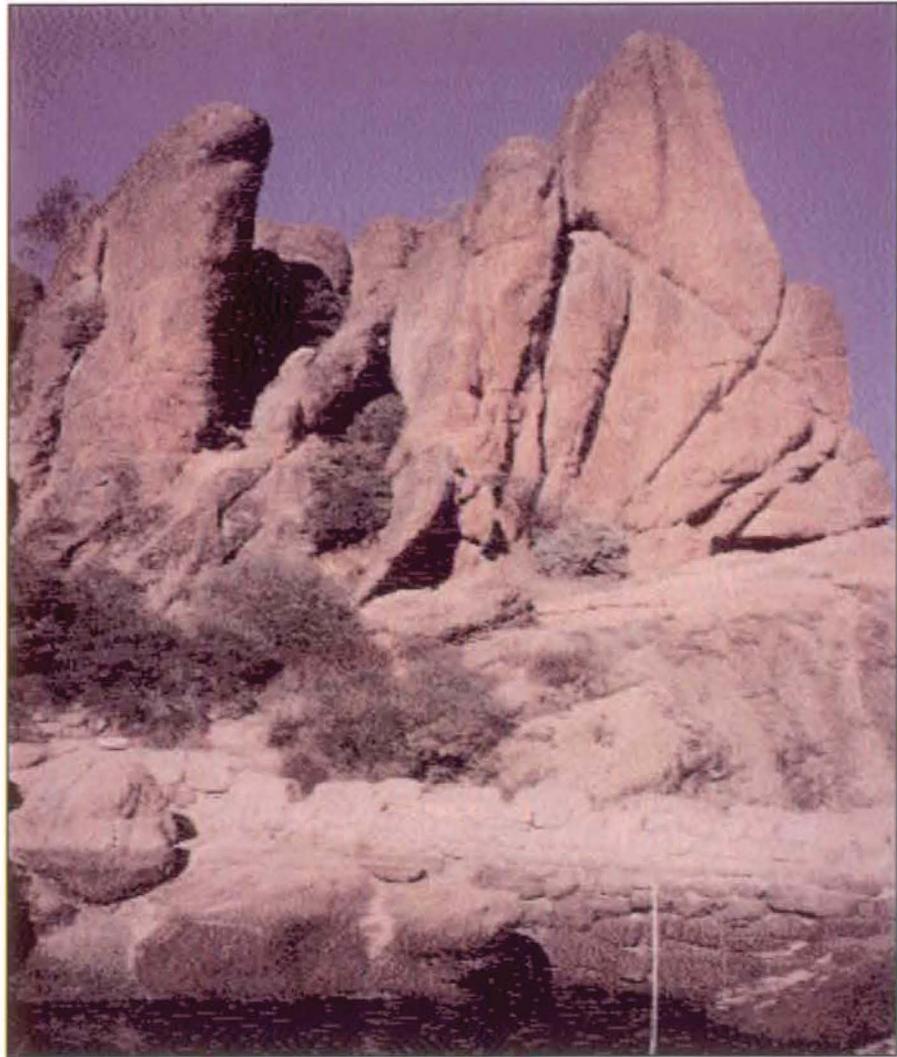


114/D76

**LONG-RANGE INTERPRETIVE PLAN**

**PINNACLES  
NATIONAL MONUMENT**

**APRIL 2004**



**NATIONAL PARK SERVICE**



PLEASE RETURN TO:

TECHNICAL INFORMATION CENTER  
DENVER SERVICE CENTER  
NATIONAL PARK SERVICE

**Color Scans**

6/24/2004



**LONG-RANGE INTERPRETIVE PLAN**

---

**PINNACLES  
NATIONAL MONUMENT**

**APRIL 2004**

**prepared by**

**Department of the Interior  
National Park Service**

**Pinnacles National Monument**

**Harpers Ferry Center  
Interpretive Planning**

---



# TABLE OF CONTENTS

---

INTRODUCTION .....	1
PLAN CONTEXT .....	2
PURPOSE AND SIGNIFICANCE .....	3
INTERPRETIVE THEMES .....	4
VISITOR EXPERIENCE GOALS .....	8
VISITATION AND VISITOR USE .....	9
EXISTING CONDITIONS .....	11
RECOMMENDATIONS .....	13
Pre-Arrival Information and Orientation .....	13
On-Arrival Information and Orientation .....	15
West Side Visitor Contact Station .....	16
East Side Visitor Center .....	18
Option 1: Pinnacles Ranch .....	18
Option 2: Inside Existing Boundary .....	22
Option 3: Retain Existing Facility .....	23
Bear Gulch .....	24
Trails .....	25
Publications .....	25
Personal Services .....	26
Education Program .....	27
Partnerships .....	29
Museum Collection .....	30
SPECIAL POPULATIONS .....	32
STAFFING AND TRAINING .....	33
PROGRAM SUPPORT NEEDS .....	34
PRODUCTS .....	35
IMPLEMENTATION PRIORITIES .....	38
PLANNING TEAM AND CONSULTANTS .....	41
APPENDIX A: Special Populations .....	42
APPENDIX B: Table of Media/Program/Theme Relationships .....	56

---

## INTRODUCTION

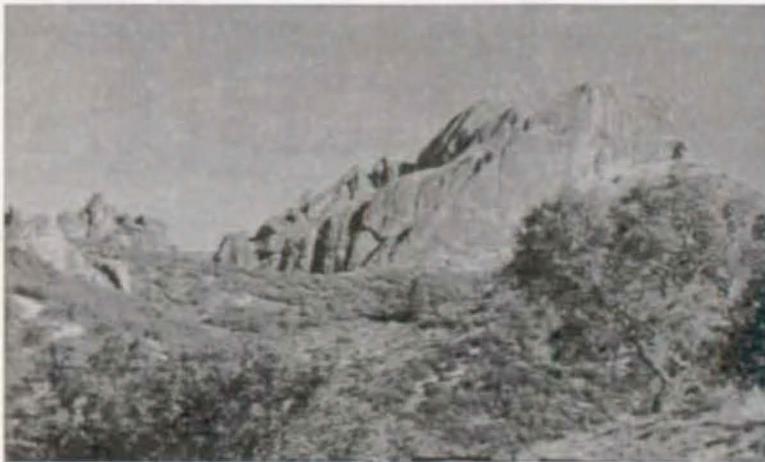
---

Pinnacles National Monument was established as a forest reserve eight years before it became a national monument by Presidential Proclamation in 1908 and is one of the first 25 national monuments established in the United States. It is located in the Gabilan Mountain Range 35 miles south of Hollister, California in San Benito County. The monument also can be accessed from the west through Soledad, Monterey County.

Containing 24,225 acres, the monument preserves geologic formations, talus caves, wilderness and a rich array of natural resources that attracts approximately 174,000 visitors each year. Legislation in 1978 created a 12,952-acre wilderness area within the unit. In 2002, 7,960 acres were added to the monument by presidential proclamation. The proclamation made it possible to proceed with the purchase of the adjacent Pinnacles Ranch, totaling approximately 2,000 acres by including the ranch within the added acreage.

During the 1930s the Civilian Conservation Corps (CCC) developed many visitor facilities in the monument. They established a number of trails, roads, bridges, and buildings, most of which remain today.

While the preservation of geologic features was the impetus to create Pinnacles National Monument, the park has grown substantially, and the importance of both the natural setting and cultural history are recognized as integral to management of the unit. Pinnacles is also an important recreation destination for the region. Its hiking trails and technical rock climbing are internationally known.



## PLAN CONTEXT

---

The last interpretive plan for Pinnacles National Monument was approved in 1990. Since then, a General Management Plan (GMP) has been initiated, and a number of significant changes to current interpretive facilities, media, and programs are proposed. Negotiations also are underway for the park to acquire the Pinnacles Ranch property, which would have further implications for the parkwide interpretive program. In addition, the park desires to strengthen relations with park neighbors, nearby communities, partnering agencies and other sites in the region.

This long-range interpretive plan (LRIP) will be a component of the park's Comprehensive Interpretive Plan (CIP) as directed by National Park Service Director's Orders-6. This plan will provide long-term direction and focus for the interpretive program for the Pinnacles National Monument. Together with the park-produced annual interpretive plan and the interpretive database, it will form a comprehensive interpretive plan. The LRIP will describe the park's primary interpretive themes and visitor experiences, and recommend ways to facilitate those experiences through facility design, interpretive/informational media, personal services programs, and partnership endeavors.

The LRIP also establishes the framework for subsequent program planning, and media planning, design, and production over the next 10+ years.

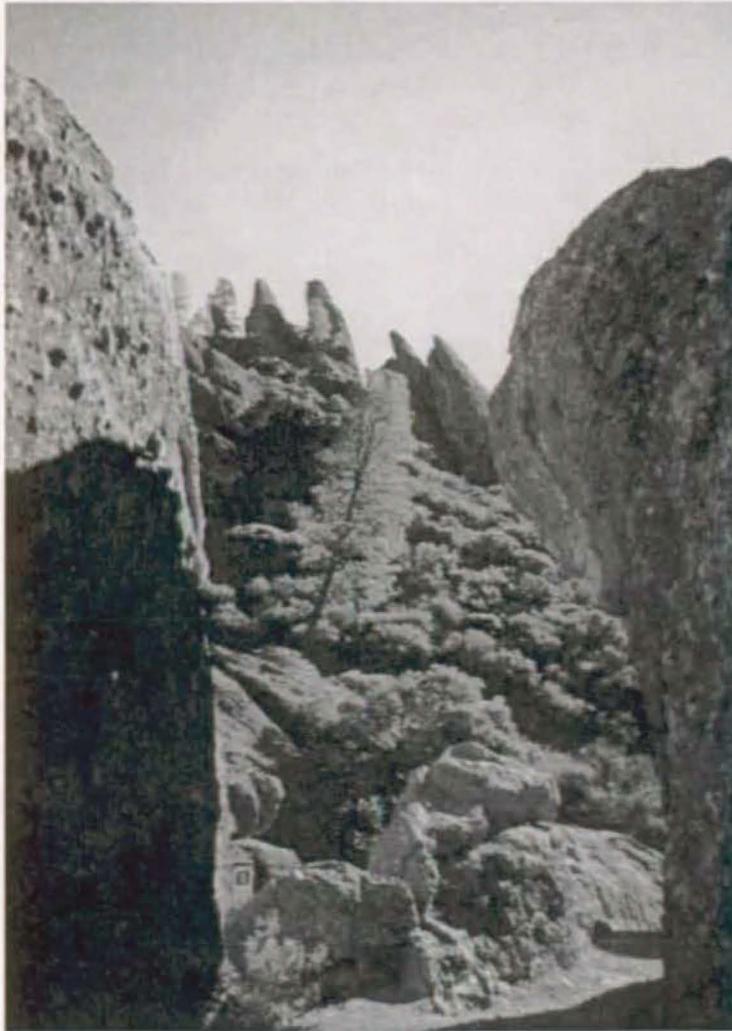


## PURPOSE AND SIGNIFICANCE

---

The purpose of Pinnacles National Monument is to preserve for their scientific value the unique rock formations, landforms, native habitats, natural processes, and cultural resources of the central coast region, and to provide enjoyment, education, inspiration, and scientific study for this and future generations. The monument also provides unique opportunities to experience wilderness, natural darkness, and quietness, class one air quality, outstanding scenery and viewsheds, diverse and accessible recreational opportunities, and open space in a significantly growing urban setting.

The largest diversity of bee species in North America and 35 rare, threatened, and endangered species find habitat within monument boundaries.



## INTERPRETIVE THEMES

---

Primary interpretive themes are those ideas/concepts about Pinnacles National Monument that guide every facet of interpretive program development and delivery, and are critical to everyone's understanding and appreciation of the monument's value. These themes, which are based on the monument's purpose and resource significance, address those ideas that are critical to helping people connect the concepts with the resources and derive something meaningful from the experience. All interpretive and educational efforts (through both media and personal services programs) will relate to one or more of the themes, and each theme will be addressed by some component of the overall interpretive program.

The following interpretive themes represent primary concepts for visitors to understand about Pinnacles National Monument. The primary themes appear in bold and are followed by a list of topics or story elements that further define each theme.

