values, including visitors' enjoyment.</li> <li>• Continue to require tour bus companies, monument visitors and staff vehicles to comply with regulations designed to reduce noise levels (e.g., turning off engines when buses are parked).</li> <li>• Minimize noise generated by NPS management activities by strictly regulating administrative use of motorized equipment. Consider noise in the procurement and use of equipment within the national monument.</li> <li>• Work with the U.S. Department of Defense to address noise from military flights.</li> <li>• Encourage visitors to avoid unnecessary noise, such as the use of generators and by maintaining quiet hours in the campgrounds.</li> <li>• Manage activities or actions producing excessive noise in cave environments to protect cave resources, including the state-listed Townsend's big-eared bat.</li> </ul>
<b>Public Health and Safety</b>	
<p><b>Policy Guidance/ Sources</b></p> <p>OSHA Regulations (29 CFR)</p> <p>Federal Acquisition, Recycling, and Waste Prevention (Executive Order 12873, 1993)</p> <p>Energy Efficiency and Water Conservation at Federal Facilities (Executive Order 12902, 1994)</p> <p>NPS Management Policies 2006</p> <p>Emergency Medical Services (Director's Order 51, 2005 and Reference Manual 51, 2009)</p> <p>Hazard and Solid Waste Management (Director's Order 30 and Reference Manual 30)</p>	<p><b>Desired Conditions</b></p> <ul style="list-style-type: none"> <li>• Pinnacles National Monument and its partners, contractors, and cooperators work cooperatively to provide a safe and healthful environment for visitors and employees while applying nationally accepted standards and while recognizing that there are limitations on the NPS's capability to eliminate all hazards.</li> <li>• Consistent with mandates and nonimpairment, the monument would reduce or remove known hazards by applying appropriate mitigation measures, such as closures, guarding, gating, education, and other actions.</li> </ul> <p><b>Management Direction/Strategies</b></p> <p>Pinnacles National Monument would take the following kinds of actions to meet legal and policy requirements related to public health and safety:</p> <ul style="list-style-type: none"> <li>• Maintain a documented safety program in the monument to address health and safety concerns and to identify appropriate levels of action and activities to reduce or eliminate safety hazards.</li> <li>• Ensure that all potable water systems and waste water systems in the monument continue to meet state and federal requirements.</li> <li>• Provide interpretive signs and materials as appropriate to notify visitors of potential safety concerns, hazards and procedures; to help provide for a safe visit to the monument; and to ensure visitors are aware of the possible risks of certain activities.</li> <li>• Continue professional EMS and Search and Rescue program to train a cadre of park staff and volunteers, in conjunction with county and state emergency response personnel, private life flight organizations and Sequoia and Kings Canyon National Parks dispatch office, to assist lost persons and respond to emergency situations affecting human health.</li> <li>• Continue to partner with network fire personnel and Calfire to provide both wildland and structural fire protection within the monument.</li> </ul>

Sustainable Facility Design	
<b>Policy Guidance/ Sources</b>  Federal Acquisition, Recycling, and Waste Prevention (Executive Order 12873, 1993)  Energy Efficiency and Water Conservation at Federal Facilities (Executive Order 12902, 1994)  Strengthening Federal Environmental, Energy, and Transportation Management (Executive Order 13423, 2007)  Federal Leadership in Environmental, Energy, and Economic Performance (Executive Order 13514, 2009)  Energy Policy Act, 2005  Energy Independence and Security Act, 2007  NPS Management Policies 2006	<b>Desired Conditions</b> <ul style="list-style-type: none"> <li>• Administrative and visitor facilities are harmonious with monument resources, compatible with natural processes, aesthetically pleasing, functional, as accessible as possible to all segments of the population, energy efficient, and cost-effective.</li> <li>• Decisions regarding operations, facilities management, and development in the monument—from the initial concept through design and construction—reflect principles of resource preservation.</li> <li>• Monument development and operations are sustainable to the maximum degree practicable.</li> <li>• New development and existing facilities are located, built, and modified according to the Guiding Principles of Sustainable Design or other similar guidelines.</li> <li>• Biodegradable, nontoxic, and durable materials are used in the monument whenever possible.</li> <li>• The reduction, reuse, and recycling of materials is promoted, while use of materials that are nondurable, environmentally detrimental, or that require transportation from great distances are avoided whenever possible.</li> </ul> <b>Management Direction/Strategies</b>  Pinnacles National Monument would take the following kinds of actions to meet policy requirements related to sustainable design: <ul style="list-style-type: none"> <li>• Develop major facilities - especially those that can be shared with other agencies - outside of the monument boundary whenever possible.