National Park Service
U.S. Department of the Interior
White Sands National Monument
Alamogordo, New Mexico

NEW VISITOR CENTER RESTROOM CONSTRUCTION

Environmental Assessment

August, 2011

WHITE SANDS NATIONAL MONUMENT, NEW MEXICO
Prepared by:
U.S. Department Of Interior
National Park Service
White Sands National Monument
New Mexico

New Visitor Center Restroom Construction

Environmental Assessment

Summary

This Environmental Assessment (EA) describes options for constructing public restrooms accessible to Monument visitors with disabilities. Included is an analysis of the impacts on the project location.

The purpose of this project is to provide safe, healthy, and accessible restroom facilities for visitors to White Sands National Monument. A new restroom facility would provide an improved experience to White Sands' nearly 475,000 annual visitors. It is needed in part to accommodate large numbers of visitors that visit the Monument during special events or missile launch related road and Monument closures. For example, when White Sands Missile Range closes US Highway 70 for a missile test, travelers will stop at the monument's visitor center while they wait for the highway to re-open. This results in the restrooms being over capacity, causing lines to form outside of the restrooms, which can be a major inconvenience to visitors. This issue has not gone unnoticed by the park's visitors. Out of all the park's facilities and visitor services, the current restrooms receive the most complaints from visitors. In 2010, visitor satisfaction with the restrooms park wide was rated at 63 percent, which does not meet the park's goals. New restrooms are also needed to address handicap accessibility; the current restroom facilities do not meet the American Disabilities Act (ADA) guidelines and are not accessible to visitors with disabilities. Additionally, new restrooms are needed in order to minimize the impacts to the historic building, which currently houses the existing restroom facilities, and to reduce the maintenance needs required by the current restrooms.

This environmental assessment evaluates four alternatives; a no-action alternative and three action alternatives. The no-action alternative (Alternative A) describes the current condition if no restrooms were constructed. The result will be no restroom improvements, and no increase in facility space. The first action alternative (Alternative B) addresses the construction of handicap accessible public restrooms northwest of the current restrooms. This alternative also addresses the rehabilitation of the current restrooms for administrative use. There will be no change to the exterior of the historic restroom building. The second action alternative (Alternative C) addresses the construction of handicap accessible public restrooms inside of the current concessions warehouse. This alternative also addresses the rehabilitation of the current restrooms so they continue to be used as restrooms and are accessible to visitors with disabilities. There will be no change to the exterior of the historic restroom building with the exception of the entrances to the restrooms, which will be widened. The third action alternative (Alternative D) addresses the rehabilitation of the current restrooms so they are accessible to visitors with disabilities. There will be no change to the exterior of the historic restroom building with the exception of the entrances to the restrooms, which will be widened. This document describes such actions and provides an environmental analysis.

This environmental assessment has been prepared in compliance with the National Environmental Policy Act (NEPA) to provide the decision-making framework that 1) analyzes a reasonable range of alternatives to meet objectives of the proposal, 2) evaluates potential issues and impacts to White Sands National Monument's resources and values, and 3) identifies mitigation measures to lessen the degree or extent of these impacts. Resource topics included in this document because the resultant impacts may be greater-than-minor include historic structures, cultural landscapes, visitor use and experience, and park operations. All other resource topics were dismissed because the project will result in negligible or minor effects to those resources. No major effects are anticipated as a result of this project. Public

scoping was conducted to assist with the development of this document and comments were received, mostly in support of the proposed project.

Public Comment

The Environmental Assessment is now available for public review and comment at the National Park Service website *Planning, Environment, and Public Comment* (http://parkplanning.nps.gov/whsa) (click on Proposal to Construct a New Restrooms and then go to document list). You may also call Richard Greene at (575) 679-2599 ext. 229 to request a hard copy. We encourage you to review the Environmental Assessment and send us your thoughts by September 7, 2011. You may submit comments online at http://parkplanning.nps.gov/whsaNewRestrooms or you may mail or hand-deliver comments to the Superintendent; White Sands National Monument, P.O. Box 1086, Holloman Air Force Base, N.M. 88330-1086. Your comments will be considered as we move toward a decision. Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment – including your personal identifying information – may be made publicly available at any time. We will make all submissions from organizations, businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses available for public inspection in their entirety. Although you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so. **If you wish us to withhold your name and/or address, you must state this at the beginning of your comment**.

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PURPOSE AND NEED

Introduction

White Sands National Monument was established in 1933 by presidential proclamation for "...the preservation of the white sands and additional features of scenic, scientific, and educational interest." The Monument contains about half of the world's largest gypsum sand dune field and is managed by the National Park Service (NPS) under the Department of Interior.

White Sands National Monument is located within the Tularosa Basin in south-central New Mexico (Figure 1). The nearest town is Alamogordo, located 15 miles east of the Monument. The city of Las Cruces is 60 miles southwest of the Monument headquarters. A visitor center and administrative facilities are located at the Monument headquarters, on U.S. Highway 70 between Alamogordo and Las Cruces, New Mexico. The western portion of the Monument is within Doña Ana County, and the eastern portion of the Monument is within Otero County. The Monument is almost entirely surrounded by military lands, including the White Sands Missile Range managed by the U.S. Army, and Holloman Air Force Base. Land within the Monument boundary is entirely federally owned.

The purpose of this environmental assessment is to examine the environmental impacts associated with the proposal to construct new restrooms at White Sands National Monument. This environmental assessment was prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, regulations of the Council on Environmental Quality (CEQ) (40 CFR §1508.9), and the National Park Service Director's Order (DO)-12 (*Conservation Planning, Environmental Impact Analysis, and Decision-Making*).

National Park Service's *Management Policies,* 2006, require analysis of potential effects to determine whether or not actions will impair park resources. The fundamental purpose of the national park system, established by the Organic Act and reaffirmed by the General Authorities Act, as amended, begins with a mandate to conserve park resources and values. National Park Service managers must always seek ways to avoid, or to minimize to the greatest degree practicable, adversely impacting park resources and values.

However, the laws do give the National Park Service the management discretion to allow impacts to park resources and values when necessary and appropriate to fulfill the purposes of a park, as long as the impact does not constitute impairment of the affected resources and values. Although Congress has given the National Park Service the management discretion to allow certain impacts within a park, that discretion is limited by the statutory requirement that the National Park Service must leave park resources and values unimpaired, unless a particular law directly and specifically provides otherwise. The prohibited impairment is an impact that, in the professional judgment of the responsible National Park Service manager, will harm the integrity of park resources or values, including the opportunities that otherwise will be present for the enjoyment of these resources or values. An impact to any park resource or value may, but does not necessarily, constitute an impairment, but an impact will be more likely to constitute an impairment when there is a major or severe adverse effect upon a resource or value whose conservation is:

- necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park;
- key to the natural or cultural integrity of the park; or
- identified as a goal in the park's general management plan or other relevant NPS planning documents.

An impact will be less likely to constitute an impairment if it is an unavoidable result of an action necessary to pursue or restore the integrity of park resources or values and it cannot be further mitigated. An impairment analysis for the preferred alternative can be found in Appendix A.

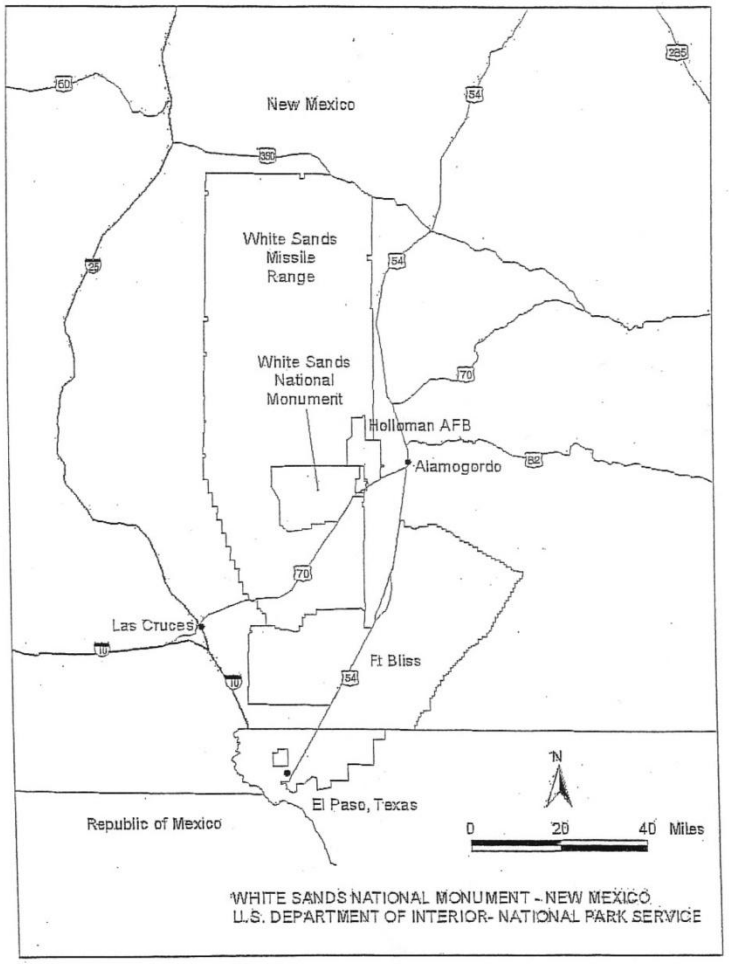

Figure 1: Regional Map of New Mexico and Location of White Sands National Monument.

Background

The current public restrooms located at the park's visitor center are housed within a separate, 426 square foot building, which was constructed along with the historic visitor center building. The visitor center and adjacent restrooms are 1930's era adobe buildings originally conceived by the architects Lyle E. Bennett and Robert W. Alders and constructed in the Pueblo Revival Style by the Civil Works Administration. The visitor center restroom building is one of the contributing buildings in the park's historic district and cultural landscape listed on the National Register of Historic Places. The existing restrooms have been updated but they have a limited

capacity and do not serve groups on tour busses or increased crowds during special events well. Out of all the park's facilities and visitor services, the current restrooms receive the most complaints from visitors. In 2010, visitor satisfaction with the restrooms park wide was rated at 63 percent, which does not meet the park's goals. The present restrooms are not accessible to visitors with disabilities. The high use and subsequent care of the inadequate historic restroom building creates addition work for maintenance staff.

The present office space occupied by the park's interpretive staff is exceedingly limited. Three small offices totaling approximately 556 square feet house records and files, plus 3 permanent interpretive employees, 5 to 8 seasonal employees, 2 Western National Parks Association employees and a number of park volunteers.

Purpose and Need

The purpose of the proposal is to provide safe, healthy, and accessible restroom facilities for monument visitors in compliance with the goals and objectives of current plans and policy. The project is needed to accomplish the following objectives:

1. Provide permanent restroom facilities that meet current ADA, health, and safety standards, as well as meets structural requirements.
2. Improve visitor experience.
3. Provide an additional location for park staff to work that facilitates the monument's operations.
4. Identify a location that minimizes impacts to park resources and will not result in impairment or unacceptable impacts to these resources.

Relationship to Other Plans and Policies

Current plans and policy that pertain to this proposal include the 2009 White Sands National Monument *Management Strategy* (NPS 2009) and the *2006 NPS Management Policies* (NPS 2006). Following is more information on how this proposal meets the goals and objectives of these plans and policies:

- This project is consistent with the 2009 White Sands National Monument *Management Strategy.* The management strategy identifies the actions, impacts, and mitigating measures necessary to resolve the issues facing the Monument.
- The new restrooms will "increase restroom capacity at the visitor center to accommodate large groups" (Chapter 4; Areas of Focus, Section 5; Visitor Experience: 2009 White Sands National Monument *Management Strategy).*
- The proposal is consistent with the goals and objectives of the *2006 National Park Service Management Policies* (NPS 2006) that state that major park facilities within park boundaries should be located so as to minimize impacts to park resources. The proposed site(s) of the new restrooms was identified to minimize harm to all park resources.