- 1. The Pinnacles are the remnant of an ancient volcano that was split by the movement of two continental plates, and now lies about 195 miles north of its origin.**

Interpretation of this theme will help visitors to understand and appreciate:

- The nature of continental plates and the mechanisms of plate tectonics.
- The concept of geologic time.
- The various rock types found in the park, most of which are remnants of ash and lava flows rather than the volcano's core.
- Evidence supporting the "birthplace" of the park 195 miles to the south.
- Earthquakes and the nature, extent, and influence of the San Andreas, Pinnacles, and Chalone faults.
- Volcanoes and how they operate.
- The amorphous shape of the original Pinnacles volcano with its five vents.
- The concept and examples of "differential erosion."
- That the park played a significant role in helping to support the plate tectonics theory.
- Connections with the Pacific Rim's "ring of fire."

- Other alternative perspectives on the origin and formation of the Pinnacles landscape.

**2. The Pinnacles contain some of the best examples of talus caves, a rare cave form resulting from boulder pilings, in the United States.**

Interpretation of this theme will help visitors to understand and appreciate:

- The different ways that cave form
- Differences between talus caves and other cave types.
- Characteristics of the different species that live in these caves.
- Qualities of the talus cave environment.
- Past and current research projects (i.e. mineral deposits, entomology, bats, etc.)
- Past and current resource conservation efforts related to the caves.
- Historic use of the caves as a hideout for people like Tiburcio Vasquez.
- Trail construction by the Civilian Conservation Corps (CCC) through the caves (which included carved steps and lighting).
- Changes in techniques and strategies for developing caves for public access and use.
- Total darkness
- The role played by local families (Bacon & Schmidt) in promoting the caves.

**3. The Pinnacles are a refuge for a diversity of plants and animals tied to a complex of habitats and four well-defined biological communities.**

Interpretation of this theme will help visitors to understand and appreciate:

- The adaptations of various animal species to the hot and dry environment [Focus species may include bats, raptors, condors, turkey vultures, owls, tarantulas, butterflies, bees, and various reptiles and amphibians.]
- The significant qualities and variations between and among the chaparral, riparian, rock-scrub, and woodland-savanna plant communities in the park.
- Impacts of exotic species and the necessity for physically removing some species.
- The importance of fire in the ecosystem and the periodic need for prescribed burns.
- Other resource management practices, including those that sometimes require the closure of certain areas of the park.

## INTERPRETIVE THEMES

- The importance of past and on-going research in guiding the management of park resources.
  - The importance of good air quality to the overall management of the park's natural resources.
  - The qualities and importance of the small "micro-worlds" of Pinnacles.
  - The importance and impacts of floods.
- 4. In an area of intense and increasing urban development, Pinnacles National Monument maintains and preserves an island of relatively pristine Central California wilderness.**

Interpretation of this theme will help visitors to understand and appreciate:

- The elements that qualify an area for wilderness designation-such as natural quiet, dark night skies, viewsheds, excellent air and water quality, minimal signage, opportunities for solitude, etc.
  - The value of a wilderness area so close to large metropolitan areas.
  - The challenges of preserving a wilderness area so close to large population centers.
  - The importance of minimal impact (leaving no trace) in experiencing wilderness areas.
  - Experiencing wilderness only by meeting the land on its terms.
  - The contrast of wilderness areas to the surrounding landscapes.
  - The concepts of "untrammled" and "unfettered."
- 5. The Pinnacles are a dynamic landscape, continually affected by the natural processes of fire, erosion, flooding, and plate tectonics.**

Interpretation of this theme will help visitors to understand and appreciate:

- The concept that many events termed "disasters" by human standards are in reality natural occurrences.
- The cyclic dependence of certain species on fire.
- Management policies toward the use and control of fire in the park.
- The effects of flooding on park resources, infrastructure, and visitation.
- The dependence of some species on periodic flooding.
- The role of flooding in defining the landscape and contributing to the dynamic qualities of stream channels.
- The processes of erosion and its effects on the landscape.
- The marked contrast of Pinnacles to the surrounding area.

- The concept and processes of plate tectonics-including the activities of subduction, strike/slip movements, and thrust faults.

**6. The Pinnacles landscape and resources reflect influences of a succession of people with differing worldviews, life ways, and technologies.**

Interpretation of this theme will help visitors to understand and appreciate:

- The harmonious connections and uses of the land by various American Indian peoples.
- Accounts of the Spanish explorers who came through the area.
- The role of the Spanish missionaries in the area and their use of Pinnacles resources.
- Impacts of the introduction of domestic livestock and non-native plants to the region.
- Impacts of early mining efforts.
- The development of ranching, and the role of local ranchers in helping to preserve Pinnacles.
- The fact that descendants of many of the early peoples who settled in the Pinnacles area are still here today, such as the Bacon and Schmidt families.
- The contributions of Schuyler Hain, Dr. David Starr Jordan, and others in influencing the creation of the National Monument.
- The role of the Civilian Conservation Corps in the early development of the National Monument.
- The role the National Park Service has had in protecting the site's resources while providing opportunities for public use and enjoyment.
- Impacts from today's population pressures.
- The perspectives of different cultures toward the meanings and values in the park's resources.
- The history and changing technologies of rock climbing in the monument.
- The role of fire suppression activities-fire towers.

## VISITOR EXPERIENCE GOALS

---

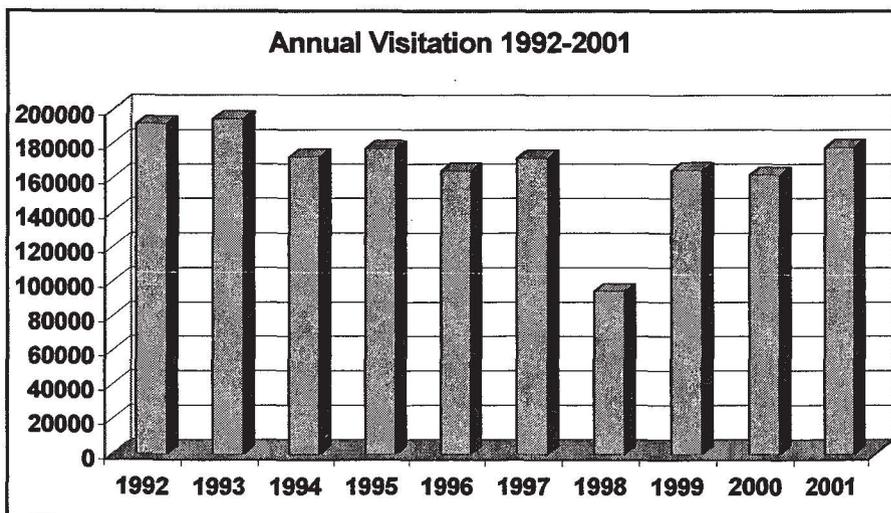
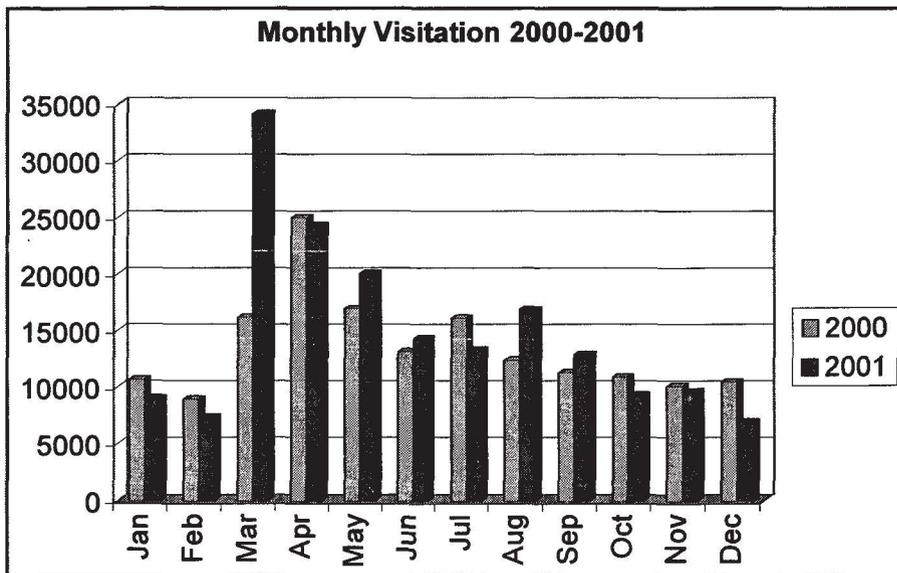
Visitors to Pinnacles National Monument will have opportunities to:

- Get information about the park before leaving home and upon arrival.
- Plan their visit based on interests, abilities, and time constraints.
- Easily find the park and learn of the similarities and differences between the east and west sides.
- Find accurate directions for getting where they want to go.
- Obtain informational and interpretive materials in both English and Spanish.
- Find adequate parking.
- Find clean rest rooms.
- Know that they are in a National Park area.
- Contact a National Park Service employee.
- Choose from a variety of appropriate recreational activities (i.e. hiking, climbing, caving, camping, picnicking, sightseeing, etc.).
- Participate in a variety of interpretive programs and activities.
- Choose from a variety of ways to access park resources.
- Learn why certain activities are inappropriate in a national park unit.
- Slow down and experience the freedom from crowds of people.
- Experience the value of seemingly unlimited natural space.
- Engage in both internal and external self-discovery.
- Explore off-trail.
- Get views of the high peaks from their vehicles.
- Watch a sunset or a moonrise from the high peaks.
- Listen to the natural sounds.
- Experience solitude.
- Experience the dark night sky.
- See the park at different seasons of the year.
- Have a wilderness experience.
- Socialize
- Learn about elements of each of the primary interpretive themes.
- Make personal and cultural connections with the tangible resources, their meanings and significance.
- Realize that while the park may in some respects appear to be an island, in many ways it is intricately connected to regional and global processes and influences.
- Develop a sense of stewardship toward the park.
- Have a safe visit.
- Utilize the park as an educational classroom for lifelong learning.

## VISITATION AND VISITOR USE

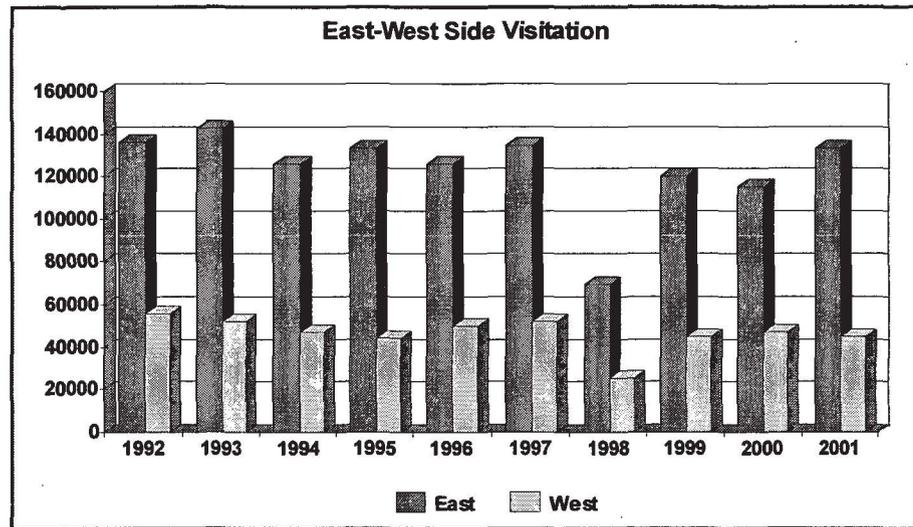
The following information regarding park visitors and visitation is derived from data maintained by the Socio-Economic Services Division (WASO) in Denver, and from conversations with park staff. A NPS Visitor Services Project survey was conducted in the spring of 2002; however, the results have not yet been published. [Note: If these results become available before the completion of this LRIP, I will add a summary of the findings to this section.]

The following charts show monthly visitation for 2000-2001 and total annual visitation for a ten-year period from 1992-2001.



## VISITATION AND VISITOR USE

The next chart compares annual visitation to the east and west sides over a ten-year period.



