Attachment 1: Management Zones and Selected Alternative Map

ZONES	PRIMITIVE	SEMI-PRIMITIVE	FRONTCOUNTRY	CULTURAL INTERPRETATION	SPECIAL RESEARCH
Zone Concept Summary	This zone is managed primarily to preserve the four qualities of wilderness character; untrammeled, naturalness, undeveloped, and solitude or primitive, unconfined recreation. Natural resources are in as pristine a condition as possible, and are minimally modified only for wilderness visitor use and resource protection. Significant cultural resources are protected and managed according to NPS policy consistent with wilderness values. Visitors are immersed in a primitive (undeveloped) and wild environment and experience solitude, natural sounds, a sense of remoteness, self-reliance and discovery. Development is very minimal in this zone and only allowed in support of wilderness values such as resource protection. Visitors access this zone on primitive natural surface trails.	This zone represents a transition between the frontcountry and primitive areas. In designated wilderness, this zone is managed, like the Primitive Zone, to preserve the four qualities of wilderness character, but can accommodate periodic high visitor use with limited improvements for essential visitor services and park operation needs. Natural resources retain their integrity and wild character, but may be minimally modified for visitor use and resource protection to protect naturalness. Significant cultural resources are protected and managed according to NPS policy. Interpretive services and recreational access are important functions of this zone. Visitors also have opportunities to experience solitude, natural sounds, a sense of remoteness, self-reliance and discovery. Development is minimal in this zone. Visitors access this zone on natural surface trails.	This zone is managed for visitor access, education, recreation, and orientation as well as park operations. Natural resources are protected, but may be modified in less sensitive locations for visitor use, park operations or administrative use. Significant cultural resources are protected and managed according to NPS policy. Modifications of other cultural resources for visitor use, administrative purposes, safety, and resource protection may occur where compatible with the historic character. This zone provides capacity for a large number of visitors and serves as an access point for park experiences. Visitors are provided with opportunities for orientation, education, interpretation, and a wide range of visitor activities. Development includes a diversity of facilities to support park operations and visitor use, mixed with open space and natural settings. Visitors access this zone on paved and unpaved roads, and on natural surface and paved trails designed for universal access where possible	This zone is focused on the preservation, protection, and interpretation of historically significant cultural resources. Visitors are provided opportunities to learn about and experience these cultural resources. Natural resources are protected, but may be modified in appropriate locations to support important cultural resources and their interpretation. Significant cultural resources are protected and managed according to NPS policy. Cultural sites, structures, and landscapes are managed to reflect and interpret their period of significance. Cultural preservation and interpretation of human time periods and cultural themes are the primary focus of this zone. Visitors experience sights, sounds, and activities that are evocative of the site's period(s) of significance. Development in this zone consists primarily of historic structures and additional facilities necessary for adaptive reuse or public	This zone is managed to protect and promote research that improves the survival of the federally endangered California condor, and to provide areas for undisturbed research. Protection of this special resource takes precedence over visitor accommodations and access is highly controlled. Natural resources are protected, but may be modified in less sensitive locations to support condor research and protection activities. Significant cultural resources, if present in this zone, are protected and managed according to NPS policy. Modifications of cultural resources for research and resource protection may occur. Visitor use and access are highly controlled. Access is allowed at management discretion, if not disruptive to research or protection activities. Development levels are fairly minimal and consist

ZONES	PRIMITIVE	SEMI-PRIMITIVE	FRONTCOUNTRY	CULTURAL INTERPRETATION	SPECIAL RESEARCH
				enjoyment. Visitors access this zone on natural surface and paved trails.	primarily of facilities that support research and resource protection activities. Roads and trails in this zone are maintained to support resource protection and research activities.
Natural Resour	ces				
Overall Condition	Natural resources are in as pristine a condition as possible, and are minimally modified only for wilderness visitor use and resource protection.	Natural resources retain their integrity and wild characteristics, but may be minimally modified for visitor use and resource protection compatible with the natural environment.	Natural resources are protected, but may be modified in less sensitive locations for visitor use, park operations or administrative use.	Natural resources are protected, but may be modified in appropriate locations to support important cultural resources and their interpretation.	Natural resources are protected, but may be modified in less sensitive locations to support condor research and protection activities.
Vegetation and Wildlife	Native vegetation communities and wildlife habitat are intact. Nonnative invasive species are managed with emphasis on species that have the most severe adverse impacts on native communities. Sensitive, threatened and endangered species and associated habitats may be actively managed to perpetuate these species. (Common to all - CTA)	Native vegetation communities and wildlife habitat are mostly intact but may be minimally modified. Nonnative invasive species are managed with emphasis on species that have the most severe adverse impacts on native communities. Sensitive, threatened and endangered species and associated habitats may be actively managed to perpetuate these species. (CTA)	Native vegetation communities and wildlife habitat are mostly intact, but may be modified by development and high visitor use in suitable areas. In developed settings, native vegetation will be used for landscaping. Invasive nonnative species will not be used. Sensitive, threatened and endangered species and associated habitats may be actively managed to perpetuate these species.	Native vegetation communities and wildlife habitat, which are also recognized as important cultural resources to some traditionally associated peoples, may be modified to support important cultural landscape features. Noninvasive nonnative species may be maintained if determined to be a contributing resource to the cultural landscape. Native alternatives will first be examined. Nonnative invasive species are managed with emphasis on species that have the most severe adverse impacts on	The primary purpose of this zone is to support California condor recovery. Native vegetation communities and wildlife habitat may be manipulated for research and protection purposes, but are otherwise intact. Nonnative invasive species are managed with emphasis on species that have the most severe adverse impacts on native communities. Sensitive, threatened and endangered species and associated habitats may be actively managed to