Appropriate Use

Section 1.5 of *Management Policies* (2006), "Appropriate Use of the Parks," directs that the National Park Service must ensure that park uses that are allowed will not cause impairment of, or unacceptable impacts on, park resources and values. A new form of park use may be allowed within a park only after a determination has been made in the professional judgment of the park manager that it will not result in unacceptable impacts.

Section 8.1.2 of *Management Policies* (2006), Process for Determining Appropriate Uses, provides evaluation factors for determining appropriate uses. All proposals for park uses are evaluated for":

- consistency with applicable laws, executive orders, regulations, and policies;
- consistency with existing plans for public use and resource management;
- actual and potential effects on park resources and values;
- total costs to the Service; and
- whether the public interest will be served.

Park managers must continually monitor all park uses to prevent unanticipated and unacceptable impacts. If unanticipated and unacceptable impacts emerge, the park manager must engage in a thoughtful, deliberate process to further manage or constrain the use, or discontinue it.

From Section 8.2 of *Management Policies*: "To provide for enjoyment of the parks, the National Park Service will encourage visitor use activities that

- are appropriate to the purpose for which the park was established, and
- are inspirational, educational, or healthful, and otherwise appropriate to the park environment; and
- will foster an understanding of and appreciation for park resources and values, or will promote enjoyment through a direct association with, interaction with, or relation to park resources; and
- can be sustained without causing unacceptable impacts to park resources and values."

A restroom facility accessible to visitors with disabilities is a required and vital structure in most park units. Proper location, sizing, as well as construction materials and methods will ensure that unacceptable impacts to Monument resources and values will not occur. The proposed restrooms are consistent with the Monument's general management plan and other related park plans. With this in mind, the NPS finds that construction and use of new restrooms is an appropriate project at White Sands National Monument.

Scoping

Scoping is a process to identify the resources that may be affected by a project proposal, and to explore possible alternative ways of achieving the proposal while minimizing adverse impacts. White Sands National Monument conducted internal scoping with appropriate National Park Service staff, as described in more detail in the *Consultation and Coordination* chapter. The Monument also conducted external scoping with the public and interested/affected groups and Native American consultation.

Internal scoping was conducted by an interdisciplinary team of White Sands National Monument employees. Team members met on April 5, 2011, to discuss the purpose and need for the project; important resource topics; past, present, and foreseeable impacts; ongoing maintenance activities; and possible mitigation measures of the proposed action. They also discussed potential construction alternatives, and commented on the most preferred alternative.

The initial public scoping of the project proposal consisted of public news releases sent to newspapers in Alamogordo, Las Cruces, Albuquerque and El Paso with notice of the intent to prepare an environmental assessment and requesting comment from concerned citizens or groups. Scoping comments were accepted from March 15 to April 15, 2011. The New Mexico State Historic Preservation Office (NMSHPO) was also contacted since the area is located in an historic district.

During the 30-day scoping period, three public responses were received. The majority of respondents were in favor of constructing new restrooms just north of the current restrooms. This alternative was also favored by the interdisciplinary team. One response opposed the alternative to construct a new restroom building, and suggested that the current restrooms be expanded (enlarged) and rehabilitated. This was dismissed by the interdisciplinary team because the monument and the State Historic Preservation Office found this alternative to not be in keeping with the historic fabric of the building, and it does not meet all of the objectives of the proposed project by not providing for additional administrative space. In addition, during tribal consultation, three Native American tribes responded with no objection to the proposed project. This included the Hopi, Pueblo of Isleta, and the Ysleta del Sur Pueblo. The proposed project will not have an adverse impact on traditional, religious or culturally significant sites or properties that are affiliated with these three tribes. More information regarding external scoping and Native American consultation can be found in *Consultation and Coordination*.

Photo Plate 1: Area of potential impact for Alternative B.

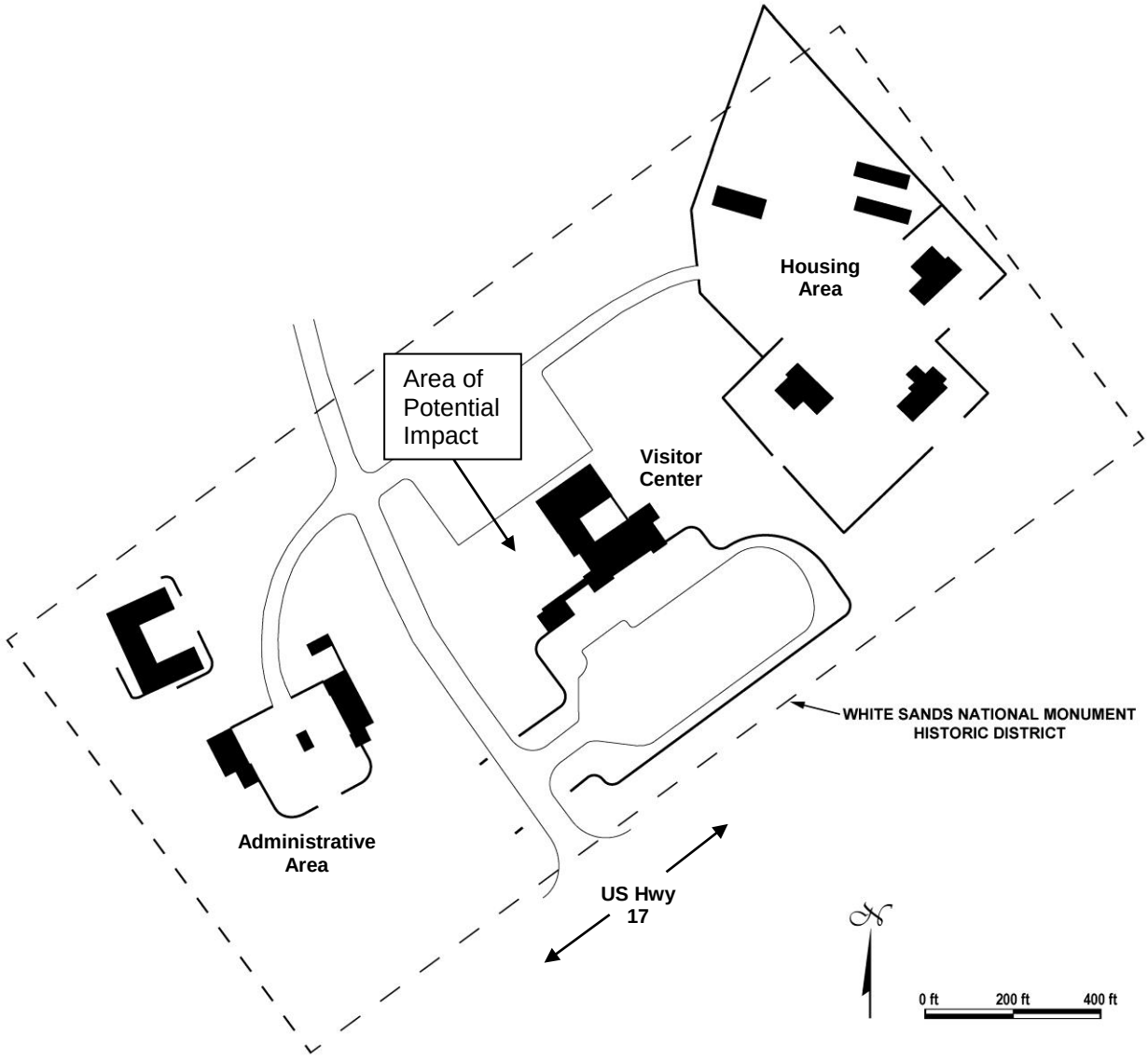

Figure 2: Project location and areas of potential impact.

Impact Topics Retained For Further Analysis

In this section and the following section on *Impact Topics Dismissed from Further Analysis*, the NPS takes a "hard look" at all potential impacts by considering the direct, indirect, and cumulative effects of the proposed action on the environment, along with connected and cumulative actions. Impacts are described in terms of context and duration. The context or extent of the impact is described as localized or widespread. The duration of impacts is described as short-term, ranging from days to three years in duration, or long-term, extending up to 20 years or longer. The intensity and type of impact is described as negligible, minor, moderate, or major, and as beneficial or adverse. The NPS equates "major" effects as "significant" effects. The identification of "major" effects will trigger the need for an EIS. Where the intensity of an impact could be described quantitatively, the numerical data is presented; however, most impact analyses are qualitative and use best professional judgment in making the assessment.

The NPS defines “measurable” impacts as moderate or greater effects. It equates “no measurable effects” as minor or less effects. “No measurable effect” is used by the NPS in determining if a categorical exclusion applies or if impact topics may be dismissed from further evaluation in an EA or EIS. The use of “no measurable effects” in this EA pertains to whether the NPS dismisses an impact topic from further detailed evaluation in the EA. The reason the NPS uses “no measurable effects” to determine whether impact topics are dismissed from further evaluation is to concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail in accordance with CEQ regulations at 1500.1(b).

In this section of the EA, the NPS provides a limited evaluation and explanation as to why some impact topics are not evaluated in more detail. Impact topics are dismissed from further evaluation in this EA if:

- they do not exist in the analysis area, or
- they will not be affected by the proposal, or the likelihood of impacts are not reasonably expected, or
- through the application of mitigation measures, there will be minor or less effects (i.e. no measurable effects) from the proposal, and there is little controversy on the subject or reasons to otherwise include the topic.

Due to there being no effect or no measurable effects, there will either be no contribution towards cumulative effects or the contribution will be low. For each issue or topic presented below, if the resource is found in the analysis area or the issue is applicable to the proposal, then a limited analysis of direct and indirect, and cumulative effects is presented.

Impact topics for this project were identified on the basis of federal laws, regulations, and orders; 2006 *Management Policies*; and National Park Service knowledge of resources at White Sands National Monument. Impact topics that are carried forward for further analysis in this environmental assessment are listed below along with the reasons why the impact topic is further analyzed. For each of these topics, the following text also describes the existing setting or baseline conditions (i.e. affected environment) within the project area. This information will be used to analyze impacts against the current conditions of the project area in the *Environmental Consequences* chapter.

Historic Structures

The National Park Service, as steward of many of America's most important cultural resources, is charged to preserve historic properties for the enjoyment of present and future generations. According to the National Park Service’s 2006 *Management Policies and* Director’s Order-28 *Cultural Resource Management,* management decisions and activities throughout the National Park System must reflect awareness of the irreplaceable nature of these resources (NPS 2006). The National Park Service will protect and manage cultural resources in its custody through effective research, planning, and stewardship and in accordance with these policies and guidelines.

National Park Service Management Policies (2006) categorizes cultural resources as archeological resources, ethnographic resources, historic structures, cultural landscapes, and museum collections. Historic structures and cultural landscapes will be considered here. Archeological resources, ethnographic resources and museum collections will be discussed in the section on impact topics dismissed from further analysis.

Section 106 of the National Historic Preservation Act requires federal agencies to take into account the effects of their undertakings on historic properties and to afford the Advisory

Council on Historic Preservation an opportunity to comment in the consultation process. The term "historic properties" is defined as any site, district, building, structure, or object eligible or listed in the National Register of Historic Places, which is the nation's inventory of historic places and the national repository of documentation on property types and their significance. More information about this consultation can be found in the *Consultation and Coordination* chapter.

The term "historic structures" refers to both historic and prehistoric structures, which are defined as constructions that shelter any form of human habitation or activity. The Monument has an historic district encompassing the adobe visitor center, residences, and maintenance buildings. The White Sands National Monument Historic District (LA 135173) was listed on the National Register in 1988. A Cultural Landscape Inventory (CLI) was completed for this district in 1994, and revised/updated in 2005. List of Classified Structures (LCS) entries have also been completed for district structures.