The total annual visitation chart shows that visitation has been consistent over the last decade, except for 1998 when the park experienced a significant flood event. Monthly visitation clearly shows a peak during the spring months, a decline during the summer, and a slight resurgence in the fall.

Visitor use studies show:

- Most visitors come on weekends and holidays.
- Visitation is day-use
- Most visits occur between 10:00 a.m. and 1:00 p.m.
- Most visitors come from the greater San Francisco Bay Area.
- The most popular visitor activities include hiking, climbing, picnicking, and exploring the caves.
- The Bear Gulch Trail, located on the east side, is the most popular, followed by the Balconies Trail which connects the east and west units.
- Demographic characteristics are similar to much of California.
- Park use patterns currently do not indicate that a proportionate percentage of Hispanic visitation.

## EXISTING CONDITIONS

---

The following is a brief and generalized description of visitor experiences and interpretive media and programs as they existed at the onset of this long-range interpretive planning process. The purpose of this section is to provide a baseline that may help to justify some of the plan's proposed actions.

Pinnacles National Monument has two separate districts-east and west. No through road connects the two, and visitors must travel different routes to access them. Highway signs do not clearly identify the districts. Frequently, visitors either arrive at the wrong destination or do not realize that there is no connecting road.

Prospective visitors can obtain good information about getting to the park, park programs, maps, and contacts for the monument by accessing the web site. Information also is available via telephone, mail, and email requests. Some information on rock climbing also is available; however, no formal orientation program for climbers currently exists.

Each district has a visitor contact facility. The visitor center on the east side is located at Bear Gulch in a historic CCC structure. It is very small and does not provide adequate space for peak visitation or for interpreting park themes. Most of the exhibits are old and worn, and many were produced in-house. In addition to running the information desk, visitor center staff also handles cooperating association sales, all informational correspondence, all incoming phone calls not handled by the automated directory, all information phone inquiries, and provides park radio dispatch services.

The visitor contact station on the west side is currently being redesigned and relocated to higher ground outside the flood plain and closer to the west side entrance. There is little room for interpretive displays in the current visitor contact station. Staffing is limited, and the facility often is only open during peak visitation periods.

Existing interpretive media is almost totally in English, even though the surrounding region contains a large Spanish-speaking population. A park newspaper is being developed that will have wide distribution in the area, and will contain a Spanish insert.

Monument staff provide a variety of personal services interpretive programs and activities. Unique evening programs which interpret the night

#### EXISTING CONDITIONS

sky or provide guided night hiking opportunities are scheduled as special events. Other evening programs are presented in a private amphitheater located in the campground at Pinnacles Ranch, adjacent to the east entrance. These programs are only for those staying in the campground and are not advertised to the general public.

Recent flooding has necessitated closing the campground in the monument, limiting public access to day-use visitation except for special evening programs mentioned above. Visitors are still able to access the park by bicycle or by walking after the gate is closed to vehicle traffic in the evening.

A variety of self-guiding interpretive trails have been developed, and trail guide publications are available at the visitor contact facilities.

The monument has started an education program, and some activities are available on the web site. There is a strong desire to expand the program for on- and off-site groups.

Externally generated web-based and published information is not regularly reviewed for consistency and accuracy. No formally established procedures or contacts have been developed.

Other than the Chief of Research/Resource Management, the park does not have staff assigned to cultural resources. This area is critical to interpreting a complete picture of the monument.



## **RECOMMENDATIONS**

---

The following recommendations address the interpretive media and programs for Pinnacles National Monument. Each recommendation is designed to further define, support, and communicate the monument's purpose, resource significance, interpretive themes, and visitor experience goals. Implementation of these recommendations will help ensure that visitors are well prepared and informed, and that meaningful connections will be formed with the tangible and intangible resources.

The discussion of program and media proposals identifies the purpose, special considerations, and sometimes suggests ideas about their presentation. It is important to remember that these are only suggestions, and should not limit the creativity that is essential during the media or program planning and design processes. On the other hand, the proposals are specific enough to provide guidance and define the parameters in which these creative energies can flow. In addition to the following recommendations, the park staff along with the media and program developers need to continually ensure that the primary interpretive themes and visitor experience goals are being addressed.

Since the region supports a large Hispanic population, interpretive media (both printed and audio), as well as personal services programs should be available in both English and Spanish.

The continuation of existing partnerships and the establishment of new ones will be a key to the success of this long-range interpretive plan. There are many opportunities for sharing skills, resources, media, and programs. Partnerships, both formal and informal, offer ways to ensure that the overall visitor experience goals and all aspects of the primary interpretive themes are presented.

### **Pre-Arrival Information and Orientation**

General and trip planning information regarding Pinnacles National Monument will continue to be provided through traditional means such as answering regular mail, telephone, and email requests. Responses to regular mail requests will continue to be tailored to specific inquiries. Packets of material will continue to be used in handling the more common requests.

The staff will continue to explore ways to improve the park telephone system, including researching ways for people to call the west unit. A

## RECOMMENDATIONS

TDD system is needed for access by the hearing impaired, and a Spanish-language option needs to be considered for the phone tree.

As the park education program develops, packets of information for educators will be developed for distribution. All printed information will contain appropriate phone numbers and addresses, including email the park web site. All materials should be reviewed on a regular basis to ensure that the information remains accurate, appropriate, and current.

Publishers of regional, national, and international tourism literature seek periodic updates of their information. To the extent possible, the park needs to ensure that printed and electronic tourism literature promoting the monument also remains accurate, appropriate, and current. This recommendation extends to non-NPS web sites as well.

The monument's web site will continue to serve ever-expanding audiences. NPS web sites are becoming an increasingly popular pre-visit tool, and continuous updates are essential. In addition to material on the current web site, the following actions are proposed:

- Organize trip planning options for different audiences/user groups, including families, children, and people who have an interest in specific resources and resource management issues.
- Improve the graphic impact to attract attention, hold interest, and compel people to visit the monument. This might include the use of movie clips, virtual tours, etc.
- Create Spanish-language page.
- Improve the link with the Friends of Pinnacles rock-climbing site, and provide basic climbing orientation in addition to announcements regarding route closures.
- Provide clear directions and maps for accessing the east and west units, and reinforce that there is no connecting road.
- Provide education program information, including downloadable materials when available.
- Emphasize safety precautions when visiting the monument.

In addition to the above, the web site offers excellent potential for expanding interpretive and educational materials. Web site visitors can get a basic introduction to each of the primary interpretive themes, their associated stories, and the resources that best relate to them. As the education program continues to grow, information about programs, workshop announcements, and curriculum materials would be posted on the web site. This will not only benefit area educators, but also serve audiences around the world, who may never have an opportunity to physically visit the monument.

On a regional scale, information about the monument will be provided at area visitor centers, other major tourist attractions, and lodging and camping facilities. Rack cards and the new park newspaper are excellent vehicles to accomplish this goal. In addition to standard information, the newspaper provides a flexible format for presenting changeable and current material. The newspaper will have a Spanish insert, and one side of the rack card can be printed in Spanish.

Monument staff will work closely with federal, state, and county highway authorities to evaluate existing directional signing and develop and implement recommendations for improvement. Signage needs to be consistent. Use of the NPS arrowhead and elements of the service-wide Messaging Project also should be considered.

The potential of developing a low-watt radio broadcast system (Traveler's Information System or TIS) will be explored. One of the key messages will be to let motorists know that there are two separate districts and that no through road connects them. Other information will include hours of operation, fees, and parking. Information about the resources and services in each district can help first-time visitors make informed decisions, but the overall message must remain short and pertinent to the pre-arrival experience. Detailed information exchange would occur as part of the on-arrival experience.

Studies have shown that TIS systems typically reach about 20% of motorists. As with the web site and other forms of information, the TIS requires regular maintenance, and messages must be continuously updated. Ways to provide the broadcast in English and Spanish also will be explored.

### **On-Arrival Information and Orientation**

Upon entering the monument, visitors will find clear directions to key facilities and resources. During peak visitor use periods when limited parking is an issue, motorists on the east side will be directed to shuttle parking areas. Information provided at the pickup point or on the shuttles will help orient visitors to the monument and assist with initial trip-planning decisions.

The visitor centers on the east and west sides will serve as primary initial contact points for information and orientation. Details regarding the information desk operations will be discussed in subsequent sections.

## RECOMMENDATIONS

Since climbing is a very popular visitor use at Pinnacles, special consideration will be given to providing adequate orientation, especially for first-time climbers. While much of the basic orientation should occur before climbers arrive at the monument, some people may not have had the opportunity to access outside information. An on-arrival orientation program will benefit those who did not get information earlier, and reinforce key safety and resource management topics. The need for this program and its specific content will be developed further in the Climbing Management Plan and in consultation with the climbing community. At a minimum, climbing advisory handouts would be available at the visitor centers and at key climbing locations.

A monument-wide wayside exhibit plan was developed in 1993. The recommendations in this document are still being implemented. In addition to wayside exhibits to interpret key features in the landscapes, the plan also proposes the installation of several informational waysides at the visitor contact centers and at major trailheads. The wayside exhibit plan will be reviewed in light of the recommendations in this long-range interpretive plan, and especially if the Pinnacles Ranch property is acquired. The potential to develop wayside exhibits in partnership with other agencies to interpret geologic and/or cultural features outside the monument will be explored.

Informational wayside exhibits (designed in a vertical format and sometimes including a bulletin case) will be located near the visitor centers. The exhibits will help answer common questions before the visitor enters the facility, provide a contact point for repeat visitors to get current information without needing to burden visitor services staff, and provide after-hours information when the centers are closed. At trailheads, the informational waysides give people an idea of what to expect along the trails, including the length, difficulty, safety precautions, etc.

Bulletin cases associated with informational wayside exhibits can display seasonal and other changeable information including interpretive program schedules, weather, area closures, etc. Content, format, and design are critical to the usefulness and timeliness of these exhibits. The bulletin cases also require regular maintenance.

### **West Side Visitor Contact Station**

A project to relocate the existing maintenance facility, housing, and visitor contact station on the west side was begun prior to the onset of this long-range interpretive plan. This Denver Service Center project will construct new facilities away from the environmentally sensitive flood

plain to a higher site closer to the monument entrance. Planning and design documents related to the construction of these facilities should be consulted in reference to the following interpretive media and program recommendations.

Since the new center will be small and may not be staffed at all times, some of the interpretive media will be developed outside (perhaps in a "courtyard").

One such exhibit will focus on the park's volcanic story, and the influence of continental plate movements and other forces in creating the current landscape. The exhibit will illustrate the geologic changes over time, and show visitors where they can go to see examples in the park. It will focus on how the ancient volcano was formed and how it got to this location. The outdoor component of this exhibit will present the general picture, with more details conveyed through a film and/or publications inside the building. This exhibit may include moveable components to show the concept of volcanic displacement. It may even be possible to illustrate the San Andreas Fault on the "floor" of the courtyard, showing visitors where they stand along it. Some of these exhibit elements could be developed in partnership with the U.S. Geological Survey.

A second outdoor exhibit will focus on the talus caves. This could be an interactive exhibit, perhaps a simulated walk-through of a talus cave. It may be possible to design this feature as an exterior element of the building itself. Visitors would walk through the "cave" which would be ADA accessible, and interpretive text/graphics would highlight some of the natural and cultural features to be found. The experience could motivate people to hike to the talus caves, provide information on what to look for, and offer an alternate cave experience for those unable to access these resources.

A third possible outdoor exhibit might include a large-scale map or model of the park. It would show major trails, the fault line, volcanic vents, and other points of interest. The model/map (perhaps in a vertical format) could be interactive, highlighting major features.

Inside the visitor contact station, a series of changeable exhibits will interpret a variety of theme-related topics. This could include (on a rotational basis): the effects of fire and floods, raptor management, native species programs, current resource management efforts, bats, and related cave closures, air quality, night sky, wildflowers, exotic species, climbing, volunteering, etc. The exhibits will be compact with built-in

## RECOMMENDATIONS

storage, but they also will include the potential for displaying 3-dimensional items (in climate-controlled cases when necessary).

One way to present some of this information could be through a touch screen computer utilizing material developed for the park web site. No Internet connection would be needed, and visitors could search the site for topics of interest.