ZONES	PRIMITIVE	SEMI-PRIMITIVE	FRONTCOUNTRY	CULTURAL INTERPRETATION	SPECIAL RESEARCH
				native communities. Sensitive, threatened and endangered species and associated habitats may be actively managed to perpetuate these species.	perpetuate these species.
Geologic Resources	Geologic features are protected and geologic processes continue. Impacted areas are restored to the greatest extent possible.	Geologic features are protected and geologic processes continue. Geologic features may be minimally modified to provide for a safe visitor experience. Impacted areas are restored to the greatest extent possible.	Significant geologic features and processes are protected. Other geologic features and processes may be altered to support visitor use and park operations. Infrastructure is designed or relocated to avoid significant geologic resources and hazards.	Geologic features are protected and geologic processes continue. Some alteration or intervention in geologic processes may occur to protect cultural resources and support visitor use. Impacted areas are restored to the greatest extent possible consistent with cultural resource protection.	Geologic features are protected and geologic processes continue. Some alteration or intervention in geologic processes may occur to support research and resource protection activities. Infrastructure is designed or relocated to avoid significant geologic resources and hazards. Impacted areas are restored to the greatest extent possible consistent with research and resource protection needs.

ZONES	PRIMITIVE	Semi-Primitive	FRONTCOUNTRY	CULTURAL INTERPRETATION	Special Research
Hydrologic Systems	Natural hydrologic systems and processes are primarily left unimpeded. Impacted areas are restored to the greatest extent possible.	Natural hydrologic systems and processes are primarily left unimpeded. Hydrologic systems may be minimally modified to allow for visitor use. Impacted areas are restored to the greatest extent possible.	Natural hydrologic systems and processes are left unimpeded except where stabilization and management are needed to protect existing facilities and significant resources, and to support visitor services and park operations. Where possible, infrastructure is designed or relocated to minimize impacts on hydrologic systems and to restore natural functions.	Natural hydrologic systems and processes are left unimpeded except where stabilization and management are needed to protect cultural and other significant resources, and to support visitor services and park operations. Where possible, infrastructure is designed or relocated to minimize impacts on hydrologic systems and to restore natural functions.	Natural hydrologic systems and processes are left unimpeded except where stabilization and management are needed to protect significant resources and support park operations. Where possible, infrastructure is designed or relocated to minimize impacts on hydrologic systems and to restore natural functions.
Soundscape, Viewshed, and Night Sky	The natural soundscape, night sky and viewsheds are intact and enhance the visitor experience. Natural sounds dominate, however distant artificial sounds may intrude at times. Habitats for noisesensitive wildlife are free or nearly free of intrusive noise. No artificial outdoor lighting is present, although distant lighting may be visible from certain locations. Viewsheds are protected to a high degree. Uninterrupted views of natural and scenic resources are an integral part of the visitor experience.	The natural soundscape, night sky and viewsheds are largely intact and enhance the visitor experience. Natural sounds dominate. Sounds from park visitors and operations may occasionally be present. Habitats for noise-sensitive wildlife are free or nearly free of intrusive noise. No artificial lighting is present, although lighting from developed areas may be visible from certain locations. Viewsheds are protected to a high degree.	Intact natural soundscapes, night skies and viewsheds can be experienced in certain locations and times. Facilities are sited and designed to minimize impacts on the soundscape, night sky, and viewshed. Natural sounds are generally audible but may be mixed with pulses of sounds from visitor and park operations activities. Habitats for noise-sensitive wildlife are nearly free of intrusive noise beyond immediate developed areas. Outdoor lighting is present when needed to support visitor services or park operations, but is designed to minimize light pollution. Views of natural and scenic resources are present at many locations.	The natural soundscape, night sky and viewsheds are largely intact and enhance the visitor experience. New facilities are sited and designed to minimize impacts on the soundscape, night sky, viewshed, and cultural landscape. Natural sounds are generally audible but may be mixed with pulses of sounds from visitor and park operations activities. Habitats for noise-sensitive wildlife are nearly free of intrusive noise beyond immediate developed areas. Outdoor lighting is present when needed to support visitor services or park operations, but is designed to minimize light pollution. Historically appropriate	The natural soundscape, night sky and viewsheds are largely intact and benefit protection of sensitive species within this zone. Natural sounds dominate, however distant artificial sounds may intrude at times. Habitats for noisesensitive wildlife would be free or nearly free of intrusive noise. Artificial outdoor lighting may be visible from some locations. Viewsheds are protected to a high degree, although minimal impacts may occur from research and protection activities.

Zones	PRIMITIVE	SEMI-PRIMITIVE	FRONTCOUNTRY	CULTURAL INTERPRETATION	SPECIAL RESEARCH
				sounds and lighting from the period of significance may modify the otherwise intact natural soundscape and night sky. Views reflect historic landscapes. Night sky enhances the cultural landscape.	
Cultural Resour	rces				ا
Overall Condition	Significant cultural resources are protected and managed according to NPS policy consistent with wilderness values.	Significant cultural resources are protected and managed according to NPS policy.	Significant cultural resources are protected and managed according to NPS policy. Modifications of other cultural resources for visitor use, administrative purposes, safety, and resource protection may occur where compatible with the historic character.	Significant cultural resources are protected and managed according to NPS policy. Cultural sites, structures, and landscapes are managed to reflect and interpret their period of significance.	Significant cultural resources, if present in this zone, are protected and managed according to NPS policy. Modifications of other cultural resources for research and resource protection may occur.
Historic Structures	Historically significant structures are present in this zone and are preserved and managed according to NPS policy. Non-contributing historic structures may be stabilized, removed, or allowed to deteriorate naturally, consistent with wilderness values.	Historically significant structures are present in this zone and will be preserved and managed according to NPS policy. Historically significant structures may be interpreted on-site. Non-contributing historic structures may be preserved, removed, or allowed to deteriorate naturally, consistent with wilderness values.	Historically significant structures are present in this zone and will be preserved and managed according to NPS policy. Historically significant structures may be interpreted on-site. Non-contributing historic structures may be adaptively reused, stabilized, or removed, based on visitor or administrative use potential.	Historically significant structures are present in this zone and will be preserved and managed according to NPS policy. Historic structures will be interpreted on-site. Non-contributing historic structures may be preserved or removed, based on interpretive potential. Any adaptive reuse for administrative purposes must be historically compatible.	Historically significant structures, if present in this zone, will be preserved and managed according to NPS policy. Non-contributing historic structures, if present in this zone, may be preserved, removed, or allowed to deteriorate naturally, in support of research and resource protection activities.