</li> <li>• Remove or relocate structures and facilities that are no longer functional in their present locations or that have been determined to be inappropriately placed in important resource areas.</li> <li>• Design, construct, and operate all buildings and facilities so they are accessible and usable by persons with disabilities to the greatest extent practicable.</li> <li>• Use transportation plan updates to determine whether the road system should be maintained as is, reduced, expanded, reoriented, eliminated, or supplemented by other means of travel.</li> <li>• Strive to make Pinnacles National Monument's facilities and programs sustainable.</li> <li>• Provide NPS staff a comprehensive understanding of their relationship to environmental leadership and sustainability.</li> <li>• Support and encourage the service of suppliers and contractors that follow sustainable practices.</li> <li>• Monitor energy use and promote energy efficient practices and renewable energy sources wherever possible.</li> <li>• Identify sustainable and unsustainable practices where appropriate in interpretive programs.</li> <li>• Incorporate the principles of environmental leadership and sustainability in exhibits and other interpretive media as appropriate.</li> <li>• Perform value analysis and value engineering, including life cycle analysis, to examine the energy, environmental, and economic implications of proposed developments.</li> <li>• Measure and track environmental compliance and performance.</li> <li>• Document environmental compliance, identify best management practices, and educate employees at all levels about environmental management responsibilities through Environmental Management System audits.</li> </ul>



Visitor Experience	
<b>Policy Guidance/ Sources</b>  NPS Organic Act, 1916  Americans with Disabilities Act, 1990  Architectural Barriers Act (ABA), 1968  NPS Management Policies 2006  Accessibility for Visitors with Disabilities (Director's Order 42, 2000)  Interpretation and Education (Director's Order 6, 2005)  Law Enforcement (Director's Order 6, 2005, Reference Manual 9, 2009)	<p>The NPS Organic Act, NPS General Authorities Act, and NPS Management Policies (2006) (§1.4, 8.1) all address the importance of national park units being available to all Americans to enjoy and experience. Current laws, regulations, and policies leave considerable room for judgment about the best mix of types and levels of visitor use activities, programs, and facilities. For this reason, most decisions related to visitor experience are addressed in the alternatives, however, all visitor use of the national park system must be consistent with the following guidelines.</p> <p><b>Desired Conditions</b></p> <ul style="list-style-type: none"> <li>• Monument resources are conserved “unimpaired” for the enjoyment of future generations.</li> <li>• Visitors have enjoyment opportunities that are uniquely suited and appropriate to the natural and cultural resources in the monument; opportunities continue to be provided for visitors to understand, appreciate, and enjoy the monument within its regional context.</li> <li>• Visitors have opportunities to understand and appreciate the significance of the monument and its resources, and to develop a personal stewardship ethic. Interpretive and educational programs build public understanding of, and support for, such decisions and initiatives, and for the NPS mission and for Pinnacles National Monument.</li> <li>• Excellent communication between resource managers/ researchers and professional interpreters produce compelling and effective science communication to a wide audience.</li> <li>• To the extent feasible, all programs, services, and facilities in the monument are accessible to and usable by all people, including those with disabilities.</li> </ul> <p><b>Management Direction/Strategies</b></p> <p>Pinnacles National Monument would take the following kinds of actions to meet legal and policy requirements related to the provision of visitor services:</p> <ul style="list-style-type: none"> <li>• Provide visitors with easy access to the information they need to have a safe and enjoyable experience through information and orientation programs.</li> <li>• Provide both on and off-site interpretive programs that are designed to encourage visitors to form their own intellectual or emotional connections with the resource. Interpretive programs facilitate a connection between the interests of visitors and the meanings of the monument.</li> <li>• Design curriculum-based educational programs that link monument themes to national standards and state curricula and involve educators in planning and development. These programs would include pre-visit and post-visit materials, address different learning styles, include an evaluation mechanism, and provide learning experiences that are linked directly to clear objectives. Programs would develop a thorough understanding of a monument's resources in individual, regional, national, and global contexts and of the monument's place within the national park system.