The proposed project addresses the rehabilitation of the visitor center restrooms. The visitor center is the cornerstone of the park's historic district. The building is a two-story stucco adobe built during the 1930's in Pueblo Revival Style. The building has projecting wooden vigas and canales with portals supported by log posts along the front facade. The interior has corner fireplaces, wall niches, exposed viga and latilla ceilings, with original WPA era furnishings and tin light fixtures. Lyle E. Bennett and Robert W. Alders designed the building. The construction was performed by the Civilian Works Administration.

Because Alternatives B, C and D involve the rehabilitation of the current restrooms, the topic of impacts to the visitor center has been carried forward for further analysis.

Cultural Landscapes

According to the National Park Service's Director's Order-28 *Cultural Resource Management Guideline*, a cultural landscape is a reflection of human adaptation and use of natural resources, and is often expressed in the way land is organized and divided, patterns of settlement, land use, systems of circulation, and the types of structures that are built. A Cultural Landscape Inventory (CLI) has been conducted for the White Sands National Monument Historic District by the NPS Intermountain Region - Santa Fe. The CLI was completed in 1994 and updated/revised in 2005 (CLI Identification Number: 850106). The landscape of the White Sands National Monument Historic District was designed during the period between 1936 and 1940 as a center for park visitors, administration, park maintenance, and residences for park staff. The design was developed by NPS architects, funded by the CWA, and constructed by WPA workers. The Historic District includes a museum/administration building, with attached concession area and restrooms, an employee's residential area with four residences (three WPA and one Mission 66), a maintenance area with warehouse/laundry, utility/powerhouse, gas and oil building, paint/flammable storage building, new administration building, and assorted sheds, dives, parking areas, gates, and walls. Alternative B, the proposed new restrooms building, is likely to impact the Monument's cultural landscape by adding an additional building to the historic district and cultural landscape, therefore the topic of impacts to the cultural landscape has been carried forward for further analysis.

Visitor Use and Experience

According to 2006 *Management Policies*, the enjoyment of park resources and values by people is part of the fundamental purpose of all park units (NPS 2006). The National Park Service is committed to providing appropriate, high quality opportunities for visitors to enjoy the parks, and will maintain within the parks an atmosphere that is open, inviting, and accessible to every segment of society. Further, the National Park Service will provide opportunities for forms of

enjoyment that are uniquely suited and appropriate to the superlative natural and cultural resources found in the parks. The National Park Service 2006 *Management Policies* also state that scenic views and visual resources are considered highly valued associated characteristics that the National Park Service should strive to protect (NPS 2006).

About 475,000 visitors enter the monument annually. The primary use season is March through October, with Easter weekend and school spring breaks being especially busy. Summer temperatures influence use, with daytime highs commonly reaching 100 degrees.

Other than primitive backcountry camping, use is confined to daylight hours along the corridor of the eight-mile public road. The road ends at the "Heart of the Sands," a loop of parking and picnic areas that is the focal point of visitor use in the dunes. People enjoy playing on the dunes near the road, hiking, picnicking, and photographing the dune landscape. Few people hike more than one mile from the main road. The monument is almost entirely surrounded by military land and public access is restricted to roads providing access to remote areas of the monument. Ranger guided interpretive hikes are led daily from the dunes road, and one trip per month is led to the western portion of the monument and the Lake Lucero playa.

Because the proposed project will functionally and visually reconfigure the area adjacent to the visitor center that is currently used by visitors, the topic of visitor use and experience has been carried forward for further analysis.

Park Operations

The administrative functions for the Monument are currently in two separate buildings. Although the majority of employee offices are in the existing administration building (roughly 10 offices), the visitor center also contains office space currently occupied by the park's interpretive staff, which is exceedingly limited and cramped. Three small offices totaling approximately 556 square feet house records and files, as well as three permanent interpretive employees, Western National Parks Association employees, seasonal employees and a number of park volunteers.

Rehabilitation of the current restrooms for administrative use will have a measurable effect on the Monument's staff and how/where they conduct their work. For these reasons, the topic of park operations has been carried forward for further analysis in this document.

Impact Topics Dismissed From Further Analysis

Topography, Geology, and Soils

According to the National Park Service's 2006 *Management Policies*, the National Park Service will preserve and protect geologic resources and features from adverse effects of human activity, while allowing natural processes to continue (NPS 2006). These policies also state that the National Park Service will strive to understand and preserve the soil resources of park units and to prevent, to the extent possible, the unnatural erosion, physical removal, or contamination of the soil, or its contamination of other resources.

The monument consists of 144,000 acres (225 square miles) of Chihuahuan Desert valley floor between elevations of 3,890 and 4,116 above sea level. Just west of the monument, the rugged San Andres Mountains slope down to the western portion of the monument. From the western boundary of the monument, low gradient alluvial slopes (bajadas) drain down into a closed basin, with the low area of the basin and monument forming a playa or mostly dry lakebed called Lake Lucero. North and east of the playa is a very gently sloping land surface called Alkali Flat, which merges easterly into the sand dune field. East and south of the dune field are

flat areas of grass mixed with shrubs.

The white sand dunes are a primary resource of the monument and make up the largest gypsum sand dune field in the world. The white sand dunes are composed of granules of nearly pure hydrated calcium sulfate and range up to 50 feet in height. Annual dune movement varies from 30 feet per year to nearly stationary where vegetation predominates. Older dune deposits of the Duneland-Yessum soil association are stabilized and have extensive soil crust and some vegetation (USDA-SCS 1976). The area east and south of the dunefield is mostly flat, deep, well-drained wind-deposited soil of moderately coarse texture and very high in gypsum content of the Yessum-Holloman soil association.

The proposed construction of new restrooms will be located on flat, well-drained wind-deposited soil that does not contain significant topographic or geologic features. Further, the general location for the new building was previously disturbed by past construction of utilities. Minor modifications of the topography will be required to provide a level surface on which to construct the new building, which will have a negligible to minor effect to the topography of this area. The building construction will also require excavation, which will displace and disturb soils, primarily in the footprint of the new building. Soils may also be disturbed and compacted on a temporary basis in the locations used to access the construction site.

Given that there are no significant topographic or geologic features in the project area, and that the area has been previously disturbed, the proposed actions will result in negligible to minor, temporary and permanent adverse effects to topography, geology, and soils. Because these effects are minor or less in degree, this topic is dismissed from further analysis in this document.

Vegetation

According to the National Park Service's 2006 *Management Policies*, the National Park Service strives to maintain all components and processes of naturally evolving park unit ecosystems, including the natural abundance, diversity, and ecological integrity of plants (NPS 2006).

The following plant communities are found on the 144,000-acre monument: (New Mexico Natural Heritage Program 1994).

- 64,000 acres or 44 percent grass/shrubland
- 11,000 acres or 8 percent creosote/mesquite
- 23,000 acres or 16 percent semi-vegetated dunefield
- 20,000 acres or 14 percent very sparsely vegetated dunefield
- 26,000 acres or 18 percent very sparsely vegetated playa/Alakali Flats

Non-native or exotic plants include salt cedar (tamarisk) scattered throughout the Monument. Salt cedar and other exotics are being controlled in the area within one mile of Monument public roads. African rue, Russian thistle, Malta star-thistle, and ragweed are found and controlled on disturbed sites around buildings and road shoulders.

The project area is topographically flat with introduced desert landscaping. The original desert vegetation was removed from the area in the 1930's when the visitor center was constructed. The native vegetation planted in the area includes cottonwood, four-wing saltbush, pickleweed, little-leaf sumac, soaptree yucca, and claret-cup cactus.

Vegetation will be displaced, disturbed, and/or compacted in the areas of construction, particularly in the footprint of the new building and along the utility line corridors. Construction of new sidewalks to provide access to the newly situated building will also disturb vegetation. Disturbed areas will be revegetated and rehabilitated following construction; therefore, removal

and/or disturbance of vegetation in the project area is expected to result in negligible to minor adverse impacts to vegetation. Because these effects are minor or less in degree, this topic is dismissed from further analysis in this document.

Wildlife

According to the National Park Service's 2006 *Management Policies*, the National Park Service strives to maintain all components and processes of naturally evolving park unit ecosystems, including the natural abundance, diversity, and ecological integrity of animals (NPS 2006). Native wildlife found in the Monument includes at least 6 species of amphibians, 12 snake species, 13 lizard species, one turtle species, 210 bird species, and 26 mammal species. Bird species include various perching birds as winter migrants and nesting during spring, some spring and fall migratory shore birds and migratory raptors. Mammals include various rodents, bats, and medium sized mammals such as gray and kit fox, coyote, badger, raccoon, ringtail, and bobcats.

Wildlife in the project area is limited to lizards and various rodents. Perching bird species can also be seen in the area, these include cactus wren, roadrunner, curved-bill thrasher and Scott's oriole. The size of the area and the presence of humans, human-related activities, and structures have removed or displaced much of the native wildlife habitat in the project area, which has limited the number and variety of wildlife occurrences in the area. Some smaller wildlife such as rodents, reptiles, and amphibians and their habitat will be displaced or eliminated during construction of the new restrooms. Disturbed areas will be revegetated and rehabilitated following construction, which will result in a negligible to minor adverse impact to the wildlife and wildlife habitat in the immediate area of construction.

During construction, noise will also increase, which may disturb wildlife in the general area. Construction-related noise will be temporary, and existing sound conditions will resume following construction activities. Therefore, the temporary noise from construction will have a negligible to minor adverse effect on wildlife. Because these effects are minor or less in degree, this topic is dismissed from further analysis in this document.

Special Status Species

The Endangered Species Act of 1973 requires examination of impacts on all federally-listed threatened, endangered, and candidate species. Section 7 of the Endangered Species Act requires all federal agencies to consult with the U.S. Fish and Wildlife Service to ensure that any action authorized, funded, or carried out by the agency does not jeopardize the continued existence of listed species or critical habitats. In addition, the 2006 *Management Policies* and Director's Order-77 *Natural Resources Management Guidelines* require the National Park Service to examine the impacts on federal candidate species, as well as state-listed threatened, endangered, candidate, rare, declining, and sensitive species (NPS 2006). The proposed actions will have no effect on state or federally-listed threatened or endangered species.

A number of species are listed for federal protection under the Endangered Species Act as endangered or threatened and may be found on the Monument (Appendix B). Several state-listed species may also be found. State and federal listings are by county, with no explanation of where in the county they may be found. None of the listed plants are known on the Monument, and with the exception of night blooming cereus cactus, are not likely to be found due to requirements of soil type, elevation, and moisture. A breeding population of the state-listed White Sands Pupfish occupies the Lost River, which ends about 1,000 feet upstream from the Monument boundary. No listed birds or mammals are known to nest or breed within the Monument, although they may pass through the area.

Protection under the Migratory Bird Treaty Act makes it unlawful to pursue, hunt, kill, capture, possess, buy, sell, purchase, or barter any migratory bird, including the feathers or other parts, nests, eggs, or migratory bird products. In addition, this act serves to protect environmental conditions for migratory birds from pollution or other ecosystem degradations. Some migratory birds may be potential transients of the general area, but the immediate project area contains little to no suitable habitat for migratory birds. There are no known nesting sites in this area, and these lands are not vital for foraging or roosting. Construction-related noise could potentially disturb transient bird species, but these adverse impacts will be 1) temporary, lasting only as long as construction, and 2) negligible, because suitable habitat for transient birds is found throughout the region.

No threatened, endangered, or other species of concern are known to occur in the project area, and impacts to transient bird species will be temporary and negligible. Because these effects are minor or less in degree, this topic is dismissed from further analysis.

Water Resources

National Park Service policies require protection of water quality consistent with the Clean Water Act. The purpose of the Clean Water Act is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." To enact this goal, the U.S. Army Corps of Engineers has been charged with evaluating federal actions that result in potential degradation of waters of the United States and issuing permits for actions consistent with the Clean Water Act. The U.S. Environmental Protection Agency also has responsibility for oversight and review of permits and actions, which affect waters of the United States.