ZONES	PRIMITIVE	SEMI-PRIMITIVE	FRONTCOUNTRY	CULTURAL INTERPRETATION	SPECIAL RESEARCH
Cultural Landscapes	Significant cultural landscape features are preserved and managed according to NPS policy, consistent with wilderness values.	Significant cultural landscape features are preserved and managed according to NPS policy, to perpetuate historic and scenic values. Modifications for interpretation, safety, and resource protection may be allowed where compatible with the character defining features of the cultural landscape.	Significant cultural landscape features are preserved and managed according to NPS policy, to perpetuate historic and scenic values. Modifications for visitor use, administrative purposes, safety, and resource protection may be allowed where compatible with the character defining features of the cultural landscape.	Significant cultural landscape features are preserved and managed according to NPS policy, to support interpretive values. Modifications for visitor use, administrative purposes, safety, and resource protection may be allowed where compatible with the character defining features of the cultural landscape.	Significant cultural landscape features, if present in this zone, are preserved and managed according to NPS policy, to perpetuate historic and scenic values. Modifications for research and resource protection may be allowed where compatible with the character defining features of the cultural landscape.
Archeological Resources	Significant archeological sites and resources will be protected and managed according to NPS policy, consistent with wilderness values. Opportunities for interpretation and cooperation with traditionally associated peoples may be developed.	Significant archeological sites are protected and managed according to NPS policy. NPS will endeavor to find opportunities for meaningful interpretation and cooperation by consulting with traditional associated peoples.	Significant archeological sites are protected and managed according to NPS policy. Opportunities for interpretation and cooperation with traditionally associated peoples may be developed.	Significant archeological sites are protected and managed according to NPS policy. NPS will endeavor to find opportunities for meaningful interpretation and cooperation by consulting with traditional associated peoples.	Significant archeological sites are protected and managed according to NPS policy.
Visitor Experie	nce				
Overall Visitor Experience	Visitors are immersed in a primitive (undeveloped) and wild environment and experience solitude, natural sounds, a sense of remoteness, self-reliance and discovery.	Interpretive services and recreational access are important functions of this zone. Visitors also have opportunities to experience solitude, natural sounds, a sense of remoteness, self-reliance and discovery.	This zone provides capacity for a large number of visitors and serves as an access point for park experiences. Visitors are provided with opportunities for orientation, education, interpretation, and a wide range of visitor activities.	Cultural preservation and interpretation of human time periods and cultural themes are the primary focus of this zone. Visitors experience sights, sounds, and activities that are evocative of the site's period(s) of significance.	The primary purpose of this zone is to support California condor recovery. Visitor use and access are highly controlled. Access is allowed at management discretion, if not disruptive to research or protection activities.

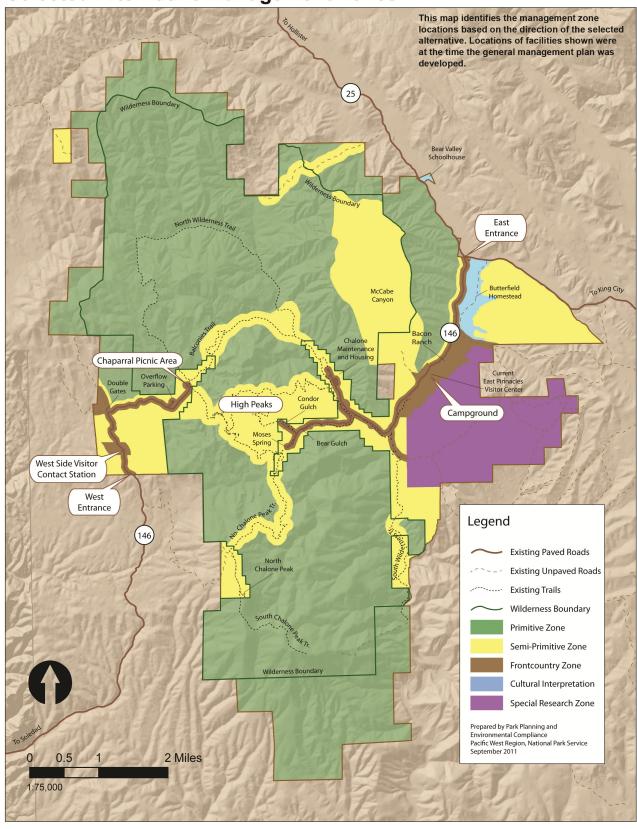
Zones	PRIMITIVE	SEMI-PRIMITIVE	FRONTCOUNTRY	CULTURAL INTERPRETATION	SPECIAL RESEARCH
Interpretation and Education	Interpretation and education are focused on wilderness values and are mostly self-directed.	Interpretation and education are important functions of this zone, and are achieved through a range of methods that are complementary to the natural setting.	Interpretation and education are important functions of this zone, and are achieved through a range of methods, facilities and programs.	Interpretation and education are important functions of this zone, and are achieved through a range of methods, facilities and programs	This zone is generally closed to visitor use. When visitor use is allowed, appropriate interpretation and education may be determined by park management on a case-by-case basis.
Types of Activities	Visitor activities are primarily unstructured and self-guided. Limited, small group activities may be appropriate, if wilderness values are not degraded. Visitors have opportunities to experience solitude, open space, and primitive and unconfined recreation. Visitor use opportunities are subordinate to the protection of the natural setting and wilderness values, and may be restricted to protect resources or wilderness values. Visitor use opportunities may include hiking, climbing, and nature appreciation, so long as wilderness values are not degraded. A high degree of physical effort may be required to experience the wilderness and backcountry. Visitors should be prepared for challenge and use of outdoor skills.	Visitors have opportunities for unstructured and self-guided experiences as well as opportunities to participate in interpretive and stewardship programs and guided walks/hikes. Visitors generally have opportunities to experience solitude, open space, and primitive and unconfined recreation. Visitor use opportunities are complementary to the natural setting, and may be restricted to protect resources or wilderness values. Visitor use opportunities may include hiking, climbing, nature appreciation, and dispersed picnicking. Bicycling is limited to those trails and facilities, if any, designated specifically for that use. A moderate to high degree of physical effort may be required to experience this zone. Visitors should be prepared for challenge and use of outdoor skills.	This zone provides a wide range of visitor use opportunities. Visitors of all physical abilities can experience this zone. Visitors have opportunities to participate in interpretive and stewardship programs and guided walks/hikes. Visitor use opportunities may include hiking/walking, climbing, sightseeing, appreciation of natural and cultural resources, picnicking, camping, and bicycling. Bicycling is limited to those roads, if any, designated specifically for that use.	Visitors have opportunities to experience cultural resources. There are opportunities for interpretation, programs, and recreation that complement the historic setting. Visitor use opportunities may include hiking/walking, appreciation of natural and cultural resources, picnicking, and bicycling, so long as cultural resources are not degraded. Bicycling is limited to those roads, if any, designated specifically for that use.	This zone is generally closed to visitor use. Park managers may allow visitor use if not disruptive to research or resource protection activities. Appropriate visitor use opportunities, if any, will be determined by park management on a case-by-case basis.