A small exhibit inside or outside the building could interpret some of the sustainable design elements incorporated into the facility. This could include a site specific publication.

A small outdoor seating area is proposed. This would be used for interpretive talks and demonstrations, an assembly point for interpretive walks, and other group activities. This also would be a location for conducting night sky interpretive programs, including the use of telescopes.

A bulletin case outside the building would provide current trail conditions, weather, and safety issues. The case will be developed as part of the current or revised wayside exhibit plan.

From the visitor contact station visitors will be able to take a short (ADA accessible) walk to a nearby homestead site. This would be an interpretive trail, perhaps using a combination of wayside exhibits and a self-guiding trail brochure. Interpretation along this trail also could focus on elements of early American Indian uses of the area, the old mission mine in the vicinity, and mission era cross that was once visible from the site.

### **East Side Visitor Center**

Since the acquisition of Pinnacles Ranch has not been resolved, this long-range interpretive plan presents three conceptual alternatives for the location of a visitor center. It is important to note, however, that formal site selection and design of a new facility is beyond the scope of this document. This will require separate planning and design processes and an assessment of environmental and social impacts.

#### **Option 1: Pinnacles Ranch**

The preferred alternative in the current General Management Plan (GMP) calls for acquiring the Pinnacles Ranch property and establishing a visitor services facility there. On the ranch property the visitor center would be a central hub for information, orientation, and introducing

the primary interpretive themes. It also would be central to the shuttle system.

Public use space in the new visitor center will contain a lobby, staffed information desk, cooperating association sales area, exhibit space, auditorium, education room, visitor transportation center, and rest rooms. In addition, most or all of the park offices currently located at Bear Gulch may be relocated this new facility.

Visitors will easily see the staffed information desk as they enter the building, and it will be large enough for 2-3 employees. The desk will be equipped with a telephone, storage for various handouts, cash register(s) for handling cooperating association sales and possibly the collection of entrance fees, and a remote start switch for the audiovisual program in the auditorium. The desk also will have sufficient space for displaying and unfolding maps and giving directions.

Various free publications (i.e. site bulletins) could be displayed under glass at the information desk, or in a changeable wall-mounted frame. Text would indicate that copies of any items are available on request. This will serve to show visitors what literature is available, but deter the tendency to gather items indiscriminately just because it is there.

Exhibits in the lobby area will focus primarily on information and orientation—perhaps answering some of the more commonly asked questions. Chargeable information, such as trail conditions, weather reports, area closures, etc. would be displayed here.

A new 3-dimensional model of the monument should be considered for the lobby area. It will help with visitor orientation and be used for interpretive talks by park staff. Interactive elements also could be included in the model, though the use of sound would be limited so that it does not interfere with the information desk activities.

The cooperating association sales will be located in close proximity to the information desk. This is essential so employees on duty can view the sales stock from the desk and handle transactions at the cash register. It may be desirable to design the sales area so that it can be closed off in the event that the building was open for evening functions (i.e. programs in the auditorium).

The sales area should be treated as an exhibit, in that it helps to tell aspects of the park stories. It is a special exhibit because visitors can purchase pieces of it to take home.

## RECOMMENDATIONS

The design of the cooperating association sales area should include the involvement of a professional bookstore designer. Bookstore design is now a specialized field that helps to ensure the best displays, access, and circulation decisions. In addition to standard publications, space for viewing video programs and mounting posters also should be considered.

The option for collecting entrance fees at the information desk will require further evaluation. If it is decided to collect fees here (in addition to the entrance station), a separate cash register will be needed.

As visitors approach the building, they will easily find the rest rooms, which will have exterior entrances. Interior access may also be provided, but exterior entrances will help reduce congestion inside the building.

Interpretive exhibits will present aspects of each of the primary themes.

One exhibit will focus on the park's volcanic story, and the influence of continental plate movements and other forces in creating the current landscape. This exhibit will illustrate the geologic changes over time, and show visitors where they can go to see actual examples in the park. It will focus on how the ancient volcano was formed, and how it got to this location. The exhibit may be more effective with moveable or audio-visual components, especially to show the concept of volcanic origin and displacement.

Interpretation of the San Andreas and other faults in the area will be provided. In addition to the seismograph display, it may be possible to illustrate the San Andreas Fault (perhaps on the floor), and show visitors where they stand along it. Some of these exhibit elements could be developed in partnership with the U.S. Geological Survey.

Another exhibit will focus on the talus caves. This could be some type of interactive exhibit, perhaps a simulated walk-through of a talus cave. Visitors would walk through the "cave" which would be ADA accessible, and interpretive text/graphics would highlight some of the natural and cultural features to be found. The experience will motivate people to hike to an actual talus cave, provide information on what to look for, and offer an alternate cave experience for those unable to assess these resources.

These exhibits may have similar elements to the exterior displays proposed for the west side visitor contact station. However, by designing the

east side exhibits for the interior of the visitor center, they have the potential to be more sophisticated and in-depth in their interpretation.

Other exhibits will emphasize aspects of the area's rich cultural history. This could include interpreting the American Indian tribes who lived in the area, the Spanish explorers who passed nearby, early mining and ranching activities, and the role of the CCC in developing the monument. In most cases (especially with the ranching and CCC stories) the exhibits will provide a general introduction, but more importantly, they will direct and motivate people to visit related sites in the monument.

Excerpts from oral history interviews could be valuable components of some of the exhibits. It is important to collect these interviews before some of these human resources are lost. This can be accomplished by park staff and/or through partnership agreements with area colleges and universities. High quality audio and/or video recordings are critical if excerpts are to be used in various interpretive media.

Some of the changeable exhibits proposed for the west side visitor contact station could be replicated here also. This could include (on a rotational basis): the effects of fire and floods, raptor management, native species introduction programs, current resource management efforts, bats and related cave closures, air quality, night sky, wildflowers, exotic species, climbing, volunteering, etc. The exhibits will be compact with built-in storage, but they also will include the potential for displaying 3-dimensional items (in climate-controlled cases when necessary). One way to present some of this information could be through a touch screen computer utilizing material developed for the park web site. No Internet connection would be needed, and visitors could search the site for topics of interest.

The auditorium would seat 50+ people. It will have fixed seating and a sloped floor. The room will be acoustically balanced with a properly sized screen and projection system. A projection booth will be included. This will allow safe storage for audiovisual equipment and provide flexibility for showing different programs, including live ranger talks. Harpers Ferry Center should be consulted for calculating the screen dimensions, projection distances, and appropriate equipment.

A new audiovisual program of approximately 15-minute duration will be produced to provide general orientation to Pinnacles National Monument. The film would show aerial views of the monument, depict visitors engaged in various activities, and convey critical safety messages. The program would highlight the natural assets, including vistas from the High Peaks and Rim Trails, so those not able to hike still can get a

## RECOMMENDATIONS

sense of the magnitude and understand why the monument is dedicated to preserving and protecting these resources. It is important, however, that the film maintain a central focus and not try to cover too much.

The new audiovisual program (perhaps in an expanded version) could be sold through the cooperating association. The program also could be made available to area schools and community organizations.

A children's audiovisual program and a film to be shown as part of a group orientation activity also are recommended. These programs could be developed in-house or in partnership with area film producers.

Outside the visitor center an area will be developed for conducting interpretive talks, demonstrations, living history programs, and other activities. The space also could be used for staging aspects of the monument's education program. Depending on the location of the visitor center in relation to the campground, this outdoor area could double as an amphitheater for evening programs.

From the center, visitors will be able to access the Bench Trail. Other trails will be developed to provide opportunities for visitors to explore the ranch property. At least one of these routes will be an interpretive trail that will explain aspects of ranch life and history, including some of the historic structures. Interpretive media on the trail may include a combination of a self-guiding trail publication, perhaps supplemented with wayside exhibits at key locations. Specific wayside exhibit proposals will be developed as an addendum to the existing wayside exhibit plan.

### **Option 2: Inside Existing Boundary**

If the Pinnacles Ranch property is not acquired, a second alternative is to construct a new visitor center inside the existing monument boundary. As stated earlier, a separate planning effort will be required to develop site selection criteria, assess potential sites, develop alternative designs, etc.

Since the ranch will not be part of the monument in this alternative, less interpretation of its history and activities would be presented. However, some aspects of ranching would be introduced in the exhibits to highlight how it has influenced and continues to interact with monument resources and natural processes.

In this alternative, more emphasis will be placed on interpreting the geology stories and the themes related to biological diversity, wilderness, natural processes, and elements of the non-ranching human history.

Consideration will be given to building a new amphitheater inside the park boundary. In addition to evening programs, the amphitheater would be used for various interpretive programs and demonstrations during the day, and it would be available for use by school groups as park of the monument's education program.

Although in this alternative there would be no trails constructed at the ranch, a loop trail from the visitor center would link with the Bench Trail.

### **Option 3: Retain Existing Facility**

Keeping the visitor center in the existing historic structure is the third and least preferred alternative. It would be considered only if Alternatives 1 and 2 prove impossible to implement. The existing building is too small to accommodate existing and projected visitation volumes, and it is too small to provide adequate media for orienting park visitors and giving an introduction to the interpretive themes.

If it remains necessary to utilize this building as a visitor center, one option is to maximize use of exterior space. Like the visitor contact station on the west side, outdoor media could be developed to provide visitor orientation and address some of the primary themes. However, since this building is part of a historic district, care will be needed to ensure that the outdoor media does not adversely impact the site's historic character.

The center in this alternative will not be able to provide much in-depth interpretation of park themes, leaving the in-depth interpretation to ranger-led activities. Likewise, there is no foreseeable location for an indoor auditorium, consequently, the new audiovisual program may not be necessary, or it may be necessary to show it on a video monitor (perhaps viewed from outside).

An amphitheater inside the monument boundary is still an option in this alternative. In addition to evening programs, the amphitheater would be used for various interpretive programs and demonstrations during the day, and it would be available for use by school groups as park of the monument's education program.

## Bear Gulch

The following discussion regarding Bear Gulch is predicated on the implementation of visitor center options 1 or 2.

It is recommended that several structures in the Bear Gulch area be restored to the CCC era. This restoration effort also might include the historic stables and gas station.

Interpretive media in one of the buildings (perhaps the current visitor center) will address the CCC story at Pinnacles. Visitors will learn of the many contributions the CCC made in developing the monument, and they will discover the larger role of this public works program during the Great Depression. Perhaps through oral history interviews, visitors also will learn what individuals got from their participation in the CCC program.

One or two other CCC buildings could be furnished to depict their original functions. This will require a Historic Furnishing Study to research the feasibility of furnishing any structures and to identify those with the greatest potential. In addition to possible interior furnishings, consideration should be given to adding period elements to the historic landscape. Exterior historic furnishings also will require research, and items selected generally would be reproductions that can weather the elements.

The interiors of other buildings could be used for a variety of interpretive functions, including:

- Exhibits (possibly with a video component) that would present the history of climbing at Pinnacles.
- Exhibits depicting the period when the buildings were used as a guest lodge.
- Exhibits showing examples of how NPS management policies have changed over time and are reflected in the natural and cultural resources of the monument.
- An Artist in Residence or visiting researcher temporary housing facility.
- Classroom(s) with computer stations and/or a laboratory for the formal education program or visiting scholars and researchers. This could be an education space in addition to or in lieu of the classroom proposed in the new visitor center.

As a complex of structures, Bear Gulch presents the opportunity to provide more in-depth interpretation of the human stories associated with Pinnacles. Visitors to the main visitor center will receive an introduction to the succession of human interaction with the resources and be directed to come to Bear Gulch for more detailed experiences. Also, by presenting these stories at Bear Gulch, there will be more space at the main visitor center to introduce other primary themes.

## Trails

The monument has a variety of self-guiding interpretive trails. Several new interpretive trails are proposed: one at Pinnacles Ranch, one through Jawbone Canyon, and another to a homestead site on the west side. Booklets for each of the trails are or will be available at the visitor center on the east side and at the visitor contact station on the west side. The trails will continue to be monitored regularly and necessary changes will be reflected in the publications.