</li> <li>• Develop interpretive media that provide visitors with relevant monument information and facilitate more in depth understanding of—and personal connection with—monument stories and resources. This media will be continually maintained for both quality of content and condition based upon established standards.</li> <li>• Integrate resource issues and initiatives of local and national importance into the interpretive and educational programs.</li> <li>• Provide outreach and education services in English and Spanish as an active part of a balanced visitor services program.</li> <li>• Ensure that, to the extent possible, modifications for access benefit the greatest number of visitors, staff, and the public, and are integrated with, or in proximity to, the primary path of travel for building entrances and from parking areas.</li> <li>• Provide access to wilderness areas in a way that balances the intent of access and wilderness laws and provides the highest level of protection to wilderness resources.</li> <li>• Allow to the highest extent possible, for people with disabilities to participate in the same programs and activities available to everyone else.</li> <li>• Give higher priority to methods of providing accessibility that offer programs and activities in the most integrated setting appropriate.</li> <li>• Provide special, separate, or alternative facilities, programs, or services only when existing ones cannot reasonably be made accessible.</li> </ul>

Wilderness	
<b>Policy Guidance/ Sources</b>  Wilderness Act, 1964  Wilderness Designation for Pinnacles National Monument (1976, P.L. 94-567 and 2002, P.L. 107-370)  NPS Management Policies 2006  Wilderness Stewardship (Director's Order 41)  Wilderness Preservation and Management (Reference Manual 41, 1999)	<b>Desired Conditions</b>  The National Park Service will manage wilderness areas for visitor use and enjoyment in such a manner as will leave them unimpaired for future use and enjoyment as wilderness. Visitors to the monument will continue to find opportunities for solitude and primitive, unconfined recreation, and signs of people and modern development in wilderness areas will remain substantially unnoticeable. Guidance for prescribed burning in wilderness will be provided in the monument's Wilderness Stewardship Plan.  <b>Management Direction/Strategies</b>  Pinnacles National Monument would take the following kinds of actions to meet legal and policy requirements related to wilderness: <ul style="list-style-type: none"> <li>• Preserve or improve the qualities of wilderness character including the natural, untrammeled, undeveloped, and outstanding opportunities for solitude or primitive and unconfined recreation.</li> <li>• Describe and preserve the other features of wilderness character that exemplify scenic, scientific, educational, and cultural values unique to Pinnacles NM.</li> <li>• Manage areas proposed/recommended for wilderness so as to not diminish their wilderness qualities until Congress has taken action on the proposal/recommendation.</li> <li>• Encourage uses that are in keeping with the definitions and purpose of wilderness, and do not degrade wilderness resources and character. Impose appropriate restrictions on any authorized activity as necessary to preserve wilderness character and resources, or to ensure public safety.</li> <li>• Develop a wilderness stewardship plan to guide the preservation, management and use of these resources.</li> <li>• Consider impacts to the character, aesthetics, and traditions of wilderness before considering the costs and efficiency of the equipment if the use of aircraft or other motorized equipment or mechanical transportation is proposed.</li> <li>• Ensure that all management decisions affecting wilderness are consistent with the minimum requirement / minimum tool concept: a proposed management action must be appropriate or necessary for administration of the area as wilderness (minimum requirement) and not pose a significant impact to wilderness resources and character (minimum tool), and the management method (tools) used must cause the least amount of impact to the wilderness resources and character.</li> <li>• Authorize administrative use of mechanized equipment or mechanical transport only if the superintendent determines it is the minimum requirement needed to achieve the purposes of the area as wilderness, or it is needed in an emergency situation involving the health or safety of persons actually within the area.</li> <li>• Take into account wilderness qualities and values, including the primeval character and influence of the wilderness; the preservation of wilderness conditions in evaluation of environmental impacts.</li> <li>• Address cultural resources management considerations of actions that might impact wilderness resources in the development and review of environmental analysis documents.</li> <li>• Encourage and permit scientific activities in wilderness when these are consistent with NPS responsibilities to preserve and manage wilderness.</li> <li>• Use wilderness education/interpretive programs to inform visitors about wilderness ethics and how to minimize their impacts on wilderness, leave-no-trace practices will be emphasized.</li> <li>• Ensure that all fire management activities in wilderness conform to the basic purposes of wilderness.</li> </ul>