ZONES	PRIMITIVE	Semi-Primitive	FRONTCOUNTRY	CULTURAL INTERPRETATION	Special Research
Use Levels / Density	Visitation levels are low and encounters with other visitors are infrequent. Large groups and events are not permitted.	Visitation levels are generally low to moderate, with moderate to high use levels sometimes found at entry points or points of interest. Encounters with other visitors are generally low, but may be high during times of peak use. Group sizes may be limited to protect experiential and resource protection objectives.	Visitation levels are moderate to high. Visitors may encounter a moderate to high level of contact with rangers and other visitors during peak use. A wide range of group sizes may be accommodated.	Visitation levels are moderate to high. Visitors may encounter a moderate to high level of contact with rangers and other visitors during peak use. A wide range of group sizes may be accommodated.	This zone is generally closed to visitor use. Park managers have the discretion to allow visitor uses that are not disruptive to research or resource protection activities, including limited special/organized events, such as condor release events. Visitors may encounter a moderate to high level of contact with other visitors during special events.
Wilderness	This zone includes designated wilderness and other areas managed for their wilderness values. Resources retain their integrity and wild character, and are minimally modified only for wilderness visitor use and resource protection. There are no visible signs of human use off trails and routes. Visitors are immersed in a primitive and wild environment and experience solitude, natural sounds, smells, a sense of remoteness, self-reliance and discovery.	This zone includes designated wilderness areas that receive periodic high use. Within designated wilderness in this zone: Resources retain their integrity and wild character, and are minimally modified only for wilderness visitor use and resource protection. Visitors have opportunities to experience a primitive and wild environment, solitude, natural sounds, smells, a sense of remoteness, self-reliance and discovery, although during times of peak visitation, high levels of use may occur on popular trails.	This zone does not contain designated wilderness.	This zone does not contain designated wilderness.	This zone does not contain designated wilderness.

ZONES	Primitive	Semi-Primitive	FRONTCOUNTRY	CULTURAL INTERPRETATION	SPECIAL RESEARCH
Facilities					
Overall Facilities	Development is very minimal in this zone and only allowed in support of wilderness values. Visitors access this zone on primitive natural surface trails.	Development is fairly minimal in this zone. Visitors access this zone on natural surface trails.	Development includes a diversity of facilities to support park operations and visitor use, mixed with open space and natural settings. Visitors access this zone on paved and unpaved roads, and on natural surface and paved trails designed for universal access where possible.	Development in this zone consists primarily of historic structures and additional facilities necessary for adaptive reuse or public enjoyment. Visitors access this zone on natural surface and paved trails.	Development is fairly minimal and consists primarily of facilities that support research and resource protection activities. Roads and trails in this zone are maintained to support resource protection and research activities.
Development Levels and Facilities	Development is very minimal in this zone and only allowed in support of wilderness values, such as resource protection, wilderness visitor use and visitor safety. Any necessary facilities are designed and sited to be unobtrusive and compatible with the wilderness setting. Visitor facilities could include natural surface trails, unobtrusive directional signs, and backcountry campsites. Facilities within designated wilderness are subject to a minimum requirement analysis. Telecommunications facilities and transmission lines are not allowed in this zone.	Development is fairly minimal in this zone and only allowed in support of resource protection, dispersed visitor use and visitor safety. In designated wilderness, development levels and types of facilities are the same as in the primitive zone. Outside of designated wilderness, visitor facilities could include natural surface trails, signs, waysides, backcountry campsites, and dispersed picnic tables and benches. Limited, small scale telecommunications facilities and transmission lines may be allowed outside of designated wilderness in this zone if designed and sited to minimize visual impacts.	Development includes a diversity of facilities to support park operations and visitor use, mixed with open space and natural settings. Facilities include historic resources and nonhistoric visitor and administrative facilities that complement historic and natural landscapes. Visitor facilities may include natural and paved surface trails, visitor centers, developed and walk-in campgrounds, fee stations, kiosks, trailheads, picnic areas, group use areas, signs, wayside exhibits, restrooms, roads and parking areas. Park operations facilities may include administrative offices, maintenance shops, storage, staff housing, utilities, communications structures, and facilities to serve cultural and natural resources objectives. Sustainability and energy efficiency are core park values and are part of all facility management decisions.	Development in this zone consists primarily of historic structures and additional facilities necessary for adaptive reuse or public enjoyment. Non-historic facilities are designed and sited in ways that protect cultural landscape values. Development levels are minimal to moderate. Facilities may include natural and paved surface trails, wayside exhibits, interpretive trails, restrooms, picnic and group use areas, administrative roads, and facilities to serve cultural and natural resources objectives. Limited, small scale telecommunications facilities and transmission lines may be allowed if compatible with cultural landscape values and if designed and sited to minimize visual impacts.	Development levels are fairly minimal. Development in this zone consists primarily of facilities that support research and resource protection activities. Research facilities may include condor enclosures and support structures, administrative roads and trails. Limited, small scale telecommunications facilities and transmission lines may be allowed if not disruptive to research or resource protection activities and if designed and sited to minimize visual impacts.