The proposed project area does not contain surface waters, and is mostly dry, except for periodic runoff during storm events. Water quality, water quantity, and drinking water are not expected to be affected by the project. Although the proposed restrooms contain more fixtures, the facilities will comprise of the latest water conserving fixtures, which will result in the consumption of less water when compared to the current fixtures.

The proposed action will result in negligible effects to water resources. Because these effects are minor or less in degree, this topic is dismissed from further analysis in this document.

Wetlands

For regulatory purposes under the Clean Water Act, the term wetlands means "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas."

Executive Order 11990 *Protection of Wetlands* requires federal agencies to avoid, where possible, adversely impacting wetlands. Further, §404 of the Clean Water Act authorizes the U.S. Army Corps of Engineers to prohibit or regulate, through a permitting process, discharge or dredged or fill material or excavation within waters of the United States. National Park Service policies for wetlands as stated in 2006 *Management Policies* and Director's Order 77-1 *Wetlands Protection* strive to prevent the loss or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands. In accordance with DO 77-1 *Wetlands Protection*, proposed actions that have the potential to adversely impact wetlands must be addressed in a statement of findings for wetlands.

No wetlands are located in the project area; therefore, a statement of findings for wetlands will not be prepared. Because there are no wetlands in the project area, this topic is dismissed from further analysis in this document.

Floodplains

Executive Order 11988 *Floodplain Management* requires all federal agencies to avoid construction within the 100-year floodplain unless no other practicable alternative exists. The National Park Service under 2006 *Management Policies* and Director's Order 77-2 *Floodplain Management* will strive to preserve floodplain values and minimize hazardous floodplain conditions. According to Director's Order 77-2 *Floodplain Management*, certain construction within a 100-year floodplain requires preparation of a statement of findings for floodplains.

The project area for the new restrooms is not within a 100-year floodplain; therefore, a statement of findings for floodplains will not be prepared. Because there are no floodplains in the project area, this topic is dismissed from further analysis in this document.

Archeological Resources

In addition to the National Historic Preservation Act and the National Park Service 2006 *Management Policies*, the National Park Service's Director's Order-28B *Archeology* affirms a long-term commitment to the appropriate investigation, documentation, preservation, interpretation, and protection of archeological resources inside units of the National Park System. As one of the principal stewards of America's heritage, the National Park Service is charged with the preservation of the commemorative, educational, scientific, and traditional cultural values of archeological resources for the benefit and enjoyment of present and future generations. Archeological resources are nonrenewable and irreplaceable, so it is important that all management decisions and activities throughout the National Park System reflect a commitment to the conservation of archeological resources as elements of our national heritage.

National Park Service *Management Policies* (2006) categorizes cultural resources as archeological resources, ethnographic resources, historic structures, cultural landscapes, and museum collections. Archeological resources, ethnographic resources and museum collections are considered here.

White Sands National Monument has approximately 144,000 acres. Less than one percent has archeological resource survey data. Information on the park's cultural resources is based on limited pedestrian survey and horseback reconnaissance. Sites appear to be scattered throughout the Monument primarily in the vegetated sand dunes, mesquite and grassland areas. Site density in the active dunes and in the playa areas is expected to be low.

In general, the Monument contains both prehistoric and historic sites. These include Paleolithic, Archaic, Mogollon and Apache artifact scatters and hearth sites. Two pueblo period Mogollon villages are documented within the Monument. The Monument also has historic roads, corrals, wells and water tanks, along with one 1950s era missile tracking station. The Monument has an historic district known as the Parabolic Dune Hearth Mounds listed to the state register as property 434. The hearth mounds district has been determined to be eligible for the New Mexico State Register of Historic Places.

A record search of the White Sands National Monument and Archaeological Records Management System (ARMS) files was conducted for the area of the proposed project. The record search revealed that there was one survey within the project area that located no archeological resource sites. Because the proposed action will have no effects on archeological resources, this topic is dismissed from further analysis in this document.

Paleontological Resources

According to 2006 *Management Policies*, paleontological resources (fossils), including both organic and mineralized remains in body or trace form, will be protected, preserved, and

managed for public education, interpretation, and scientific research (NPS 2006). There are no known paleontological resources within the proposed project area, therefore, the proposed action will have no effects on paleontological resources, so this topic is dismissed from further analysis in this document.

Ethnographic Resources

National Park Service's Director's Order-28 *Cultural Resource Management* defines ethnographic resources as any site, structure, object, landscape, or natural resource feature assigned traditional legendary, religious, subsistence, or other significance in the cultural system of a group traditionally associated with it. According to DO-28 and Executive Order 13007 on sacred sites, the National Park Service should try to preserve and protect ethnographic resources.

There are no known ethnographic resources in the project area. Ethnographic resources within the Monument consist of plant material collected by Native American groups. In past year's plant materials have not been collected in the project area and are readily available elsewhere in the Monument. Because the proposed action will have no effects on ethnographic resources, this topic is dismissed from further analysis in this document.

Museum Collections

According to Director's Order-24 *Museum Collections,* the National Park Service requires the consideration of impacts on museum collections (historic artifacts, natural specimens, and archival and manuscript material), and provides further policy guidance, standards, and requirements for preserving, protecting, documenting, and providing access to, and use of, National Park Service museum collections.

The Monument has 10,812 objects and specimens in its museum collection. The vast majority of the collection is stored at the National Park Service Western Archeological and Conservation Center in Tucson, Arizona. Collections located at the Monument are not stored in any of the facilities considered under this project. This project is not expected to generate new collections. Because the proposed action will have no effects on museum collections, this topic is dismissed from further analysis in this document.

Air Quality

The Clean Air Act of 1963 (42 U.S.C. 7401 *et seq.*) was established to promote the public health and welfare by protecting and enhancing the nation's air quality. The act establishes specific programs that provide special protection for air resources and air quality related values associated with National Park Service units. Section 118 of the Clean Air Act requires a park unit to meet all federal, state, and local air pollution standards. White Sands National Monument is designated as a Class II air quality area under the Clean Air Act. A Class II designation allows moderate deterioration of air quality within national ambient air quality standards, and indicates the maximum allowable increase in concentrations of pollutants over baseline concentrations of sulfur dioxide and particulate matter as specified in §163 of the Clean Air Act. Further, the Clean Air Act provides that the federal land manager has an affirmative responsibility to protect air quality related values (including visibility, plants, animals, soils, water quality, cultural resources, and visitor health) from adverse pollution impacts (EPA 2000).

Construction activities such as hauling materials and operating heavy equipment could result in temporary increases of vehicle exhaust, emissions, and fugitive dust in the general project area. Any exhaust, emissions, and fugitive dust generated from construction activities will be temporary and localized and will likely dissipate rapidly because air stagnation at White Sands National Monument is rare. Overall, the project could result in a negligible degradation of local

air quality, and such effects will be temporary, lasting only as long as construction. The Class II air quality designation for White Sands National Monument will not be affected by the proposal. Because there will be negligible effects on air quality, this topic is dismissed from further analysis in this document.

Soundscape Management

In accordance with 2006 *Management Policies* and Director's Order-47 *Sound Preservation and Noise Management*, an important component of the National Park Service's mission is the preservation of natural soundscapes associated with national park units (NPS 2006). Natural soundscapes exist in the absence of human-caused sound. The natural ambient soundscape is the aggregate of all the natural sounds that occur in park units, together with the physical capacity for transmitting natural sounds. Natural sounds occur within and beyond the range of sounds that humans can perceive and can be transmitted through air, water, or solid materials. The frequencies, magnitudes, and durations of human-caused sound considered acceptable varies among National Park Service units as well as potentially throughout each park unit, being generally greater in developed areas and less in undeveloped areas.

The proposed location for the new restrooms and all construction activity will occur in what can be considered the developed zone of White Sands National Monument. Existing sounds in this area are most often generated from vehicular traffic (visitors and employees entering/leaving the Monument), people, climate controls on the buildings, military over-flights, some wildlife such as birds, and wind. Sound generated by the long-term operation of the proposed building(s) may include climate controls such as heating or air conditioning units and people using the building. Because the area already contains man-made noises, the long-term operation of the building is not expected to appreciably increase the noise levels in the general area.

During construction, human-caused sounds will likely increase due to construction activities, equipment, vehicular traffic, and construction crews. Any sounds generated from construction will be temporary, lasting only as long as the construction activity is generating the sounds, and will have a negligible to minor adverse impact on visitors and employees. Because these effects are minor or less in degree, this topic is dismissed from further analysis in this document.

Lightscape Management

In accordance with 2006 *Management Policies*, the National Park Service strives to preserve natural ambient lightscapes, which are natural resources and values that exist in the absence of human caused light (NPS 2006). White Sands National Monument strives to limit the use of artificial outdoor lighting to that which is necessary for basic safety requirements. The Monument also strives to ensure that all outdoor lighting is shielded to the maximum extent possible, to keep light on the intended subject and out of the night sky. The visitor center, maintenance buildings, and the restrooms are the primary sources of light in the Monument.

The proposed action may incorporate minimal exterior lighting on the proposed restrooms, but the lighting will be directed toward the intended subject with appropriate shielding mechanisms and will be placed in only those areas where lighting is needed for safety reasons. The amount and extent of exterior lighting on the proposed building will have negligible effects on the existing outside lighting or natural night sky of the area. Because these effects are minor or less in degree, this topic is dismissed from further analysis in this document.

Socioeconomics

The city of Alamogordo, New Mexico, is 15 miles east of the monument, and has a population of about 35,000. Holloman Air Force Base is just east of the monument, with a base population of about 4,000. Military spending dominates the local economy. Tourism adds to the economy,

and the monument draws national and international visitors. Other nearby tourist attractions include the Space Center Museum in Alamogordo, Oliver Lee Memorial State Park south of Alamogordo, the resort town of Cloudcroft and Lincoln National Forest east of Alamogordo, and the resort town of Ruidoso and two casinos to the northeast.

West, north and south of the Monument is the White Sands Missile Range, managed by the U.S. Army. This area of 2 million plus acres is the largest Department of Defense installation and has been a primary military testing and training reservation since the beginning of World War II. Fort Bliss is south of and adjacent to the missile range, with over 1 million acres. Also west of the monument is the San Andres National Wildlife Refuge, managed by the U.S. Fish and Wildlife Service to protect desert bighorn sheep. On the east side of the Monument is Holloman Air Force Base, a German Air Force flight training unit, and several research and development facilities. Airspace over the Monument is controlled by the military and ground access to most of the Monument boundary is via military land and roads and controlled by military security.

The city of Las Cruces is 60 miles west of the Monument, with a population over 100,000, and diversified economy including New Mexico State University. The cities of El Paso, Texas, and Ciudad Juárez, Republic of Mexico, are 90 miles south of the Monument, with a combined population of about 2 million. El Paso/Juárez provides a transportation hub, a major entry port from Mexico to the U.S., NAFTA oriented manufacturing, oil refining, the University of Texas at El Paso, and Fort Bliss Army base.

The proposed project could result in the purchase of materials and the temporary employment of local construction workers, which may result in a minor beneficial effect or gain to the local economy. Because these effects are minor or less in degree, this topic is dismissed from further analysis in this document.

Prime and Unique Farmlands

The Farmland Protection Policy Act of 1981, as amended, requires federal agencies to consider adverse effects to prime and unique farmlands that will result in the conversion of these lands to non-agricultural uses. Prime or unique farmland is classified by the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS), and is defined as soil that particularly produces general crops such as common foods, forage, fiber, and oil seed; unique farmland produces specialty crops such as fruits, vegetables, and nuts. According to the NRCS, the project area does not contain prime or unique farmlands (NRCS 2003). Because there will be no effects on prime and unique farmlands, this topic is dismissed from further analysis in this document.