The monument-wide wayside exhibit plan will continue to be implemented and amended to include any new or relocated waysides along monument trails.

## Publications

The monument will continue to offer a wide selection of free and sales publications that address aspects each of the primary interpretive themes and visitor experience goals. Free publications produced by park staff will display uniformity in their design. This generally should involve use of the site bulletin format and service-wide logo and typeface designs of the NPS Messaging Project.

All publications, both free and sales, should be evaluated on a regular basis. Most cooperating associations have a tool called a "Scope of Sales" study that can be used for this purpose. These studies evaluate each publication and other sales items in regard to price range, relation to interpretive themes, and target audiences. The Scope of Sales can be used to identify strengths and needs, and it can form the basis for developing, revising, and/or expanding a publications program. The interpretive staff already have identified the need for more monument-specific publications.

The official park folder will need to be updated as new facilities are developed. The addition of the Pinnacles Ranch property also will require a significant change to the park map. These changes also should

## RECOMMENDATIONS

be reflected in the park newspaper and other handouts, including material provided by outside sources.

### Personal Services

Personal services will continue to be an essential component of the overall interpretive program at Pinnacles National Monument. These programs have the unparalleled advantage of being inspiring, versatile, alive, and tailored to the needs of individuals and groups. An interpretive staff presence also can help with the protection of fragile and sensitive resources. Interpreters, whether behind an information desk, roving, leading a tour, giving a talk, or conducting a demonstration, are the best of all interactive tools in enabling visitors to experience, understand, appreciate, and make personal connections with resources.

In spite of their advantages, however, personal services interpretive programs have limitations. They are often limited in number, and sometimes only reach a small percentage of visitors. Quality and accuracy must be maintained through regular audits and continual education and training.

With the addition of the Pinnacles Ranch property, the NPS and other monument partners should seek to expand the uniformed and create living history/costumed interpretation programs there. Area residents can be a valuable asset in assisting with demonstrations of ranch life, either as participants or as consultants for staff training. There also is great potential to expand the number and variety of evening programs (including night sky talks).

The diversity of the monument's overall interpretive program presents almost limitless opportunities for both standard and innovative activities. Keeping within the parameters of the interpretive themes and visitor experience goals, interpreters should be given a high degree of creative freedom to explore and experiment with new programs. This will help maintain a creative edge and attract new and returning audiences.

However, creativity also needs to be balanced with continued evaluation. Since personal services interpretive programs are generally easy to change, a regular schedule should be established to evaluate all programs and activities, deleting those that don't work, improving those that require it, and validating those that are successful.

## Education Program

The development of formal education programs has become a critical component of the desired visitor experiences in national park units. The park staff has expressed a strong need for creating a substantive educational programming. Pinnacles began this undertaking in July of 2002 with the creation of the park's first education specialist position and subsequent curriculum-based education program.

Education programs differ from most traditional forms of interpretation in many ways, and special skills are required to effectively plan, design, implement, and assess multidisciplinary curricula. Education staff must have knowledge of:

- State content standards
- Constructivism
- Behaviorism
- Developmental theories
- Learning styles
- Multiple intelligences
- Right brain/left brain thinking
- Observational learning
- Outcome-based learning
- Theories on instructional techniques
- Assessment theories and practices

Education coordination in the NPS has become a discipline in its own right, and the need for separate education plans has become essential. In this regard, a separate education plan for Pinnacles National Monument will be created.

The following is an overview of the direction and goals for the education program at Pinnacles. The program should function under the Interpretive Operations Supervisor.

To be successful, the education program specialist will oversee all aspects of the park's education activities. Some of the responsibilities will include:

- Encouraging school field trips to the park.
- Coordinating with area educators and park staff to expand educational plans for Pinnacles.
- Planning and conducting teacher workshops.

## RECOMMENDATIONS

- Assisting with grant writing to alleviate the cost of transportation for bringing school groups to the park.
- Providing on- and off-site resource materials to educators in an efficient, cost-effective manner.
- Developing inter-divisional partnerships and strategies.

Overall program goals and objectives for the Pinnacles education program could include the following:

- Provide teachers and other educators with the knowledge, skills, and confidence to use the monument as an outdoor classroom, facilitating opportunities for direct personal experiences with resources, thereby increasing awareness, understanding, and stewardship for this and other NPS areas by youth and educators alike.
- Provide professional development opportunities for educators in order to facilitate the above.
- Develop a park curriculum and education program that is aligned with and meets district, state, and national education standards and objectives.
- Create an education advisory network and build partnerships with other educational entities.
- Provide on- and off-site educational programming.
- Develop a park education facility to house and operate the program.
- Target traditionally underrepresented groups and develop programs to meet their needs.
- Incorporate other NPS educational strategies and efforts, regional and national scope, such as Connecting People to Parks, Natural Resources Challenge, NPS Education Strategy, etc. into the park education plan and program.
- Identify and fill education positions to meet increasing program demands.
- Assess needs and develop programs and products for children/families in the general visitation and "virtual" audiences. This could include Junior Ranger programs, family activities, children's programs, electronic and interactive media, and seasonal thematic programming.

- Develop pre-visit products for schools and other groups to ensure quality park experiences, resource protection, and safety.
- Work with the cooperating association in developing sales items for children and families.

With regard to the above, this plan recommends a significant expansion of the park's formal education programs for multiple age groups. There is great potential to foster stronger relationships with the education community throughout the region, which includes one of the largest metropolitan areas of the western United States. Computer technology also allows a worldwide audience to participate in elements of park education program, even though many students may never have the opportunity to visit in person.

The development of additional curriculum-based activities will be based in partnership with area educators who are most knowledgeable of school curricula and workload requirements. Other agencies and private entities have educational programs and materials that focus on the park and park resources and will continue to be enlisted as partners in coordinating efforts. In addition, the park will work closely with other NPS education specialists in the region.

Elements of the education program will be available through the park web page. Some materials would be free and could be downloaded by anyone. Other materials could be advertised for sale through the cooperating association.

## Partnerships

Implementation of many of the recommendations in this long-range interpretive plan will depend on the continuation of existing partnerships and the establishment of new ones. Some of these cooperative efforts have been discussed in other sections of this plan.

Partnerships are successful when all parties contribute and gain from the alliance, when all parties are involved in defining the goals and responsibilities of each participant, and when there is a continuous liaison among all participants.

For education and interpretation, these special arrangements can include coordinated efforts in providing information, orientation, training, research, special outreach programs, personal services activities, and media planning and development.

## RECOMMENDATIONS

The park staff will explore the potential of partnering with the USGS in Menlo Park, CA. There may be opportunities to share the use of existing exhibits, print material, and to develop new media. This partnership also could strengthen scientific research efforts in the park, and potentially lead to the monument's use as a "classroom" by area colleges and universities.

The potential to work closely with Dr. Weingand of Cal State Fullerton will be pursued. Dr. Weingand is very knowledgeable of the Neenach Formation in Lancaster, CA-the other half of the Pinnacles Volcano.

Creating an oral history program may involve partnering with area residents, former CCC employees, and others with knowledge of the early days of the monument. Assistance also may be obtained from area colleges and universities to conduct and transcribe the interviews. This will have near term value for activities associated with the monument's upcoming 100th anniversary, as well as long-term importance.

Area residents can be called upon to assist with staff training, and to become involved in setting up living history and/or costumed interpretive programs at the ranch.

Partnerships with area schools will be essential in expanding the education program.

Continuing partnerships with the Western National Parks Association and with the Friends of Pinnacles will remain critical to efficient park operations.

### **Museum Collection**

The monument has a substantial artifact, photograph, and paper collection that is uncatalogued and stored in random order in boxes in a dry, secure, but climatically uncontrolled building. Additional portions of the collection are in storage at other dispersed locations. It is the goal of the monument to consolidate its collection and get it inventoried and catalogued so that it becomes a usable resource. The park is currently working with BLM to co-locate offices in Hollister, which also will house the Pinnacles collections.

The inventory and cataloguing processes need to begin soon if the collection is to become a useful tool, and a historically correct park record. Interpretive media development for the new visitor centers (not to men-

tion the other media proposals in this document) will soon require photographic and other archival information.

As a result of these observations, Marylou Herlihy of the planning team, in consultation with others in the region, has proposed:

- Exploring alternatives for providing a curator on a temporary and/or permanent basis.
- Conducting an archival assessment of the collections.
- Organizing an on-site visit by curatorial specialists



## **SPECIAL POPULATIONS**

---

Provisions will be made to accommodate the needs of special populations who visit the Pinnacles National Monument. Special populations are identified as those with sight, hearing, learning, and mobility impairments; visitors who do not speak English; and, the elderly and young children.

Public Law 90-480, the Architectural Barriers Act, and the Americans with Disabilities Act of 1990 establish standards for physical access. Other regulations, laws, and standards include Section 504 of the Rehabilitation Act of 1973, Director's Orders No. 42, and Accessibility for Visitors with Disabilities in National Park Service Programs, Facilities, and Services. All newly constructed facilities, as a matter of course, will be designed for accessibility for physically disabled visitors and employees.

Accessibility standards also apply to new interpretive media. Appendix A contains the National Park Service, June 1999 Programmatic Accessibility Guidelines for Interpretive Media. These guidelines will be consulted by both monument staff and media contractors during the planning and design of any new interpretive media.

## STAFFING AND TRAINING

---

The staffing needs to implement the recommendations of this long-range interpretive plan will be flexible. Depending on the timing and level of implementation, each staffing element could be filled in a multitude of ways-volunteers, interns, employees from other agencies/institutions, etc. At a minimum, 3-6 new FTE's will be needed to support a basic program.

Training in interpretation and communication skills and related competencies, along with a sound knowledge of the monument's resources needs to be on-going. Interpreters, educators, and others who deal with the visiting public need to be kept abreast of current and planned activities, past and present research, and new technologies, not only as they relate to monument resources, but also regarding visitor studies, interpretive media, education, etc. By working across organizational and operational lines, and in concert with partners, effective and efficient ways to alert and/or involve staff in new or on-going projects and innovations can be explored.

The monument staff also will explore opportunities to offer training to others throughout the area who are engaged in information/orientation, interpretation, and education activities. Training could be offered through scheduled courses, workshops, informal meetings, etc. Other training could be offered through existing programs offered by local or regional institutions. Potential trainees could include area educators, volunteers, interagency staffs, and others throughout the region who deal with the visiting public.

## PROGRAM SUPPORT NEEDS

Some interpretive program support items and adequate space for support functions sometimes get omitted from landscape and facility designs. The following will serve as a partial checklist for interpretive support needs at the monument:

- Staff offices, especially in relocating staff from Bear Gulch to a new visitor center complex
- Library for staff and/or public use
- Storage for sales items
- Storage for free literature
- Period clothing storage for living history/costumed interpretation programs
- Storage for interpretive demonstration materials
- Storage for educational program materials
- Storage for changeable exhibits
- Storage and maintenance area for audiovisual equipment
- Exhibit preparation area (for traveling and in-house temporary exhibits)
- Training/meeting rooms
- Convenient rest rooms for visitors and staff
- Mail, message, break, and lunch areas for staff



## PRODUCTS

---

The following is a summary of the action items proposed in this long-range interpretive plan. Each of these recommendations is described in greater detail in the narrative sections of the plan. This list will help set annual and longer-term priorities, assign responsibilities, and develop cost estimates.

It must be emphasized that the following list deals specifically with actions related to media and programs related directly to information, orientation, interpretation, and education. Although new, restored, or renovated facilities are mentioned, actions related to these structures will need to be developed in greater detail during specific design and construction processes. Likewise, staffing needs to implement the plan recommendations are identified and addressed separately.

### RECOMMENDATIONS

#### Monument-wide

Review/amend wayside exhibit plan.

Update official park folder (ongoing).

Enhance/expand park web site (ongoing).

Review/revise site bulletin and self-guiding trail literature for design and content (ongoing).

Evaluate external directional sign system (coordinated by the maintenance division).

Evaluate internal directional sign system.

Establish an oral history program.

Conduct Scope of Sales study.

Expand curriculum-based education program.

Expand personal services interpretive programs-including living history and costumed interpretation.

Produce new audiovisual program for the monument.