ZONES	PRIMITIVE	SEMI-PRIMITIVE	FRONTCOUNTRY	CULTURAL INTERPRETATION	SPECIAL RESEARCH
Access and Transportation	New roads will not be allowed in this zone. Existing unpaved roads will be decommissioned. There are a limited number of designated natural surface trails. Universal access opportunities are limited in this zone.	There are no paved roads in this zone. Existing unpaved roads may be maintained for infrequent administrative use. There are a moderate number of natural surface trails. Universal access opportunities are limited in this zone.	Access opportunities are a primary purpose of this zone. There are paved and unpaved roads, parking, and shuttle stops with amenities. There are natural surface and paved trails, including some designed for universal access where possible. Visitors do not normally enter park operations areas except for park business purposes.	There are no paved roads in this zone. Existing unpaved roads may be maintained for administrative use. There could be a moderate number of natural surface and paved trails. Trails are designed for universal access when compatible with cultural and natural resource protection.	Access is highly controlled in this zone. Roads and trails in this zone are maintained to support resource protection and research activities.

Selected Alternative Management Zones



Attachment 2: Determination of Non-Impairment

Appropriate Use and Unacceptable Impacts

Sections 1.5 and 8.12 of National Park Service (NPS) Management Policies 2006 underscore that not all uses are allowable or appropriate in units of the national park system. Actions under the selected alternative were screened to determine consistency with applicable laws, executive orders, regulations, and policies; consistency with existing plans for public use and resource management; actual and potential effects to park resources; total costs to the NPS; and whether the public interest would be served. Based on this evaluation, the selected alternative is considered an appropriate use of the park's lands.

By designating user capacity indicators and standards in this plan, the park will monitor activities that could impact resources and take appropriate management actions to prevent or restore resource damage. As a whole, the selected alternative provides the best combination of management approaches for protecting park resources while providing public use consistent with NPS management policies. The selected alternative is consistent with the park purpose as stated in the enabling legislation. Because applying mitigation measures is expected to be successful to ensure that no significant adverse impacts will occur, implementation of the selected alternative will not result in any unacceptable impacts.

The Prohibition on Impairment of Park Resources and Values

NPS Management Policies 2006, §1.4.4, explains the prohibition on impairment of park resources and values:

"While Congress has given the National Park Service (NPS) management discretion to allow impacts within units of the national park system, that discretion is limited by the statutory requirement (generally enforceable by the federal courts) that the NPS must leave park resources and values unimpaired unless a particular law directly and specifically provides otherwise. This, the cornerstone of the 1916 Organic Act, establishes the primary responsibility of the NPS. It ensures that park resources and values will continue to exist in a condition that will allow the American people to have present and future opportunities for enjoyment of them."

What is Impairment?

NPS Management Policies 2006, §1.4.5, What Constitutes Impairment of Park Resources and Values, and §1.4.6, What Constitutes Park Resources and Values, provide an explanation of impairment: impairment "is an impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values."

§1.4.5 of Management Policies 2006 states:

"An impact to any park resource or value may, but does not necessarily, constitute impairment. An impact would be more likely to constitute impairment to the extent that it affects a resource or value whose conservation is:

- Necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park, or
- Key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park, or
- Identified in the park's general management plan or other relevant NPS planning documents as being of significance.

An impact would be less likely to constitute an impairment if it is an unavoidable result of an action necessary to preserve or restore the integrity of park resources or values and it cannot be further mitigated."

Per §1.4.6 of Management Policies 2006, park resources and values at risk for being impaired include:

• "the park's scenery, natural and historic objects, and wildlife, and the processes and conditions that sustain them, including, to the extent present in the park: the ecological, biological, and physical processes that

created the park and continue to act upon it; scenic features; natural visibility, both in daytime and at night; natural landscapes; natural soundscapes and smells; water and air resources; soils; geological resources; paleontological resources; archeological resources; cultural landscapes; ethnographic resources; historic and prehistoric sites, structures, and objects; museum collections; and native plants and animals;

- appropriate opportunities to experience enjoyment of the above resources, to the extent that can be done without impairing them;
- the park's role in contributing to the national dignity, the high public value and integrity, and the superlative environmental quality of the national park system, and the benefit and inspiration provided to the American people by the national park system; and
- any additional attributes encompassed by the specific values and purposes for which the park was established."

Impairment could result from NPS activities in managing the park, visitor activities, or activities undertaken by concessioners, contractors, and others operating in the park. Impairment could also result from sources or activities outside the park, but this would not violate the 1916 Organic Act unless the NPS was in some way responsible for the action.

How is an Impairment Determination Made?

§1.4.7 of Management Policies 2006 states, "In making a determination of whether there would be an impairment, an NPS decision-maker must use his or her professional judgment. This means that the decision-maker must consider any environmental assessments or environmental impact statements required by the National Environmental Policy Act of 1969 (NEPA); consultations required under section 106 of the National Historic Preservation Act (NHPA); relevant scientific and scholarly studies; advice or insights offered by subject matter experts and others who have relevant knowledge or experience; and the results of civic engagement and public involvement activities relating to the decision."

Management Policies 2006 further define "professional judgment" as "a decision or opinion that is shaped by study and analysis and full consideration of all the relevant facts, and that takes into account

- the decision-maker's education, training, and experience;
- advice or insights offered by subject matter experts and others who have relevant knowledge and experience;
- good science and scholarship; and, whenever appropriate,
- the results of civic engagement and public involvement activities relating to the decision."