Indian Trust Resources

Secretarial Order 3175 requires that any anticipated impacts to Indian trust resources from a proposed project or action by the Department of Interior agencies be explicitly addressed in environmental documents. The federal Indian trust responsibility is a legally enforceable fiduciary obligation on the part of the United States to protect tribal lands, assets, resources, and treaty rights, and it represents a duty to carry out the mandates of federal law with respect to American Indian and Alaska Native tribes.

There are no Indian trust resources at White Sands National Monument. The lands comprising the Monument are not held in trust by the Secretary of the Interior for the benefit of Indians due to their status as Indians. Because there are no Indian trust resources, this topic is dismissed from further analysis in this document.

Environmental Justice

Executive Order 12898 *General Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* requires all federal agencies to incorporate environmental justice into their missions by identifying and addressing disproportionately high and adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities. Because the new restroom facility will be available for use by all park staff regardless of race or income, and the construction workforces will not be hired based on their race or income, the proposed action will not have disproportionate health or environmental effects on minorities or low-income populations or communities. Because there will be no disproportionate effects, this topic is dismissed from further analysis in this document.

Climate Change and Sustainability

Although climatologists are unsure about the long-term results of global climate change, it is clear that the planet is experiencing a warming trend that affects ocean currents, sea levels, polar sea ice, and global weather patterns. Although these changes will likely affect winter precipitation patterns and amounts in the parks, it will be speculative to predict localized changes in temperature, precipitation, or other weather changes, in part because there are many variables that are not fully understood and there may be variables not currently defined. Therefore, the analysis in this document is based on past and current weather patterns and the effects of future climate changes are not discussed further.

In an effort to "green the parks," construction of the new building (Alternative B) would utilize renewable resources and approach the maximum attainable recycling of depletable resources, to the extent possible. The subject of sustainability will be addressed by proposing to construct the new building using sustainable construction methods and materials, including but not limited to straw bale construction for the walls, the use of solar panels as an energy source, and the use of water efficient fixtures such as low-flow toilets. An effort will be made to ensure that the most sustainable products available will be utilized in the construction of the new building.

ALTERNATIVES

During April of 2011, an interdisciplinary team of National Park Service employees met for the purpose of developing project alternatives. This meeting resulted in the definition of project objectives as described in the *Purpose and Need,* and a list of alternatives that could potentially meet these objectives. A total of five action alternatives and the no-action alternative were originally identified for this project. Of these, two of the action alternatives were dismissed from further consideration for various reasons, as described later in this chapter. Three action alternatives and the no-action alternative are carried forward for further evaluation in this environmental assessment. A summary table comparing alternative components is presented at the end of this chapter.

Alternatives Carried Forward

Alternative A – No-Action

Under this alternative, the proposed restrooms would not be constructed. The existing restrooms adjacent to the historic visitor center would continue to be utilized. The capacity of the 426 square foot public restroom would not be increased and it would not be accessible to visitors with disabilities. Should the no-action alternative be selected, the National Park Service would respond to future needs and conditions of the current restrooms without major actions or changes in the present course of action. See Figure 3 for a plan of the existing conditions.

Alternative B – Construct New Restrooms

This alternative consists of constructing restrooms to the area west of the visitor center bounded by the entrance road and the north parking lot (Figures 4 and 5). Additionally, the current restrooms would be rehabilitated for administrative use. The following text further describes the components of alternative B:

- **Building Features** – The new restroom building would be approximately 800 to 1000 square feet in size. Rough dimensions for the new restrooms are 25 feet wide by 40 feet long. The building would contain approximately 11 lavatories and 3 urinals, and be accessible to visitors with disabilities. Additionally, the current restrooms would be rehabilitated for administrative use (ie; office space). The new building would be equipped with a modern climate control system, which would include heating, ventilation, and air conditioning (HVAC). A fire protection system for the entire building, consisting of smoke and heat detection alarms and sprinklers, would also be provided. In an effort to "green the parks," construction of the new building would utilize renewable resources and approach the maximum attainable recycling of depletable resources, to the extent possible. One construction method to consider is the use of straw bales for the walls of the proposed building.
- **Use/Operation of the Facility** – The proposed new restrooms would primarily be used by Monument visitors. The current restrooms would be temporarily closed, and the space would be rehabilitated for administrative use (possibly additional office space), which includes upgrading the electrical system, adding data wiring, and upgrading the mechanical infrastructure (HVAC) as necessary.
- **Utilities** – The building would be served by existing utilities near the site, including water, sewer, electric, and gas. Connecting these existing utilities to the new building would likely entail excavation and placement of additional underground piping/wiring.

- **Access** – Access to the new restroom building would be via a sidewalk leading to/from the concession/visitor parking areas. Signs would also be erected to direct employees and visitors to the restrooms.
- **Parking** – The site of the new restrooms is near an existing parking lot currently used by visitors and employees to access the existing visitor center. The capacity of this parking lot is currently sufficient, so no new parking is needed.
- **Revegetation** – Existing contributing vegetation within the project area will be preserved as much as possible, and disturbances will be kept to a minimum. Landscaping around the new facility and within disturbed areas will match the existing contributing desert landscaping around the visitor center with respect to grading, drainage, density, species and arrangement of plants, and the placement of rocks and other natural features.
- **Pest Control** – Pest control would likely not be needed in the new restroom building due to its structural integrity. However, if rodents or other pests do enter the new building, they would be removed using biological, physical, or chemical controls.
- **Construction Staging** – To implement this alternative, an area near the new restrooms would be used for construction staging, material stockpiling, and equipment storage. This area would likely be sited in a previously disturbed area, away from visitor use areas. Portions of the existing parking lot may be used for construction purposes as well.

This alternative is based on preliminary designs and best information available at the time of this writing. Specific distances, areas, and layouts used to describe the alternative are only estimates and could change during final site design. If changes during final site design are inconsistent with the intent and effects of the selected alternative, then additional compliance would be completed, as appropriate.

Alternative C – Construct New Restrooms Inside of the Warehouse

This alternative consists of constructing new restrooms inside of the current non-historic concessions warehouse. The current restrooms would be rehabilitated and continue to be used as restrooms. The following text further describes the components of alternative C:

- **Building Features** – The new restrooms would be approximately 400 square feet in size, and be accessible to visitors with disabilities (Figures 6 and 7). Additionally, the current restrooms would be rehabilitated. The new restrooms would be equipped with a modern climate control system, which would include heating, ventilation, and air conditioning (HVAC). A fire protection system for the entire building, consisting of smoke and heat detection alarms and sprinklers, would also be provided. In an effort to "green the parks," construction of the new restrooms would utilize renewable resources and approach the maximum attainable recycling of depletable resources, to the extent possible.
- **Use/Operation of the Facility** – The new restrooms would primarily be used by Monument visitors. The current restrooms would be closed temporarily and rehabilitated to improve the facilities so they can continue to be used as restrooms. This includes widening the doorways, widening one of the stalls, and replacing the fixtures.
- **Utilities** – The new restrooms would be served by existing utilities, including water, sewer, electric, and gas. Connecting these existing utilities to the new restrooms would likely entail excavation and placement of additional underground piping/wiring.
- **Access** – Access to the new restrooms would be via a sidewalk leading to/from the concession parking area. Signs would also be erected to direct employees and visitors to the restrooms.

- **Parking** – The site of the new restrooms is near an existing parking lot currently used by visitors and employees to access the existing visitor center. The capacity of this parking lot is currently sufficient, so no new parking is needed.
- **Revegetation** – Existing contributing vegetation within the project area will be preserved as much as possible, and disturbances will be kept to a minimum. Landscaping around the new facility and within disturbed areas will match the existing contributing desert landscaping around the visitor center with respect to grading, drainage, density, species and arrangement of plants, and the placement of rocks and other natural features.
- **Pest Control** – Pest control would likely not be needed in the new restrooms due to its structural integrity. However, if rodents or other pests do enter the building, they would be removed using biological, physical, or chemical controls.
- **Construction Staging** – To implement this alternative, an area near the new restrooms would be used for construction staging, material stockpiling, and equipment storage. This area would likely be sited in a previously disturbed area, away from visitor use areas. Portions of the existing parking lot may be used for construction purposes as well.

This alternative is based on preliminary designs and best information available at the time of this writing. Specific distances, areas, and layouts used to describe the alternative are only estimates and could change during final site design. If changes during final site design are inconsistent with the intent and effects of the selected alternative, then additional compliance would be completed, as appropriate.

Alternative D – Rehabilitate Current Restrooms

This alternative consists of renovating the current restrooms so they meet ADA guidelines and are accessible to visitors with disabilities. The following text further describes the components of alternative B:

- **Building Features** – The new restrooms would be rehabilitated so they are accessible to visitors with disabilities. The only changes to the historic building fabric would be the widening of the restroom entrances. The new restrooms would be equipped with a modern climate control system, which would include heating, ventilation, and air conditioning (HVAC). A fire protection system for the entire building, consisting of smoke and heat detection alarms and sprinklers, would also be provided. In an effort to “green the parks,” rehabilitation of the current restrooms would utilize renewable resources and approach the maximum attainable recycling of depletable resources, to the extent possible.
- **Use/Operation of the Facility** – The current restrooms are primarily used by Monument visitors. The current restrooms would be closed temporarily and rehabilitated to improve the facilities so they can continue to be used as restrooms. This includes widening the doorways, widening one of the stalls, and replacing the fixtures.
- **Utilities** – The restrooms are served by existing utilities, including water, sewer, electric, and gas. Re-routing or re-connecting these existing utilities to the restrooms would likely entail excavation and placement of additional underground piping/wiring.
- **Access** – Access to the restrooms are via a sidewalk leading to/from the concession parking area. Signs would also be erected to direct employees and visitors to the restrooms.
- **Parking** – The site of the restrooms is near an existing parking lot currently used by visitors and employees to access the existing visitor center. The capacity of this parking lot is currently sufficient, so no new parking is needed.

- **Revegetation** – Existing contributing vegetation within the project area will be preserved as much as possible, and disturbances will be kept to a minimum. Landscaping around the new facility and within disturbed areas will match the existing contributing desert landscaping around the visitor center with respect to grading, drainage, density, species and arrangement of plants, and the placement of rocks and other natural features.
- **Pest Control** – Pest control would continue to be needed in the restrooms. When rodents or other pests enter the building, they are removed using biological, physical, or chemical controls.
- **Construction Staging** – To implement this alternative, an area near the current restrooms would be used for construction staging, material stockpiling, and equipment storage. This area would likely be sited in a previously disturbed area, away from visitor use areas. Portions of the existing parking lot may be used for construction purposes as well.

This alternative is based on preliminary designs and best information available at the time of this writing. Specific distances, areas, and layouts used to describe the alternative are only estimates and could change during final site design. If changes during final site design are inconsistent with the intent and effects of the selected alternative, then additional compliance will be completed, as appropriate.