## PRODUCTS

Produce children's and group orientation AV programs.

Add TDD system.

Create Spanish language options for phone tree.

Review/enhance information provided by external sources (ongoing).

Review/enhance information provided internally (ongoing).

Explore development of TIS radio broadcast system.

Upgrade museum collection and collection management (coordinated by resource management).

### **West Side Visitor Contact Station**

Develop interpretive and information exhibits for new facility-some to be placed outdoors.

Establish cooperating association sales area in the building.

Develop small outdoor s  
eating area.

Develop new self-guiding interpretive trail from the building.

Install information wayside exhibit with bulletin case.

### **East Side Visitor Center**

#### **Option 1**

Construct new visitor center on Pinnacles Ranch property (will require separate planning).

Develop interpretive and information exhibits for new facility.

Establish cooperating association sales area in the building.

Develop new self-guiding interpretive trail of ranch.

Install information wayside exhibit with bulletin case.

Relocate park headquarters to the new facility.

Design auditorium with projection booth and equipment.

Develop outdoor interpretive demonstration area.

### Option 2

Construct new visitor center inside existing boundary (will require separate planning).

Develop interpretive and information exhibits for new facility.

Establish cooperating association sales area in the building.

Install information wayside exhibit with bulletin case.

Relocate park headquarters to the new facility.

Design auditorium with projection booth and equipment.

Build new amphitheater near the center.

### Option 3

Redesign building interior.

Develop interpretive and information exhibits for existing structure-some to be placed outdoors.

Redesign cooperating association sales area.

Build new amphitheater near the center.

Bear Gulch (connected with Options 1 or 2)

Restore selected CCC era buildings (will require separate planning).

Conduct Historic Furnishings Study of one or more CCC era buildings.

Conduct exterior Historic Furnishings Study for site.

Develop interpretive exhibits-some possibly with AV components.

Create Artist/Researcher in Residence program.

# IMPLEMENTATION PRIORITIES

ACTIVITY/TASK	RESPONSIBLE PARTY	PRIORITY	POTENTIAL FUNDING SOURCE
<b>Monument-wide</b>			
Review/amend wayside exhibit plan	CHIEF RANGER	HIGH	FEE DEMONSTRATION
Update official park folder (ongoing).	OPERATIONS SUPERVISOR	HIGH	HFC
Enhance/expand park web site (ongoing)	PINN WEBMASTER	HIGH	ONPS
Review/revise site bulletin and self-guiding trail literature for design and content	OPERATIONS SUPERVISOR	HIGH	ONPS/FEE DEMO
Evaluate external directional sign system	CHIEF RANGER/OPS SUPV	MEDIUM	ONPS
Evaluate internal directional sign system	CHIEF RANGER/OPS SUPV	HIGH	ONPS/FEE DEMO
Expand oral history program	SUPERINTENDENT/RM SPEC	HIGH	ONPS/FEE DEMO
Conduct Scope of Sales study	OPERATIONS SUPERVISOR	MEDIUM	WNPA-COOP. ASSOC.
Expand curriculum-based education program.	OPERATIONS SUPERVISOR	HIGH	ONPS-OFS
Expand personal services interpretive programs — including living history and costumed interpretation	OPERATIONS SUPERVISOR	HIGH	ONPS-OFS
Produce new audiovisual program for the monument	CHIEF RANGER	LOW	HFC/FEE DEMO
Produce children's and group orientation AV programs	CHIEF RANGER	LOW	HFC/FEE DEMO
Redirect handling of phone and mail requests from the visitor center desk operation	OPERATIONS SUPERVISOR	LOW	ONPS
Add TDD system	CHIEF RANGER	LOW	FEE DEMONSTRATION
Explore addition of Spanish language options for phone tree	OPERATIONS SUPERVISOR	MEDIUM	ONPS

Review/enhance information provided by external sources (ongoing).	OPERATIONS SUPERVISOR	MEDIUM	ONPS
Review/enhance information provided internally (ongoing)	OPERATIONS SUPERVISOR	HIGH	ONPS
Explore development of TIS radio broadcast system	CHIEF RANGER	LOW	FEE DEMONSTRATION
Upgrade museum collection and collection management	CHIEF - RESOURCES	MEDIUM	FEE DEMONSTRATION
<b>Westside VC</b>			
Develop interpretive and information exhibits for new facility—some to be placed outdoors	CHIEF RANGER	HIGH	MAJOR CONSTRUCTION
Establish cooperating association sales area in the building	CHIEF RANGER	HIGH	MAJOR CONSTRUCTION
Develop small outdoor seating area	CHIEF RANGER	HIGH	MAJOR CONSTRUCTION
Develop new self-guiding interpretive trail from the building	CHIEF RANGER	MEDIUM	FEE DEMONSTRATION
Install information wayside exhibit with bulletin case	CHIEF RANGER	HIGH	MAJOR CONSTRUCTION
<b>Option 1</b>			
Construct new visitor center on Pinnacles Ranch property (will require separate planning)	SUPERINTENDENT	HIGH	MAJOR CONSTRUCTION
Develop interpretive and information exhibits for new facility	CHIEF RANGER	HIGH	MAJOR CONSTRUCTION
Establish cooperating association sales area in the building	CHIEF RANGER	HIGH	MAJOR CONSTRUCTION

Install information wayside exhibit with bulletin case	OPERATIONS CHIEF	MEDIUM	FEE DEMONSTRATION
Relocate park headquarters to the new facility	SUPERINTENDENT/CHIEF RANGER	LOW	ONPS
Design auditorium with projection booth and equipment	CHIEF RANGER/OPERATIONS SUPV.	HIGH	MAJOR CONSTRUCTION
Develop outdoor interpretive demonstration area	CHIEF RANGER/OPERATIONS SUPV.	LOW	MAJOR CONSTRUCTION



## **PLANNING TEAM AND CONSULTANTS**

---

### **Pinnacles National Monument**

Steve Shackelton, Former Superintendent  
Cicely Muldoon, Current Superintendent  
Jerry Case, Chief Park Ranger  
Richard Bañuelos, Interpretive Operations Supervisor  
Larry Whalon, Former Resource Manager  
Tom Leatherman, Current Resource Manager  
Ken Hutchison, Former Chief of Maintenance  
Debbie Simmons, Current Chief of Maintenance  
Leticia Ruiz, Chief of Administration  
Amy Fesnock, Wildlife Biologist  
Peter Szydowski, Park Ranger  
Charles Ewing, Park Ranger, Interpretation  
Carl Brenner, Park Ranger, Education Specialist  
Bea Lujan, Park Ranger  
Neal Labrie, Protection Operations Supervisor

### **Pacific West Regional Office**

Marylou Herlihy, Exhibit Specialist

### **Harpers Ferry Center**

Paul Lee, Interpretive Planner

## APPENDIX A

---

# Special Populations: Programmatic Accessibility Guidelines for Interpretive Media

National Park Service  
Harpers Ferry Center

June 1999

Prepared by  
Harpers Ferry Center  
Accessibility Task Force

Contents  
Statement of Purpose  
Audiovisual Programs  
Exhibits  
Historic Furnishings  
Publications  
Wayside Exhibits

## STATEMENT OF PURPOSE

This document is a guide for promoting full access to interpretive media to ensure that people with physical and mental disabilities have access to the same information necessary for safe and meaningful visits to National Parks. Just as the needs and abilities of individuals cannot be reduced to simple statements, it is impossible to construct guidelines for interpretive media that can apply to every situation in the National Park System.

These guidelines define a high level of programmatic access which can be met in most situations. They articulate key areas of concern and note generally accepted solutions. Due to the diversity of park resources and the variety of interpretive situations, flexibility and versatility are important.

Each interpretive medium contributes to the total park program. All media have inherent strengths and weaknesses, and it is our intent to capitalize on their strengths and provide alternatives where they are deficient. It should also be understood that any interpretive medium is just one component of the overall park experience. In some instances, especially with regard to learning disabilities, personal services, that is one-on-one interaction, may be the most appropriate and versatile interpretive approach.

In the final analysis, interpretive design is subjective, and dependent on aesthetic considerations as well as the particular characteristics and resources available for a specific program. Success or failure should be evaluated by examining all interpretive offerings of a park. Due to the unique characteristics of each situation, parks should be evaluated on a case by case basis. Nonetheless, the goal is to fully comply with NPS policy:

**"...To provide the highest level of accessibility possible and feasible for persons with visual, hearing, mobility, and mental impairments, consistent with the obligation to conserve park resources and preserve the quality of the park experience for everyone."**

NPS Special Directive 83-3, Accessibility for Disabled Persons

### **Audiovisual Programs**

Audiovisual programs include video programs, and audio and interactive programs. As a matter of policy, all audiovisual programs produced by the Harpers Ferry Center will include some method of captioning. The Approach used will vary according to the conditions of the installation area and the media format used, and will be selected in consultation with the parks and regions.

The captioning method will be identified as early as possible in the planning process and will be presented in an integrated setting where possible. To the extent possible, visitors will be offered a choice in viewing captioned or uncaptioned versions, but in situations where a choice is not possible or feasible, a captioned version of all programs will be made available. Park management will decide on the most appropriate operational approach for the particular site.

### **Guidelines Affecting Visitors with Mobility Impairments**

1. The theater, auditorium, or viewing area should be accessible and free of architectural barriers, or alternative accommodations will be provided. UFAS 4.1.
2. Wheelchair locations will be provided according to ratios outlined in UFAS 4.1.2(18a).
3. Viewing heights and angles will be favorable for those in designated wheelchair locations.
4. In designing video or interactive components, control mechanisms will be placed in accessible location, usually between 9" and 48" from the ground and no more than 24" deep.

### **Guidelines Affecting Visitors with Visual Impairments**

Simultaneous audio description will be considered for installations where the equipment can be properly installed and maintained.

### **Guidelines Affecting Visitors with Hearing Impairments**

1. All audiovisual programs will be produced with appropriate captions.
2. Copies of scripts will be provided to the parks as a standard procedure.
3. Audio amplification and listening systems will be provided in accordance with UFAS 4.1.2(18b).

### **Guidelines Affecting Visitors with Learning Impairments**

1. Unnecessarily complex and confusing concepts will be avoided.
2. Graphic elements will be chosen to communicate without reliance on the verbal component.

3. Narration will be concise and free of unnecessary jargon and technical information.

### **Exhibits**

Numerous factors affect the design of exhibits, reflecting the unique circumstances of the specific space and the nature of the materials to be interpreted. It is clear that thoughtful, sensitive design can go a long way in producing exhibits that can be enjoyed by a broad range of people. Yet, due to the diversity of situations encountered, it is impossible to articulate guidelines that can be applied universally.

In some situations, the exhibit designer has little or no control over the space. Often exhibits are placed in areas ill suited for that purpose, they may incorporate large or unyielding specimens, may incorporate sensitive artifacts which require special environmental controls, and room decor or architectural features may dictate certain solutions. All in all, exhibit design is an art which defies simple description. However, one central concern is to communicate the message to the largest audience possible. Every reasonable effort will be made to eliminate any factors limiting communication through physical modification or by providing an alternate means of communication.

### **Guidelines Affecting Visitors with Mobility Impairments**

Note: The **Americans with Disabilities Act Accessibility Guidelines (ADAAG)** is the standard followed by the National Park Service and is therefore the basis for the accessibility standards for exhibits, where applicable.

1. Height/position of labels: Body copy on vertical exhibit walls should be placed at between 36" and 60" from the floor.
2. Artifact Cases:
  - a. Maximum height of floor of artifact case display area shall be no higher than 30" from the floor of the room. This includes vitrines that are recessed into an exhibit wall.
  - b. Artifact labels should be placed so as to be visible to a person within a 43" to 51" eye level. This includes mounting labels within the case at an angle to maximize its visibility to all viewers.
3. Touchable Exhibits: Touchable exhibits positioned horizontally should be placed no higher than 30" from the floor. Also, if the exhibit is approachable only on one side, it should be no deeper than 31".
4. Railings/barriers: Railings around any horizontal model or exhibit element shall have a maximum height of 36" from the floor.
5. Information desks: Information desks and sales counters shall include a section made to accommodate both a visitor in a wheelchair

of the desk/counter shall have the following dimensions:

- a. Height from the floor to the top: **28 to 34 inches.** (ADAAG 4.32.4)
- b. Minimum knee clearance space: **27" high, 30" wide and 19" deep** of clearance underneath the desk is the minimum space required under ADAAG 4.32.3, but a space **30" high, 36" wide and 24" deep** is recommended.
- c. Width of top surface of section: at least **36 inches.** Additional space must be provided for any equipment such as a cash register.
- d. Area underneath desk: Since both sides of the desk may have to accommodate a wheelchair, this area should be open all the way through to the other side. In addition, there should be no sharp or abrasive surfaces underneath the desk. The floor space behind the counter shall be free of obstructions.