Impairment Determination for the Selected Alternative

This determination of non-impairment has been prepared for the selected alternative as detailed in the Finding of No Significant Impact (and as described as the preferred alternative in Chapter 3 of the Draft GMP/EA). As explained above, this determination of non-impairment does not include the following impact topics analyzed in the Draft GMP/EA – access and circulation, visitor use opportunities, wilderness character, interpretation and education, operations, and socioeconomics. This is because impairment findings relate to park resources and values, and the above impact topics are not generally considered to be park resources or values according to the 1916 Organic Act, and therefore, cannot be impaired as can other park values and cultural and natural resources.

Air Quality

Based on monitoring since 1987, most of the year Pinnacles National Park has superb class I air quality. The NPS Air Quality Division and EPA established a monitoring station near the east entrance in 1987. An air clarity study (using a tranmissometer) has concluded. Particulate, ozone, dry and wet deposition, and meteorological monitoring continues. Under the selected alternative, air quality monitoring in Pinnacles National Park will continue. The data gained through these efforts will continue to provide quantitative and qualitative information on the status and trends of air quality within the park.

Primary park sources of air pollutants will continue to be from motor vehicles, wildfires, barbeques, and campfires. Impacts are generally concentrated in high use areas and are localized and minor. Wildfires could occur anywhere, and vary in scale by area and pollutant releases.

Cumulative impacts to air quality are similar to current conditions, because the air quality within Pinnacles National Park is predominantly influenced by human activities outside of the park, including regional and global sources of air pollution.

There will be no impairment to the park's resources or values related to air quality because no major, long-term, adverse impacts to air quality will occur from implementation of the selected alternative.

Natural Sounds

Under the selected alternative, actions that could have an adverse impact on the natural soundscape generally involve visitors in new areas due to new trail access and cultural interpretation opportunities and short-term impacts from construction and restoration activities. Cumulative impacts, primarily from ongoing visitor and administrative activities, will continue to be similar to the current condition and range from minor to moderate. There will be no impairment to the park's resources or values related to natural soundscapes because there would be no major, long-term, adverse impacts to natural soundscapes from implementation of the selected alternative.

Water Quality

Impacts to water quality will be similar to the current conditions, including non-point source runoff from various developed and impermeable surfaces including roads, parking lots, and facilities. Construction projects under the selected alternative, including replacement of the east side visitor center and entrance station, will also produce short-term adverse impacts. Under the selected alternative, water quality degradation due to runoff will be mitigated by developing sediment control plans and implementing best management practices. Potential sources of water quality degradation also exist upstream of the park's boundary, with possible external sources including agricultural activities. Although the selected alternative will have some localized beneficial impacts from restoration and redevelopment (e.g., moving facilities out of the floodplain), these actions will continue to include effects from most existing impacts.

Overall impacts to water quality will remain similar to current conditions because the selected alternative does not propose substantial changes to current management actions. There will be no impairment of the park's resources or values related to water resources because there would be no major, long-term, adverse impacts to water resources from implementation of the selected alternative.

Hydrologic Systems and Processes

There will continue to be impacts to hydrology, from ongoing NPS erosion control measures to protect facilities. Impacts to hydrologic systems and processes are primarily associated with local manipulation of hydrology to protect roads, campgrounds and facilities from erosion. Under the selected alternative, new construction of parking lots, trails and other facilities could have minor to moderate adverse impacts. When impacts occur they will generally be localized, long-term, adverse and of minor to moderate intensity. The selected alternative could also provide beneficial effects from restoration, especially from the removal of the Chaparral parking area. Because there would be few additional long-term impacts, cumulative impacts will remain moderate and adverse from ongoing impacts related to past development.

Overall impacts to water resources will remain similar to current conditions because the selected alternative does not propose substantial changes to current management. There will be no impairment to the park's resources or values related to water resources because there would be no major, long-term, adverse impacts to hydrologic systems and processes from implementation of the selected alternative.

Geologic Resources

Most of the park's geologic resources will not be affected by the selected alternative. Some features could be degraded or altered due to new developments, access opportunities, and increased visitor use in localized areas. These long-term adverse impacts will generally be minor and will not contribute much to minor ongoing cumulative impacts from visitor use of caves, climbing routes, and trail access to the High Peaks. Most construction activities proposed in the selected alternative will not affect geologic resources since they will occur in valley bottoms on alluvial fill material.

Overall adverse impacts associated with the GMP will range from negligible to minor and will not vary substantially from the current conditions. There will be no impairment to the park's resources or values related to geologic resources because no major, long-term, adverse changes to these resources will occur from implementation of the selected alternative.

Soils

Under the selected alternative, some soils will be lost or degraded in local areas where ground disturbance occurs for development of new or expanded facilities, or to remove facilities. Expanded recreational opportunities and additional trails could lead to minor to moderate adverse impacts. Diversification and intensification of recreational use could have minor to moderate impacts on soils along newly designated trails and adjacent areas. New construction of facilities in previously undisturbed areas, including an entrance station on the east side, new trails, primitive campsites on the west side, and backcountry campsites could cause minor to moderate, long-term, adverse impacts on the immediate area and minor, long-term impacts radiating outward form the sites. Other development actions will occur in areas that have already been disturbed. These include facility improvements and redesign of the east side campground area. Little additional soil disturbance will be required for these projects.

Overall adverse impacts associated with the GMP will range from minor to moderate and will not vary substantially from current conditions. There will be no impairment to the park's resources or values related to soils because no major, long-term, adverse impacts to these resources will occur from implementation of the selected alternative.

Vegetation

The selected alternative maintains existing infrastructure with some new facilities and replacement of facilities that could affect vegetation; however, vegetation in most areas under consideration for new or replacement facilities has been previously disturbed.

The NPS will continue to mitigate impacts from various recreational visitor uses such as trampling and social trail development as well as from the importation and spread of invasive, non-native plants. Under the selected alternative, ongoing and proposed treatment, monitoring and restoration, including removal of the Chaparral parking area, reconfiguration of the campground, ongoing use of integrated pest management measures, continuing visitor education, and user capacity monitoring will benefit vegetation.