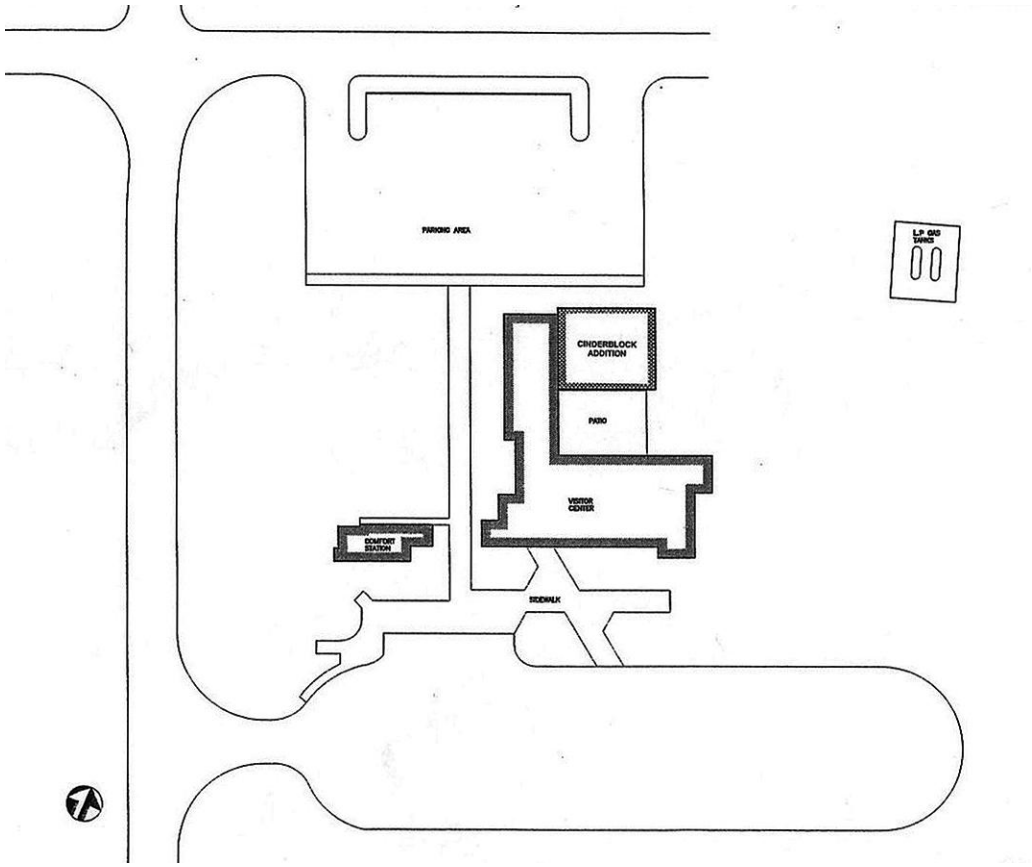

Figure 3: Plan of existing facilities.

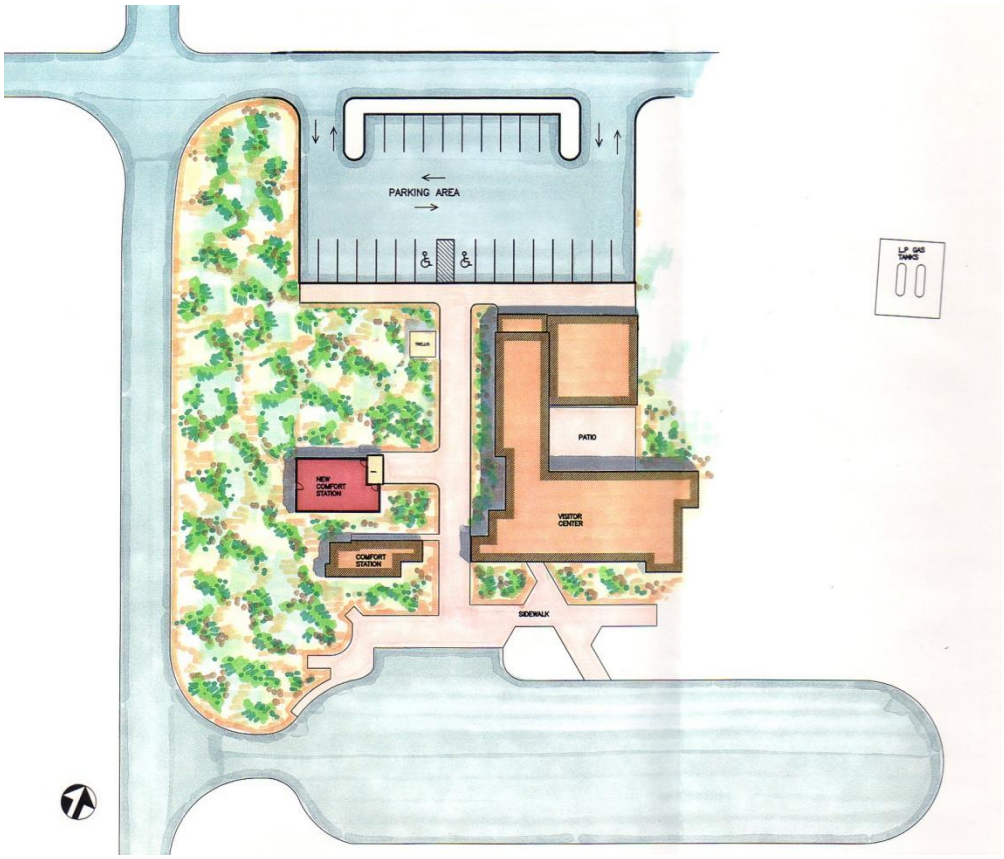

Figure 4: Overall plan of proposed restrooms (Alternative B).

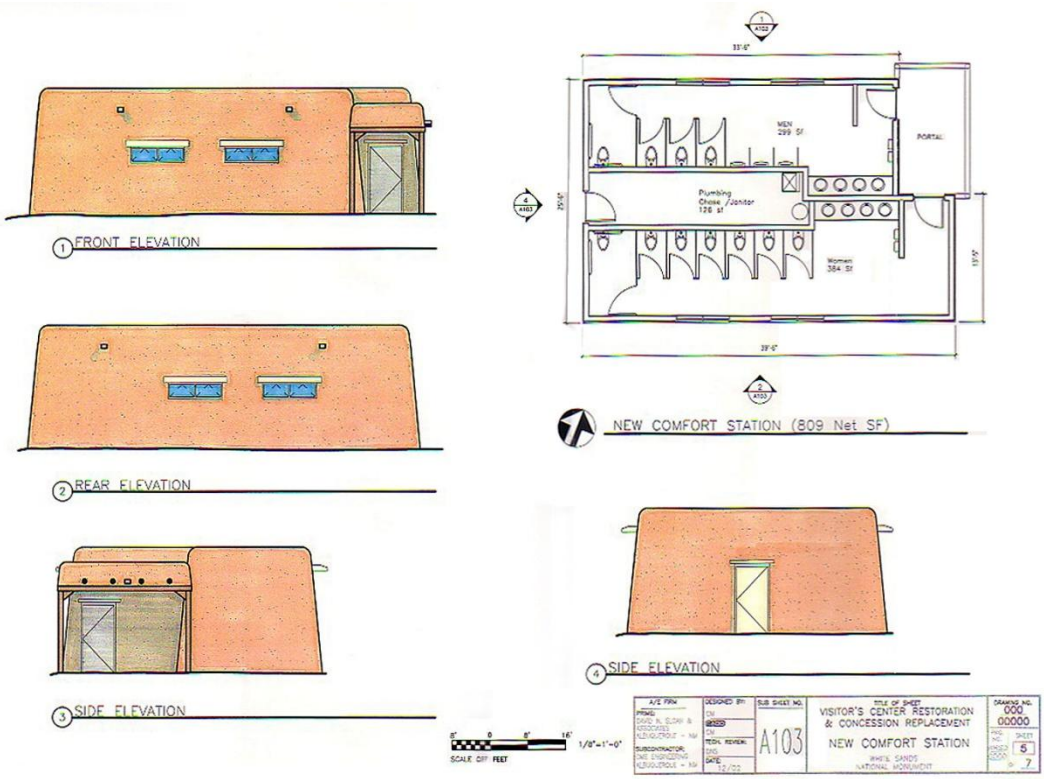

Figure 5: Elevations and floor plan of proposed restrooms (Alternative B).

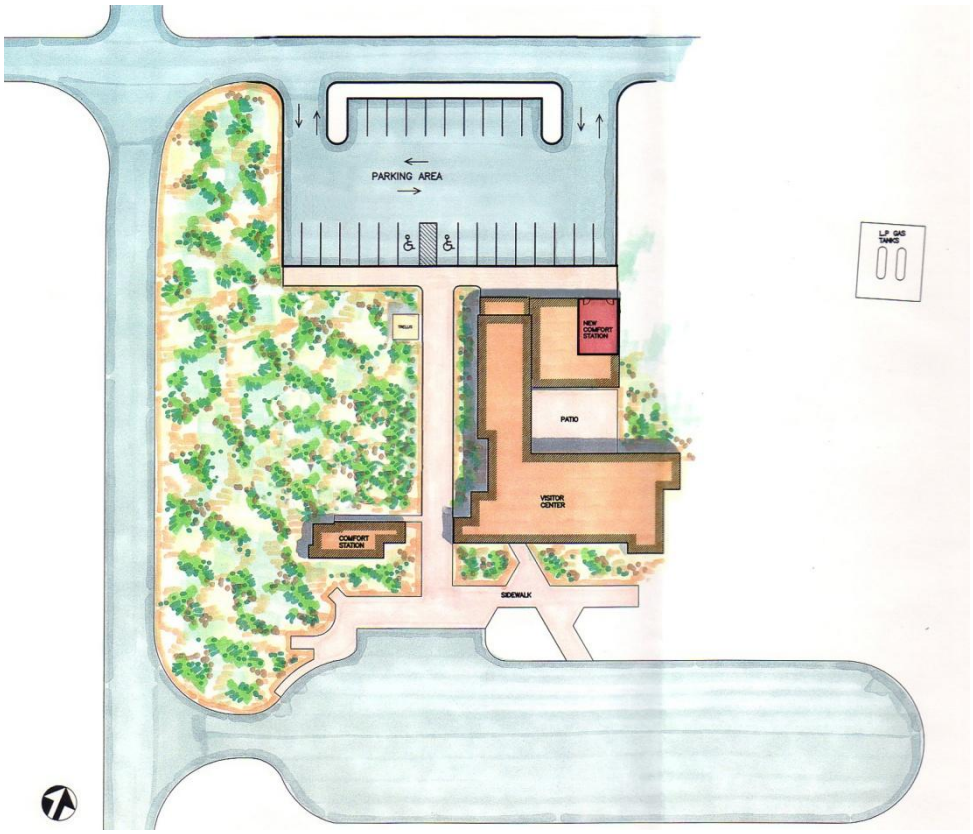

Figure 6: Overall plan of proposed restrooms within the non-historic warehouse (Alternative C).

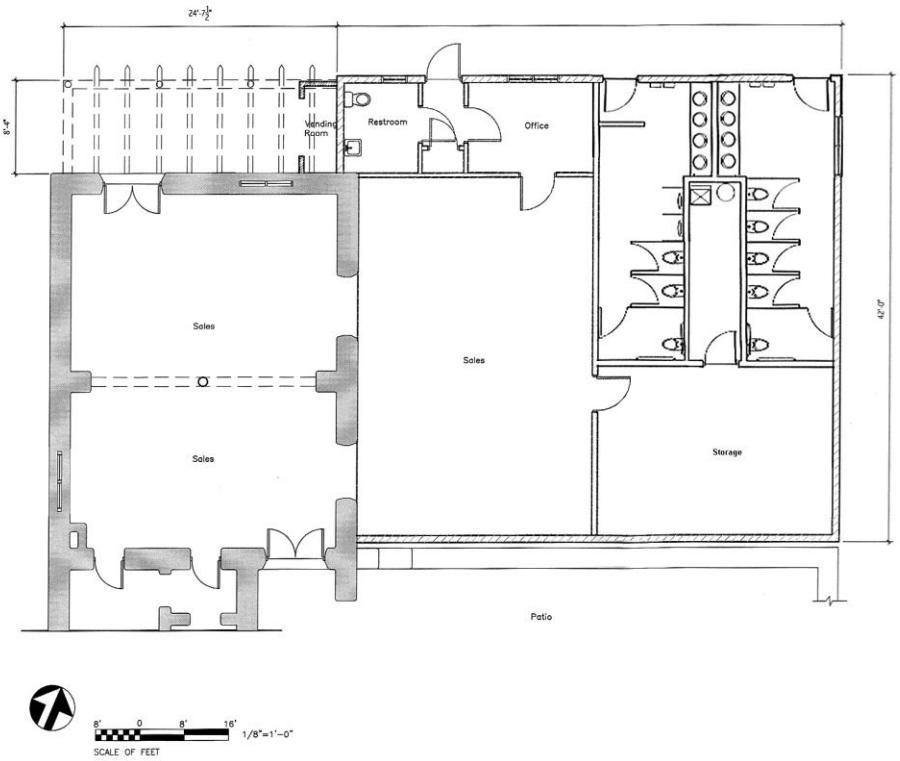

Figure 7: Floor plan of proposed restrooms within the non-historic warehouse (Alternative C).