6. Circulation Space:

- a. Passageways through exhibits shall be at least **36" wide.**
- b. If an exhibit passageway reaches a dead-end, an area **60" by 78"** should be provided at the end for turning around.
- c. Objects projecting from walls with their leading edges between **27" and 80"** above the floor shall protrude no more than **4"** in passageways or aisles. Objects projecting from walls with their leading edges at or below **27"** above the floor can protrude any amount.
- d. Freestanding objects mounted on posts or pylons may overhang a maximum of **12"** from **27" to 80"** above the floor. (ADAAG 4.4.1)
- e. Protruding objects shall not reduce the clear width of an accessible route to less than the minimum required amount. (ADAAG 4.4.1)
- f. Passageways or other circulation spaces shall have a minimum clear head room of **80"**. For example, signage hanging from the ceiling must have at least **80"** from the floor to the bottom edge of the sign. (ADAAG 4.4.2)

7. Floors:

- a. Floors and ramps shall be stable, level, firm and slip-resistant.
- b. Changes in level between **1/4"** and **1/2"** shall be beveled with a slope no greater than **1:2**. Changes in level greater than **1/2"** shall be accomplished by means of a ramp that complies with ADAAG 4.7 or 4.8. (ADAAG 4.5.2)
- c. Carpet in exhibit areas shall comply with ADAAG 4.5.3 for pile height, texture, pad thickness, and trim.

8. Seating - Interactive Stations/Work Areas: The minimum knee space underneath a work desk is **27" high, 30" wide and 19" deep**, with a clear floor space of at least **30" by 30"** in front. The top of the desk or work surface shall be between **28" and 34"** from the floor. (ADAAG 4.32, Fig.45)

### Guidelines Affecting Visitors with Visual Impairments

1. Tactile models and other touchable exhibit items should be used whenever possible. Examples of touchable exhibit elements include relief maps, scale models, raised images of simple graphics, reproduction objects, and replaceable objects (such as natural history or geological specimens, cultural history items, etc.).
2. Typography - Readability of exhibit labels by visitors with various degrees of visual impairment shall be maximized by using the following guidelines:
  - a. Type size - No type in the exhibit shall be smaller than **24 point**.
  - b. Typeface - The most readable typefaces should be used whenever possible, particularly for body copy. They are: Times Roman, Palatino, Century, Helvetica and Universe.
  - c. Styles, Spacing - Text set in both caps and lower case is easier to read than all caps. Choose letter spacing and word spacing for maximum readability. Avoid too much italic type.
  - d. Line Length - Limit the line length for body copy to no more than **45 to 50 characters per line**.
  - e. Amount of Text - Each unit of body copy should have a maximum of **45-60 words**.
  - f. Margins - Flush left, ragged right margins are easiest to read.
3. Color:
  - a. Type/Background Contrast - Percentage of contrast between the type and the background should be a **minimum of 70%**.
  - b. Red/Green - Do not use red on green or green on red as the type/background color combination.
  - c. Do not place body copy on top of graphic images that impair readability.
4. Samples: During the design process, it is recommended that samples be made for review of all size, typeface and color combinations for labels in that exhibit.
5. Exhibit Lighting:
  - a. All labels shall receive sufficient, even light for good readability.

Exhibit text in areas where light levels have been reduced for conservation purposes should have a minimum of 10 footcandles of illumination.

- b. Harsh reflections and glare should be avoided.
  - c. The lighting system shall be flexible enough to allow adjustments on-site.
  - d. Transitions between the floor and walls, columns or other structures should be made clearly visible. Finishes for vertical surfaces should contrast clearly with the floor finish. Floor circulation routes should have a minimum of 10 footcandles of illumination.
6. Signage: When permanent building signage is required as a part of an exhibit project, the ADAAG guidelines shall be consulted. Signs, which designate permanent rooms and spaces, shall comply with ADAAG 4.30.1, 4.30.4, 4.30.5, and 4.30.6. Other signs, which provide direction to or information about functional spaces of the building, shall comply with ADAAG 4.30.1, 4.30.2, 4.30.3, and 4.30.5. Note: When the International Symbol of Accessibility (wheelchair symbol) is used, the word "Handicapped" shall not be used beneath the symbol. Instead, use the word "Accessible".

#### **Guidelines Affecting Visitors with Hearing Impairments**

1. Information presented via audio formats will be duplicated in a visual medium, such as in the exhibit label copy or by captioning. All video programs incorporated into the exhibit, which contain audio, shall be open captioned.
2. Amplification systems and volume controls should be incorporated with audio equipment used individually by the visitor, such as audio handsets.
3. Information desks shall allow for Telecommunication Devices for the Deaf (TDD) equipment.

#### **Guidelines Affecting Visitors with Learning Impairments**

1. The exhibits will present the main interpretive themes on a variety of levels of complexity, so people with varying abilities and interests can understand them.
2. The exhibits should avoid unnecessarily complex and confusing topics, technical terms, and unfamiliar expressions. Pronunciation aids should be provided where appropriate.
3. Graphic elements shall be used to communicate non-verbally.

4. The exhibits shall be a multi-sensory experience. Techniques to maximize the number of senses used in the exhibits should be encouraged.
5. Exhibit design shall use color and other creative approaches to facilitate comprehension of maps by visitors with directional impairments.

### **Historic Furnishings**

Historically refurnished rooms offer the public a unique interpretive experience by placing visitors within historic spaces. Surrounded by historic artifacts visitors can feel the spaces "come alive" and relate more directly to the historic events or personalities commemorated by the park.

Accessibility is problematical in many NPS furnished sites because of the very nature of historic architecture. Buildings were erected with a functional point of view that is many times at odds with our modern views of accessibility.

The approach used to convey the experience of historically furnished spaces will vary from site to site. The goals, however, will remain the same, to give the public as rich an interpretive experience as possible given the nature of the structure.

### **Guidelines Affecting Visitors with Mobility Impairments**

1. The exhibit space should be free of architectural barriers or a method of alternate accommodation should be provided, such as slide programs, videotaped tours, visual aids, dioramas, etc.
2. All pathways, aisles, and clearances shall (when possible) meet standards set forth in UFAS 4.3 to provide adequate clearance for wheelchair routes.
3. Ramps shall be as gradual as possible and not exceed a 1" rise in 12" run, and conform to UFAS 4.8.
4. Railings and room barriers will be constructed in such a way as to provide unobstructed viewing by persons in wheelchairs.
5. In the planning and design process, furnishing inaccessible areas, such as upper floors of historic buildings, will be discouraged unless essential for interpretation.
6. Lighting will be designed to reduce glare or reflections when viewed from a wheelchair.
7. Alternative methods of interpretation, such as audiovisual programs, audio description, photo albums, and personal services will be used

in areas which present difficulty for visitors with physical impairments.

### **Guidelines Affecting Visitors with Visual Impairments**

1. Exhibit typefaces will be selected for readability and legibility, and conform to good industry practice.
2. Audio description will be used to describe furnished rooms, where appropriate.
3. Windows will be treated with film to provide balanced light levels and minimize glare.
4. Where appropriate, visitor-controlled rheostat-type lighting will be provided to augment general room lighting.
5. Where appropriate and when proper clearance has been approved, surplus artifacts or reproductions will be utilized as "hands-on" tactile interpretive devices.

### **Guidelines Affecting Visitors with Hearing Impairments**

1. Information about room interiors will be presented in a visual medium such as exhibit copy, text, pamphlets, etc.
2. Captions will be provided for all AV programs relating to historic furnishings.

### **Guidelines Affecting the Visitors with Learning Impairments**

1. Where appropriate, hands-on participatory elements geared to the level of visitor capabilities will be used.
2. Living history activities and demonstrations, which utilize the physical space as a method of providing multi-sensory experiences, will be encouraged.

### **Publications**

A variety of publications are offered to visitors, ranging from park folders, which provide an overview and orientation to a park, to more comprehensive handbooks. Each park folder should give a brief description of services available to visitors with disabilities, list significant barriers, and note the existence of TDD phone numbers, if available.

In addition, informal site bulletins are often produced to provide more specialized information about a specific site or topic. It is recommended that each park produce an easily updatable "Accessibility Site Bulletin" which could include detailed information about the specific programs, services, and opportunities available for visitors with disabilities and to describe barriers which are present in the park. A template for this site bulletin will be on the Division of Publications website for

parks to create with ease, a consistent look throughout the park service. These bulletins should be in large type, 16 points minimum and follow the large-print criteria below.

#### **Guidelines Affecting Visitors with Mobility Impairments**

1. Park folders, site bulletins, and sales literature will be distributed from accessible locations and heights.
2. Park folders and Accessibility Site Bulletins should endeavor to carry information on the accessibility of buildings, trails, and programs by visitors with disabilities.

#### **Guidelines Affecting Visitors with Visual Impairments**

##### 1. Publications for the general public:

###### a. Text

- (1) Size: the largest type size appropriate for the format.  
(preferred main body of text should be 10pt)
- (2) Leading should be at least 20% greater than the font size used.
- (3) Proportional letterspacing
- (4) Main body of text set in caps and lower case.
- (5) Margins are flush left and ragged right
- (6) Little or no hyphenation is used at ends of lines.
- (7) Ink coverage is dense
- (8) Underlining does not connect with the letters being underlined.
- (9) Contrast of typeface and illustrations to background is high  
(70% contrast is recommended)
- (10) Photographs have a wide range of gray scale variation.
- (11) Line drawings or floor plans are clear and bold, with limited detail and minimum 8 pt type.
- (12) No extreme extended or compressed typefaces are used for main text.
- (13) Reversal type should be minimum of 11 point medium or bold sans-serif type.

###### b. The paper:

- (1) Surface preferred is a matte finish. Dull-coated stock is acceptable.

- (2) Has sufficient weight to avoid "show-through" on pages printed on both sides.

2. Large-print version publications:

a. Text

- (1) Size: minimum 16 point type.
- (2) Leading is 16 on 20pt.
- (3) Proportional letterspacing
- (4) Main body of text set in caps and lower case.
- (5) Margins are flush left and ragged right.
- (6) Little or no hyphenation is used at ends of lines.
- (7) Ink coverage is dense.
- (8) Underlining does not connect with the letters being underlined.
- (9) Contrast of typeface and illustrations to background is high (70% contrast is recommended)
- (10) Photographs have a wide range of gray scale variation.
- (11) Line drawings or floor plans are clear and bold, with limited detail and minimum 14 pt type.
- (12) No extreme extended or compressed typefaces are used for main text.
- (13) Sans-serif or simple-serif typeface
- (14) No oblique or italic typefaces
- (15) Maximum of 50 characters (average) per line.
- (16) No type is printed over other designs.
- (17) Document has a flexible binding, preferably one that allows the publication to lie flat.
- (18) Gutter margins are a minimum of 22mm; outside margin smaller but not less than 13mm.

b. Paper:

- (1) Surface is off-white or natural with matte finish.
- (2) Has sufficient weight to avoid "show-through" on pages printed on both sides.

3. Maps:

- a. The less clutter the map, the more visitors that can use it.