Past and ongoing developments within the park as well as activities outside of the park (such as habitat fragmentation and construction) have resulted in cumulative adverse impacts to vegetation. The selected alternative will have few additional impacts to vegetation. Therefore the contribution to cumulative larger-scale adverse impacts from past actions that have occurred or may occur within the timeframe of this plan will be small.

There will be no impairment to the park's resources or values related to vegetation because no major, long-term, adverse impacts to these resources will occur from implementation of the selected alternative.

Wildlife and Wildlife Habitat

Under the selected alternative, management decisions will continue to be science-based, including documenting results in peer-reviewed journals and conducting monitoring programs focusing on raptors, exotic pigs, and bats in the caves. Removal of non-native invasive species and restoration of degraded areas such as in the bottomlands will also continue, resulting in long-term beneficial effects on wildlife species through habitat improvement. New construction of trails,

backcountry and primitive campsites, and replacement facilities will have localized adverse impacts. Past and ongoing cumulative impacts, within and outside the park, including eradication of predators and conversion of lands to row crops and residential purposes have had adverse impacts on wildlife. Past development throughout the park to accommodate visitor use has also adversely affected wildlife by altering habitat and stream hydrology and by disturbing natural wildlife behavior and movement. Although the selected alternative will benefit wildlife and wildlife habitat through restoration, there will continue to be long-term cumulative adverse impacts.

Overall long-term moderate impacts to wildlife will continue to occur along with some additional beneficial effects. There will be no impairment to the park's resources or values related to wildlife because no major, long-term, adverse changes to these resources will occur from implementation of the selected alternative.

Federally Listed Threatened and Endangered Species

One federally listed endangered species, the California condor (*Gymnogyps californianus*), and two federally listed threatened species, the California red-legged frog (*Rana aurora draytonii*) and California tiger salamander (*Ambystoma californiense*), are found in Pinnacles National Park. Under the selected alternative, raptor monitoring, reestablishment of the California condor, control of exotic species, and restoration efforts in the bottomlands and other degraded areas will continue. In addition, an increased level of public engagement through visitor involvement in conservation and understanding of wildlife issues will occur. This will result in long-term beneficial effects on all three listed species.

Cumulative effects on California tiger salamanders in the region have been minor to moderate and adverse, with the greatest threats related to habitat loss and hybridization with non-native tiger salamanders. The selected alternative is not likely to adversely affect California tiger salamanders.

Past effects related to California red-legged frogs in the region have been major, with the species having been entirely extirpated from its regional stronghold, the Salinas River. The park now supports one of the few remaining populations in the region. Habitat loss, non-native species introduction (bullfrogs), and urban encroachment have all adversely affected the California red-legged frog throughout its historic range. Ongoing causes of decline include direct habitat loss due to stream alteration and disturbance to wetland areas, indirect effects of expanding urbanization, and competition or predation from non-native species. With mitigation and ongoing environmental impact analysis for proposed development projects, the selected alternative will not appreciably add to major cumulative effects; while continued beneficial effects from visitor education may reduce this overall cumulative impact.

Past cumulative adverse effects related to California condors have been major, but the California Condor Recovery Program has brought the species back from the brink of extinction through captive breeding programs and reintroductions to the wild, a continuing beneficial effect. Continuation of the condor reestablishment program at Pinnacles and public education efforts regarding the adverse effects on condors caused by the use of lead ammunition will continue under the selected alternative, providing beneficial effects. Implementation of the selected alternative is not likely to adversely affect condors. Overall cumulative effects on California condors will be beneficial.

Combined, impacts on listed species will be mixed. Future environmental impact analysis for proposed development will minimize effects on listed species, but the presence of existing development in and near riparian habitat, and plans to locate new development will continue to have direct and indirect adverse impacts on California red-legged frogs. Increased education efforts on wildlife issues will benefit these and other special status species by changing visitor and community behavior currently affecting those species. The emphasis in the selected alternative on enhanced restoration efforts and encouragement of visitor participation in park stewardship will provide additional benefits.

Overall impacts to federally threatened and endangered species will be minor to moderate and long-term, with additional beneficial effects. There will be no impairment to the park's resources or values related to these species, because no major, long-term, adverse changes will result from implementation of the selected alternative.

Archeology

The addition of a full-time cultural resource specialist (program manager) position under the selected alternative will allow the park to initiate and manage a viable cultural resources program and ensure opportunities to undertake projects necessary to document and protect the park's resources. On-site staffing will facilitate prioritization of work and result in greater efficiency and savings. Resources will benefit directly from the ability of local staff to provide more frequent attention and from better stewardship from on-site presence. This program will provide the park with the capacity to conduct proactive field surveys and baseline documentation of the remaining unsurveyed areas within the park. It will also allow the park to make regular and timely condition assessments of previously recorded sites.

Resources adjacent to or easily accessible from trails or day-use areas will continue to be vulnerable to surface disturbance, inadvertent damage, and vandalism. Loss of surface archeological materials, alteration of artifact distribution, and a reduction of contextual evidence could result in loss of site integrity over time.

Construction activities associated with the selected alternative, including the East Pinnacles visitor center, an east side entrance station, backcountry campsites, shuttle stop improvements, picnic structures, and parking could potentially result in adverse impacts, however, archeological surveys will precede ground-disturbance. Known archeological resources will be avoided to the greatest extent possible. If national register-eligible or listed archeological resources cannot be avoided, an appropriate mitigation strategy will be developed in consultation with the state historic preservation officer and associated tribes.

With mitigation measures, these actions will likely result in minor, localized adverse impacts, resulting in a Section 106 determination of no effect or no adverse effect. The potential for a moderate adverse impact, resulting in a Section 106 determination of adverse effect, from the development of a walk-in campground on the west side will be avoided by carefully siting campground facilities away from known archeological resources.