Mitigation Measures

The following mitigation measures were developed to minimize the degree and/or severity of adverse effects and will be implemented during construction of the preferred action alternative, as needed:

- To minimize the amount of ground disturbance, staging and stockpiling areas will be in previously disturbed sites, away from visitor use areas to the extent possible. All staging and stockpiling areas will be returned to pre-construction conditions following construction.
- Construction zones will be identified and fenced with construction tape, snow fencing, or some similar material prior to any construction activity. The fencing will define the construction zone and confine activity to the minimum area required for construction. All protection measures will be clearly stated in the construction specifications and workers will be instructed to avoid conducting activities beyond the construction zone as defined by the construction zone fencing.
- Revegetation of disturbed areas will take place following construction and designed to minimize the visual intrusion of the structure. Revegetation efforts will strive to reconstruct the natural spacing, abundance, and diversity of native plant species using native species. All disturbed areas will be restored as nearly as possible to pre-construction conditions shortly after construction activities are completed. Weed control methods will be implemented to minimize the introduction of noxious weeds. Some plants may be removed, but other existing vegetation at the site will not be disturbed to the extent possible.
- Employees and construction crews will be required to park their vehicles in the back of the parking lot to ensure enough capacity and easier access to the monument for visitors.
- Because disturbed soils are susceptible to erosion until revegetation takes place, standard erosion control measures such as silt fences and/or sand bags will be used to minimize any potential soil erosion.
- Fugitive dust generated by construction will be controlled by spraying water on the construction site, if necessary.
- To reduce noise and emissions, construction equipment will not be permitted to idle for long periods of time.
- To minimize possible petrochemical leaks from construction equipment, the contractor will regularly monitor and check construction equipment to identify and repair any leaks.
- Construction workers and supervisors will be informed about special status species. Contract provisions will require the cessation of construction activities if a species were discovered in the project area, until park staff re-evaluates the project. This will allow modification of the contract for any protection measures determined necessary to protect the discovery.
- Should construction unearth previously undiscovered cultural resources, work will be stopped in the area of any discovery and the Monument will consult with the state historic preservation officer and the Advisory Council on Historic Preservation, as necessary, according to §36 CFR 800.13, *Post Review Discoveries*. In the unlikely event that human remains are discovered during construction, provisions outlined in the Native American Graves Protection and Repatriation Act (1990) will be followed.
- The National Park Service will ensure that all contractors and subcontractors are informed of the penalties for illegally collecting artifacts or intentionally damaging paleontological

materials, archeological sites, or historic properties. Contractors and subcontractors will also be instructed on procedures to follow in case previously unknown archeological resources are uncovered during construction.

- To minimize the potential for impacts to park visitors, variations on construction timing may be considered. One option includes conducting the majority of the work in the off-season (winter) or shoulder seasons. Another option includes implementing daily construction activity curfews such as not operating construction equipment between the hours of 6 PM to 7 AM in summer (May – September), and 6 PM to 8 AM in the winter (October – April). The National Park Service will determine this in consultation with the contractor.
- Construction workers and supervisors will be informed about the special sensitivity of monument's values, regulations, and appropriate housekeeping.
- According to 2006 *Management Policies*, the National Park Service will strive to construct facilities with sustainable designs and systems to minimize potential environmental impacts. Development will not compete with or dominate the Monument's features, or interfere with natural processes, such as the seasonal migration of wildlife or hydrologic activity associated with wetlands. To the extent possible, the design and management of facilities will emphasize environmental sensitivity in construction, use of nontoxic materials, resource conservation, recycling, and integration of visitors with natural and cultural settings. The National Park Service also reduces energy costs, eliminates waste, and conserves energy resources by using energy-efficient and cost-effective technology. Energy efficiency is incorporated into the decision-making process during the design and acquisition of buildings, facilities, and transportation systems that emphasize the use of renewable energy sources.

Alternatives Considered and Dismissed

The following alternatives were considered for project implementation, but were ultimately dismissed from further analysis. Reasons for their dismissal are provided in the following alternative descriptions.

- **Alternative Locations for Restroom Facilities –** The proposal to construct the new restrooms outside of the historic district was dismissed. Locating these facilities outside of the historic district will remove them from the area most used by visitors, and therefore the restrooms will not be accessible. This alternative will require new ground disturbance in a previously undisturbed location leading to building construction outside of the developed area of the Monument. In addition, new utility and sewer lines will be needed.
- **Adding to and Rehabilitating the Current Restroom Facilities –** The proposal to expand and rehabilitate the current restrooms was also dismissed by the interdisciplinary team because the monument found that this alternative would have resulted in unacceptable impacts to the historic fabric of the building, and it does not meet all of the objectives of the proposed project by not providing for additional administrative space.

Alternative Summaries

Table 1 summarizes the major components of Alternatives A, B, C and D, and compares the ability of these alternatives to meet the project objectives (the objectives for this project are identified in the *Purpose and Need* chapter). As shown in the following table, Alternative B

meets each of the objectives identified for this project, while the No Action Alternative does not address all of the objectives.

Table 1 – Summary of Alternatives and How Each Alternative Meets Project Objectives

Alternative Elements	Alternative A – No Action	Alternative B – Construct New Restroom Facilities	Alternative C – Construct New Restrooms Inside Warehouse	Alternative D – Rehabilitate Current Restrooms
New Construction	The existing restrooms within the historic visitor center would continue to be utilized.	New restrooms will be constructed. The new restroom building will be approximately 800 to 1000 square feet in size. Rough dimensions for the new restrooms are 25 by 40 feet. The building will contain roughly 11 lavatories and 3 urinals, and be accessible to visitors with disabilities. The new building will be constructed in a previously disturbed area. Additionally, the current restrooms will be rehabilitated for administrative use.	New restrooms will be constructed inside the current non-historic concession warehouse. The new restrooms will be roughly 400 square feet in size. The warehouse will be converted to house roughly 6 lavatories and 2 urinals, and be accessible to visitors with disabilities. No new buildings will be constructed. The current restrooms will be rehabilitated so they are accessible to visitors with disabilities. Fixtures will be replaced, the entranceways will be widened, and one stall per restroom will be widened.	The current restrooms will be rehabilitated within the current space, and be accessible to visitors with disabilities. No new buildings will be constructed. Fixtures will be replaced, the entranceways will be widened, and at least one stall per restroom will be widened.
Access/Parking	The existing sidewalk and parking lot will continue to be used with no change.	The existing sidewalk will be extended to the entrance of the new restrooms, and the parking lot will continue to be used with no change.	The existing sidewalk will be extended to the entrance of the new restrooms, and the parking lot will continue to be used with no change.	The existing sidewalk and parking lot will continue to be used with no change.
Utilities/ Construction Staging	New utility connects and construction staging will not be needed.	Some excavation will be required to route existing utilities to the new building. Temporary staging	Some excavation will be required to route existing utilities to the new building. Temporary staging	Some excavation will be required to route existing utilities to the new restrooms. Temporary staging

		would occur within previously disturbed areas, with some overflow located in the parking lot.	would occur within previously disturbed areas, with some overflow located in the parking lot.	would occur within previously disturbed areas, with some overflow located in the parking lot.
Project Objectives	**Meets Project Objectives?**	**Meets Project Objectives?**	**Meets Project Objectives?**	**Meets Project Objectives?**
Provide a permanent facility that meets current ADA, health and safety standards and structural requirements.	No. The current restrooms do not meet current ADA requirements.	Yes. A new restroom building will meet current ADA, structural, and health and safety requirements.	Yes. The new restrooms will meet current ADA, structural, and health and safety requirements.	Yes. The current restrooms will meet current ADA, structural, and health and safety requirements.
Improve visitor experience with the park's restroom facility.	No. The current restrooms have a limited capacity and do not serve groups on tour busses or crowds during special events well. Also, they are not accessible to visitors with disabilities.	Yes. The new restrooms will be accessible to visitors with disabilities and be able to accommodate large groups of people at one time.	Yes. The new restrooms will provide modern, larger restrooms accessible to visitors with disabilities, and the current restrooms will also be accessible to visitors with disabilities.	No. The current restrooms have a limited capacity and do not serve groups on tour busses or increased crowds during special events well. However, the restrooms will be accessible to visitors with disabilities.
Provide an additional location for park staff to work that facilitates the monument's operations.	No. The proposed project will not add any additional administrative space. The present office space occupied by park staff is exceedingly limited. Three small offices totaling roughly 556 square feet house records plus 3 permanent interpretive employees, seasonal employees, Western National Parks Association employees, and a number of park volunteers.	Yes. The new restrooms will replace the current restrooms, which are currently located adjacent to the visitor center and will be rehabilitated for administrative use.	No. The proposed project will not add any additional office space. The present office space occupied by park staff is exceedingly limited. Three small offices totaling roughly 556 square feet house records and files plus 3 permanent interpretive employees, seasonal employees, Western National Parks Association employees, and a number of park volunteers.	No. The proposed project will not add any additional office space. The present office space occupied by park staff is exceedingly limited. Three small offices totaling roughly 556 square feet house records and files plus 3 permanent interpretive employees, seasonal employees, Western National Parks Association employees, and a number of park volunteers.
Identify a location that minimizes impacts to park	Yes. The location of the current restrooms is	Yes. The location of the new building will be within a	Yes. The location of the new restrooms will be	Yes. The location of the current restrooms is

resources and will not result in impairment to these resources.	situated outside the monument's primary resource.	previously disturbed area which is situated outside the monument's primary resource.	within a previously disturbed area which is situated outside the monument's primary resource.	situated outside the monument's primary resource.

Table 2 summarizes the anticipated environmental impacts for alternatives A, B, C and D. Only those impact topics that have been carried forward for further analysis are included in this table. The *Environmental Consequences* chapter provides a more detailed explanation of these impacts.

Table 2 – Environmental Impact Summary by Alternative

Impact Topic	Alternative A – No Action	Alternative B	Alternative C	Alternative D
Historic Structures	No disturbance to the historic visitor center.	No disturbance to the exterior of the historic visitor center building, only the interior will be rehabilitated for administrative use. No additional historic structures will be disturbed.	Minor adverse effect resulting from the rehabilitation of the current restrooms, which will result in the doorways being widened. No additional historic structures will be disturbed.	Minor adverse effect resulting from the rehabilitation of the current restrooms, which will result in the doorways being widened. No additional historic structures will be disturbed.
Cultural Landscapes	No disturbance to cultural landscapes.	Moderate adverse effect resulting from the addition of one small adobe building located to the west of the visitor center.	Minor adverse effect resulting from the rehabilitation of the current restrooms, which will result in the doorways being widened.	Minor adverse effect resulting from the rehabilitation of the current restrooms, which will result in the doorways being widened.
Visitor Use and Experience	Moderate adverse effect to visitors due to small, inaccessible restrooms.	Moderate beneficial effect to visitor use from larger, improved and accessible restrooms. Minor adverse effect resulting from construction noise/dust.	Minor beneficial effect to visitor use from larger, improved and accessible restrooms. Minor adverse effect resulting from construction noise/dust.	Minor beneficial effect to visitor use from improved and accessible restrooms. Minor adverse effect resulting from construction noise/dust.
Park Operations	Moderate adverse effect resulting from employees working in cramped spaces, and continued maintenance of the restrooms in the historic building.	Moderate beneficial effect resulting from an increase in work space and reduced maintenance of the historic building (but additional maintenance of	Moderate adverse effect resulting from employees working in cramped spaces, continued maintenance of the historic building, additional maintenance of new restrooms.	Moderate adverse effect resulting from employees working in cramped spaces, and continued maintenance of the restrooms in the historic building.