- b. The ultimate is one map that is large-print and tactile.
  - c. Raised line/tactile maps are something that could be developed in future, using our present digital files and a thermaform machine. Lines are distinguished by lineweight, color and height. Areas are distinguished by color, height, and texture.
  - d. The digital maps are on an accessible web site.
  - e. Same paper guides as above.
  - f. Contrast of typeface background is high. (70% contrast is recommended)
  - g. Proportional letterspacing
  - h. Labels set in caps and lower case
  - i. Map notes are flush left and ragged right.
  - j. Little or no hyphenation is used as ends of lines.
  - k. No extreme extended or compressed typefaces are used for main text.
  - l. Sans-serif or simple-serif typeface.
4. The text contained in the park folder should also be available on audiocassette, CD and accessible web site. Handbooks, accessibility guides, and other publications should be similarly recorded where possible.
  5. The official park publication is available in a word processing format. This could be translated into Braille as needed.

#### **Guidelines Affecting Visitors with Hearing Impairments**

Park site bulletins will note the availability of such special services as sign language interpretation and captioned programs.

#### **Guidelines Affecting Visitors with Learning Impairments**

1. The park site bulletin should list any special services available to these visitors.
2. Publications:
  - a. Use language that appropriately describes persons with disabilities.
  - b. Topics will be specific and of general interest. Unnecessary complexity will be avoided.
  - c. Whenever possible, easy to understand graphics will be used to convey ideas, rather than text alone.
  - d. Unfamiliar expressions, technical terms, and jargon will be

avoided. Pronunciation aids and definitions will be provided where needed.

- e. Text will be concise and free of long paragraphs and wordy language.

### **Wayside Exhibits**

Wayside exhibits, which include outdoor interpretive exhibits and signs, orientation shelter exhibits, trailhead exhibits, and bulletin boards, offer special advantages to visitors with disabilities. The liberal use of photographs, artwork, diagrams, and maps, combined with highly readable type, make wayside exhibits an excellent medium for visitors with hearing and learning impairments. For visitors with sight impairments, waysides offer large type and high legibility.

Although a limited number of NPS wayside exhibits will always be inaccessible to visitors with mobility impairments, the great majority are placed at accessible pullouts, viewpoints, parking areas, and trailheads.

The NPS accessibility guidelines for wayside exhibits help insure a standard of quality that will be appreciated by all visitors. Nearly everyone benefits from high quality graphics, readable type, comfortable base designs, accessible locations, hard-surfaced exhibit pads, and well-landscaped exhibit sites.

While waysides are valuable on-site "interpreters," it should be remembered that the park resources themselves are the primary things visitors come to experience. Good waysides focus attention on the features they interpret, and not on themselves. A wayside exhibit is only one of the many interpretive tools which visitors can use to enhance their appreciation of a park.

### **Guidelines Affecting Visitors with Mobility Impairments**

1. Wayside exhibits will be installed at accessible locations whenever possible.
2. Wayside exhibits will be installed at heights and angles favorable for viewing by most visitors including those in wheelchairs. For standard NPS low-profile units the recommended height is 30 inches from the bottom edge of the exhibit panel to the finished grade; for vertical exhibits the height of 6-28 inches.
3. Trailhead exhibits will include information on trail conditions which affect accessibility.
4. Wayside exhibit sites will have level, hard surfaced exhibit pads.
5. Exhibit sites will offer clear, unrestricted views of park features described in exhibits.

**Guidelines Affecting Visitors with Visual Impairments**

1. Exhibit type will be as legible and readable as possible.
2. Panel colors will be selected to reduce eyestrain and glare, and to provide excellent readability under field conditions. White should not be used as a background color.
3. Selected wayside exhibits may incorporate audio stations or tactile elements such as models, texture blocks, and relief maps.
4. For all major features interpreted by wayside exhibits, the park should offer non-visual interpretation covering the same subject matter. Examples include cassette tape tours, radio messages, and ranger talks.
5. Appropriate tactile cues should be provided to help visually impaired visitors locate exhibits.

**Guidelines Affecting Visitors with Hearing Impairments**

1. Wayside exhibits will communicate visually, and will rely heavily on graphics to interpret park resources.
2. Essential information included in audio station messages will be duplicated in written form, either as part of the exhibit text or with printed material.

**Guidelines Affecting Visitors with Learning Impairments**

1. Topics for wayside exhibits will be specific and of general interest. Unnecessary complexity will be avoided.
2. Whenever possible, easy to understand graphics will be used to convey ideas, rather than text alone.
3. Unfamiliar expressions, technical terms, and jargon will be avoided. Pronunciation aids and definitions will be provided where needed.
4. Text will be concise and free of long paragraphs and wordy language.

**Table of Media/Program/Theme Relationships**

Each of the six primary interpretive themes is represented in the following charts. The primary theme statement appears in the upper left-hand column. The supporting (sub-theme) statements are listed below. The various types of interpretive media and programs are listed along the top of the charts. An "X" indicates what interpretive media the planning team felt would best communicate each theme component. The charts are intended only as suggestions and should in no way limit the possibilities.

	A/V	Exhibits	Pers. Serv.	Publications	Waysides	Digital Media	Other	Notes
<b>The pinnacles are the remnant of an ancient volcano that was split by the movement of two continental plates, and now lies about 195 miles north of its origin.</b>								
The nature of continental plates and the mechanisms of plate tectonics.	x	x	x	x	x	x		
The concept of geologic time.		x	x	x	x	x		
The various rock types found in the park, most of which are remnants of ash and lava flows rather than the volcano's core.		x	x	x	x	x		
Evidence supporting the "birthplace" of the park 195 miles to the south.	x		x	x	x	x		
Earthquakes and the nature, extent, and influence of the San Andreas, Pinnacles, and Chalone faults.	x							
Volcanoes and how they operate.	x		x	x				
The amorphous shape of the Pinnacles volcano with its five vents.	x		x	x	x	x		
The concept and examples of "differential erosion."	x		x	x	x	x		
That the park played a significant role in helping to prove the plate tectonics theory.	x	x	x	x		x		
Connections with the Pacific Rim's "ring of fire."		x	x	x		x		
Other (non-scientific) perspectives on the origin and formation of the Pinnacles landscape.	x		x	x		x		

<b>The pinnacles contain some of the best examples of talus caves, a rare cave form resulting from boulder pilings, in the United States.</b>	<b>A/V</b>	<b>Exhibits</b>	<b>Pers. Serv.</b>	<b>Publications</b>	<b>Waysides</b>	<b>Digital Media</b>	<b>Other</b>	<b>Notes</b>
The different ways that caves form.	x	x	x	x	x	x		
Differences between talus caves and other cave types.	x	x	x	x	x	x		
Characteristics of the different species that live in these caves.	x	x	x	x		x		
Past and present research projects (i.e. mineral deposits, entomology, bats, etc.).	x	x	x	x	x	x		
Past and current resource conservation efforts related to the caves.			x	x	x	x		
Historic use of the caves as a hideout for people like Tiburcio Vasquez.	x		x	x		x		
Trail construction by the CCC through the caves (which included carved steps and lighting).	x	x	x	x		x		
Changes in techniques for developing caves for public access and use.	x	x	x	x	x	x		
Total darkness.			x			x		
Qualities of the talus cave environment.		x	x	x	x	x		

<b>The pinnacles are a refuge for a diversity of plants and animals tied to a complex of habitats and four well-defined biological communities.</b>	<b>A/V</b>	<b>Exhibits</b>	<b>Pers. Serv.</b>	<b>Publications</b>	<b>Waysides</b>	<b>Digital Media</b>	<b>Other</b>	<b>Notes</b>
The adaptations of various species to the hot and dry environment (focus species may include bats, raptors, condors, turkey vultures, etc.)		X	X	X	X	X		
The significant qualities & variations between/among chaparral, riparian, rock - scree, & woodland -savanna communities.		X	X	X		X		
Impacts of exotic species and the necessity for physically removing some species.		X	X	X		X		
The importance of fire in the ecosystem and the periodic need for prescribed burns.		X	X	X	X	X		
Other resource management practices, including those that sometimes require the closure of certain areas of the park.		X	X	X		X		
The importance of past and ongoing research in guiding the management of park resources.		X	X	X		X		
The importance of good air quality to the overall management of the park's natural resources.		X	X	X		X		
The qualities and importance of the small "micro-worlds" of Pinnacles.		X	X	X		X		
The importance and impacts of floods.		X	X	X		X		

<b>In an area of intense and increasing urban development, Pinnacles National Monument maintains and preserves an island of relatively pristine Central California coastal region wilderness.</b>	<b>A/V</b>	<b>Exhibits</b>	<b>Pers. Serv.</b>	<b>Publications</b>	<b>Waysides</b>	<b>Digital Media</b>	<b>Other</b>	<b>Notes</b>
The elements that qualify an area for wilderness designation.			X	X		X		
Specific elements of the Pinnacles Wilderness (i.e. natural quiet, dark night skies, viewsheds, excellent water quality, lack of signs, opportunities for solitude, etc.).	X	X	X	X	X	X		
The value of a wilderness area so close to large metropolitan areas.	X		X	X			X	Personal visitor experience
The challenges of preserving a wilderness area so close to large population centers.	X	X	X	X	X	X		
The importance of minimal impact (leaving no trace) in experiencing wilderness areas.	X		X	X		X		
Experiencing wilderness only by meeting the land of its terms.	X		X	X		X		
The contrast of wilderness areas to the surrounding landscapes.	X		X	X		X		
The concepts of "untrammled" and "unfettered."	X		X	X		X		

The pinnacles are a dynamic landscape, continually affected by the natural processes of fire, erosion, flooding, and plate tectonics.	A/V	Exhibits	Pers. Serv.	Publications	Waysides	Digital Media	Other	Notes
The concept that many events termed "disasters" by human standards are in reality natural occurrences.	x		x	x	x	x		
The cyclic dependence of certain species on fire.	x	x	x	x	x	x		
Management policies toward the use and control of fire in the park.	x	x	x	x	x	x		
The effects of flooding on park resources, infrastructure, and visitation.	x		x	x	x	x	x	Chalone Creek & YCC rest. waysides
The dependence of some species on periodic flooding.			x	x	x	x	x	Chalone Creek & YCC rest. waysides
The role of flooding in defining the landscape and contributing to the dynamic qualities of stream channels.	x		x	x	x	x	x	Chalone Creek & YCC rest. waysides
The process of erosion and its effects on the landscape.	x		x	x	x	x		
The marked contrast of Pinnacles to the surrounding area.	x		x	x	x	x		
The concept and processes of plate tectonics (including the activities of subduction, strike/slip movements, & thrust faults.	x		x	x		x		

<b>The Pinnacles landscape and resources reflect influences of a succession of people with differing worldviews, life ways, &amp; technologies.</b>	<b>A/V</b>	<b>Exhibits</b>	<b>Pers. Serv.</b>	<b>Publications</b>	<b>Waysides</b>	<b>Digital Media</b>	<b>Other</b>	<b>Notes</b>
The harmonious connections and uses of the land by various American Indian peoples.	x	x	x	x		x		Coop. Assn. Publications
Accounts of the Spanish explorers who came through the area.	x	x	x	x		x		Coop. Assn. publications
The role of the Spanish missionaries in the area and their use of Pinnacles resources for perceived health benefits.	x	x	x	x		x		Coop. Assn. Publications
Impacts of the introduction of domestic livestock and non -native plants to the region.		x	x		x	x	x	Coord. w/ RRM-VIP projects- Education programs
Impacts of early mining efforts.	x	x	x	x		x	x	
The development of ranching and the role of local ranchers in helping to preserve PINN.	x	x	x	x	x	x		Living hist. demos. at new ranch site
The fact that descendants of many of the early peoples who settled in the Pinnacles area are still here today.		x	x	x		x		Dev. of 100 yr. history book on PINN
The contributions of Schuyler Hain, Dr. David Starr Jordan, and others (Pres. T. Roosevelt) in influencing the creation of Pinnacles Ntl. Monument.			x	x		x		Dev. of 100 yr. history book on PINN
The role of the Civilian Conservation Corps in the early development of the national monument.		x	x	x	x	x		
The role the NPS has had in protecting the site's resources while providing opportunities for public use and enjoyment.	x		x	x		x		Dev. of 100 yr. history book on PINN
Impacts from today's population pressures.			x			x		
The perspectives of different cultures toward meanings & values in the park's resources.	x	x	x	x	x	x		Cultural events at park
The role that PINN played in the early history of rock climbing	x		x	x		x		