Over the years, visitors have caused direct damage to known sites throughout the park. Indirect damage by visitors is more difficult to measure but likely has affected sites that are adjacent to high public use areas such as roads, trails, geologic features, and visitor services areas. Natural processes, including erosion, also affect archeological sites. Dam, road, and other facility construction in the past likely resulted in cumulative adverse impacts on cultural resources, including archeological resources.

Some archeological sites in the park have probably experienced long-term, minor to major adverse cumulative impacts in the past, ranging from gradual deterioration to loss of sites and artifacts. A backlog of archeological survey and condition assessment work continues to contribute to this cumulative impact. Implementation of the selected alternative will not increase these overall adverse cumulative effects on archeological resources.

There will be no impairment to the park's resources or values related to archeological resources because no major, long-term, adverse impacts to these resources will occur from implementation of the selected alternative.

Cultural Landscapes and Historic Structures

The park will continue to preserve and maintain its historic structures and cultural landscapes. Most actions will follow the Secretary of the Interior's Standards for the Treatment of Archeology and Historic Preservation, and the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes. With the exception of the potential removal of the North Chalone Peak fire lookout, there will be minor adverse effects to historic structures or cultural landscapes combined with beneficial effects under the selected alternative.

Removal of the remote North Chalone Peak Fire Lookout, a structure eligible for listing on the National Register of Historic Places (NRHP), will have a major adverse impact if implemented. A consensus determination of eligibility found the fire lookout eligible for listing on the NRHP under Criterion A for its association with the history of fire protection, and Criterion C as the oldest surviving example of the California Department of Forestry's revised 809R design. The State Historic

Preservation Officer (SHPO) concurred with the eligibility determination in 1993. Therefore, removal will result in an adverse effect under Section 106 (requiring development of a Memorandum of Agreement with the SHPO and Advisory Council on Historic Preservation). When removal, as a preliminary alternative, was presented to the public, the concept did not generate controversy. Removal and restoration could provide beneficial impacts to surrounding resources, including designated wilderness. The lookout is located within the High Peaks Trail System, part of the East Entrance Historic District, but does not contribute to the significance of that district. Initial discussions with the SHPO indicate that the significance of the lookout could be interpreted on-site after removal. This remote physical structure is not necessary to fulfill purposes identified in the establishing legislation of the park, nor is it key to the natural or cultural integrity of the park, or to opportunities for enjoyment of the park.

Cumulatively, natural processes, such as fire, as well as past development in the park have resulted in the disturbance and loss of cultural resources, which have had a minor to moderate, cumulative adverse impacts on the integrity of cultural landscapes. Decades of neglect in the Ben Bacon Ranch Historic District, combined with the addition of many non-contributing structures and features in the East Entrance Historic District, have also added to this adverse impact. The integrity of both districts, however, remains sufficiently intact to convey their historic importance.

In addition, deferred maintenance and wear and tear associated with visitor access and administrative use has adversely impacted some structures. Some structures that would be considered historic today were moved, removed or modified in the past and/or have lost their integrity under National Register standards.

The park has expanded several times to include resources related to cultural landscapes, with the intent of protecting and interpreting those landscapes. Management activities, including restoration efforts, continue to consider the culturally important character-defining patterns and features of cultural landscapes, resulting in cumulative beneficial impacts.

Overall, the cumulative impacts on cultural landscapes and historic structures will be long-term, and minor to moderate. There will be no impairment to the park's resources or values related to historic buildings and cultural landscapes when the selected alternative is implemented because there are no long-term, adverse impacts to resources that fulfill the legislative purpose of the park, are key to the natural or cultural integrity of the park, or are key to opportunities for enjoyment of the park.

Values, Traditions, and Practices of Traditionally Associated Peoples

The addition of a full-time cultural resource specialist (program manager) position under the selected alternative will assist in the process of building and managing a viable cultural resources program. On-site, rather than regional office, staffing will facilitate prioritization of work and result in greater efficiencies and savings. The cultural resource program will ensure better curation of oral histories that identify the values, traditions, and practices of associated peoples. In addition, the program will provide the park with the capacity to research and document important resources associated with the living survivors of people who once inhabited the region. On-site capacity will allow the park to establish and maintain personal relationships with these descendants and to cultivate ongoing active stewardship of the park's resources.

Cumulative impacts are similar to the current condition and are largely the result of the regional loss of elders with knowledge of traditions, practices, and beliefs and past development in the region which has affected the plants, wildlife, and landscape features which remain important to the descendants of Native Americans that used the area (e.g. California condor, deer grass and white root sedge). The most important of these changes occurred a long time ago, but the potential for further change, or intensification of change, still exists. For example, remnant oak savanna and grassland throughout the region may still be converted to vineyards and other row crop uses. Overall, the magnitude of these impacts is unknown; inventory and appropriate mitigation will continue.

There will be no impairment to park resources or values related to traditionally associated peoples because no long-term, adverse impacts will occur from implementation of the selected alternative.

Museum Collections

Under the selected alternative, the park's existing museum management program will be improved by the establishment of an on-site cultural resource program. The park will continue to improve the quality of documentation of collections for use by park staff and the public.

The current museum collection facility will continue to be monitored and maintained to provide for the preservation and protection of the collections, but is vulnerable to fire. If museum collections continue to be housed at the park, some minor adverse impacts could result from environmental controls that do not meet current NPS standards for museum collections.

The park will keep reference collections (herbarium specimens, artifacts needed for interpretation and display, and other items needed on a periodic basis for park operations) in adequate museum storage facilities and will continue to manage, maintain and process museum collections.

A shared national park museum collection facility, to be located in an existing structure at Rosie the Riveter/World War II Home Front National Historical Park, is in the planning stages. The park is likely to benefit from this development, which will provide professional staff, appropriate storage, and increased physical access to the collections. It is reasonably foreseeable that the park will house the majority of its collections at this facility, providing a long-term, cumulative, beneficial effect to museum collection storage and management.

There will be no impairment to the park's resources or values related to museum collections because no long-term, adverse changes will occur from implementation of the selected alternative.