Impact Topic	Alternative A – No Action	Alternative B	Alternative C	Alternative D
		new restrooms should be taken into account).		

Environmentally Preferred Alternative

The environmentally preferred alternative is determined by applying the criteria suggested in the National Environmental Policy Act of 1969 (NEPA), which guides the Council on Environmental Quality (CEQ). The CEQ provides direction that the environmentally preferable alternative is the alternative that will promote the national environmental policy as expressed in NEPA's §101:

- fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
- assure for all generations safe, healthful, productive, and esthetically and culturally pleasing surroundings;
- attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences;
- preserve important historic, cultural and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice;
- achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities; and
- enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

Alternative A, no-action, only minimally meets the above six evaluation factors because it retains facilities that do not meet ADA standards in terms of accessibility. Although it minimizes potential impacts to significant Monument resources such as the historic visitor center, it does not achieve a balance between these resources and the requirements of Monument visitors. This alternative also does not meet the criteria for improving renewable resources because the existing restroom facilities are inefficient with regards to energy and water use.

Alternative B is the environmentally preferred alternative because it best addresses these six evaluation factors. Alternative B will provide restrooms accessible to visitors with disabilities, while minimizing impacts to the surrounding environment, as well as to the existing historic visitor center. The new restroom building will also be more energy efficient and more environmentally-friendly than the existing restrooms. Additionally, Alternative B will result in restroom facilities which will accommodate large groups of people when the Monument experiences a sudden influx of visitors.

No new information came forward from public scoping or consultation with other agencies to necessitate the development of any new alternatives, other than those described and evaluated in this document. Because it meets the purpose and need for the project, the project objectives, and is the environmentally preferred alternative, Alternative B is also recommended as the National Park Service preferred alternative.

ENVIRONMENTAL CONSEQUENCES

This chapter analyzes the potential environmental consequences, or impacts, that will occur as a result of implementing the proposed project. Topics analyzed in this chapter include historic structures, cultural landscapes, visitor use and experience, and park operations. Direct, indirect, and cumulative effects are analyzed for each resource topic carried forward. Potential impacts are described in terms of type, context, duration, and intensity. General definitions are defined as follows, while more specific impact thresholds are given for each resource at the beginning of each resource section.

- **Type** describes the classification of the impact as either beneficial or adverse, direct or indirect:
  - *Beneficial*: A positive change in the condition or appearance of the resource or a change that moves the resource toward a desired condition.
  - *Adverse*: A change that moves the resource away from a desired condition or detracts from its appearance or condition.
  - *Direct*: An effect that is caused by an action and occurs in the same time and place.
  - *Indirect*: An effect that is caused by an action but is later in time or farther removed in distance, but is still reasonably foreseeable.
- **Context** describes the area or location in which the impact will occur. Are the effects site-specific, local, regional, or even broader?
- **Duration** describes the length of time an effect will occur, either short-term or long-term:
  - *Short-term* impacts generally last only during construction, and the resources resume their pre-construction conditions following construction.
  - *Long-term* impacts last beyond the construction period, and the resources may not resume their pre-construction conditions for a longer period of time following construction.
- **Intensity** describes the degree, level, or strength of an impact. For this analysis, intensity has been categorized into negligible, minor, moderate, and major. Because definitions of intensity vary by resource topic, intensity definitions are provided separately for each impact topic analyzed in this environmental assessment.

Cumulative Impact Scenario

The Council on Environmental Quality (CEQ) regulations, which implement the National Environmental Policy Act of 1969 (42 USC 4321 et seq.), require assessment of cumulative impacts in the decision-making process for federal projects. Cumulative impacts are defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions" (40 CFR 1508.7). Cumulative impacts are considered for both the no-action and preferred alternative.

Cumulative impacts were determined by combining the impacts of the preferred alternative with other past, present, and reasonably foreseeable future actions. Therefore, it was necessary to identify other ongoing or reasonably foreseeable future projects at White Sands National Monument and, if applicable, the surrounding region. Because the scope of this project is relatively small, the geographic and temporal scope of the cumulative analysis is similarly small.

The geographic scope for this analysis includes actions within the monument's boundaries, while the temporal scope includes projects within a range of approximately ten years.

Impacts on Cultural Resources and Section 106 of the National Historic Preservation Act

In this environmental assessment, impacts to cultural resources are described in terms of type, context, duration, and intensity, as described above, which is consistent with the regulations of the Council on Environmental Quality (CEQ) that implement the National Environmental Policy Act (NEPA). These impact analyses are intended, however, to comply with the requirements of both NEPA and Section 106 of the National Historic Preservation Act (NHPA). In accordance with National Historic Preservation Act implementing Section 106 regulations (36 CFR Part 800, *Protection of Historic Properties),* impacts to archaeological resources were identified and evaluated. This includes (1) determining the area of potential effects; (2) identifying cultural resources present in the area of potential effects that are either listed to or eligible to be listed in the National Register of Historic Places; (3) applying the criteria of adverse effect to affected cultural resources either listed to or eligible to be listed in the National Register; and (4) considering ways to avoid, minimize or mitigate adverse effects.

Under the Advisory Council's NHPA regulations a determination of either *adverse effect* or *no adverse effect* must also be made for affected cultural resources. An *adverse effect* occurs whenever an impact alters, directly or indirectly, any characteristics of a cultural resource that qualify it for inclusion in the National Register, e.g. diminishing the integrity of the resource's location, design, setting, materials, workmanship, feeling, or association. Adverse effects also include reasonably foreseeable effects caused by the preferred alternative that would occur later in time, be farther removed in distance or be cumulative (36 CFR Part 800.5, *Assessment of Adverse Effects*). A determination of *no adverse effect* means there is an effect, but the effect would not diminish in any way the characteristics of the cultural resource that qualify it for inclusion in the National Register.

CEQ regulations and the National Park Service's *Conservation Planning, Environment Impact Analysis and Decision-making* (NPS, 2001) also call for a discussion of the appropriateness of mitigation, as well as an analysis of how effective the mitigation would be in reducing the intensity of a potential impact, e.g. reducing the intensity of an impact from major to moderate or minor. Any resultant reduction in intensity of impact due to mitigation, however, is an estimate of the effectiveness of mitigation under NEPA only. It does not suggest that the level of effect as defined by Section 106 is similarly reduced. Although adverse effects under Section 106 may be mitigated, the effect remains adverse.

Regulations and Policy

As with all units of the National Park System, management of White Sands National Monument is guided by the 1916 Organic Act; the General Authorities Act of 1970; the act of March 27, 1978 relating to the management of the National Park System; NPS Management Policies (NPS, 2000); and other applicable federal laws and regulations.

Historic Structures

Intensity Level Definitions

For purposes of analyzing potential impacts to historic structures/buildings, the thresholds of

change for the intensity of an impact are defined as follows:

Negligible: The impact is at the lowest levels of detection, barely perceptible with no measurable consequences to the historic structure(s). For purposes of Section 106, the determination of effect would be *no adverse effect*.

Minor: *Adverse*: The impact is measurable or perceptible, but it is slight and affects a limited area of a structure or group of structures. The impact does not affect the character defining features of a National Register of Historic Places eligible or listed structure and will not have a permanent effect on the integrity of the structure. For purposes of Section 106, the determination of effect would be *no adverse effect*.

Beneficial: Stabilization/preservation of features is in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*.

Moderate: *Adverse*: The impact is measurable and perceptible. The impact changes one or more character defining feature(s) of a historic structure, but does not diminish the integrity of the resource to the extent that its National Register eligibility is jeopardized. For purposes of Section 106, the determination of effect would be *no adverse effect*.

Beneficial: Rehabilitation of a structure is in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*.

Major: *Adverse*: The impact is substantial, noticeable, and permanent. For National Register eligible or listed historic structures, the impact changes one or more character defining features(s) of the historic resource, diminishing the integrity of the resource to the extent that it is no longer eligible for listing on the National Register. For purposes of Section 106, the determination of effect would be an *adverse effect*.

Beneficial: The impact is of exceptional benefit and the rehabilitation of a structure is in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*.

Impacts of Alternative A (No-Action Alternative)

No new disturbance or new impacts would occur to the historic buildings or historic district. Under this alternative, existing disturbances would continue. The historic restrooms would continue to have high use for which they were not designed, and will not be accessible to visitors with disabilities.

Cumulative Effects: Past management actions would combine with this proposed no-action to result in no impacts to historic structures because no construction activities would be conducted. As such, this alternative would not contribute to any cumulative disturbance of historic structures when considered with other past, present, and reasonably foreseeable future actions.

Conclusion/Section 106 Summary: The no-action alternative would result in no impacts to historic structures because no construction activities would be conducted. The historic restrooms would continue to have high use for which they were not designed, and would not be accessible to visitors with disabilities.

Impacts of Alternative B

The proposed new restrooms building would complement the Pueblo Revival architecture reflected in the park's historic district. The restrooms would be constructed with modern

materials but would have the look of an adobe building. The walls would taper toward the roof parapet, the exterior would be stuccoed to match the historic district and the roofline would be in scale with the surrounding buildings. The rehabilitation of the historic visitor center restroom building would result in no impacts to the exterior fabric of the historic building (only the interior would be changed). Therefore, this project would have a long-term negligible to minor adverse effect on the park's historic district and historic structures.

Cumulative Effects: Cumulatively, this alternative would have a negligible to minor adverse effect on historic structures when considered with other past, present, and reasonably foreseeable future actions. The rehabilitation of the current restroom building would result in a negligible to minor adverse effect on the exterior fabric of the historic visitor center building.

Conclusion: The proposed restrooms design would be compatible with the existing buildings and would have no significant adverse visual impact on the historic district. The rehabilitation of the historic visitor center restroom building would result in no impacts to the exterior fabric of the historic building (only the interior would be changed). Cumulatively, this alternative would have a negligible to minor adverse effect on historic structures when considered with other past, present, and reasonably foreseeable future actions.

Impacts of Alternative C

Under this alternative, existing disturbances would continue. The historic restrooms would continue to have high use for which they were not designed. This existing disturbance is a minor adverse effect; it does not diminish the significance or integrity of the historic structure(s) to the extent that their National Register eligibility is jeopardized. The rehabilitation of the historic visitor center restroom building would result in a minor adverse effect on the exterior fabric of the historic building with the widening of the restroom doorways, resulting in little loss of significance or integrity to the National Register eligibility of the historic structures. Therefore, this alternative would have a long-term minor adverse effect on the park's historic district and historic structures.

Cumulative Effects: Cumulatively, this alternative would have a minor adverse effect on historic structures when considered with other past, present, and reasonably foreseeable future actions. The rehabilitation of the current restroom building would result in a minor adverse effect on the exterior fabric of the historic building with the widening of the restroom doorways.

Conclusion: This alternative would result in a long-term minor adverse effect on historic structures because the entrances to the restrooms would be widened for handicap accessibility. All other construction activities would be limited to the interior of a non-historic building. Cumulatively, this alternative would have a minor adverse effect on historic structures when considered with other past, present, and reasonably foreseeable future actions.

Impacts of Alternative D

Under this alternative, existing disturbances would continue. The historic restrooms would continue to have high use for which they were not designed. This existing disturbance is a minor adverse effect; it does not diminish the significance or integrity of the historic structure(s) to the extent that their National Register eligibility is jeopardized. The rehabilitation of the historic visitor center restroom building would result in a minor adverse effect on the exterior fabric of the historic building with the widening of the restroom doorways and the modification of some historic interior walls, resulting in little loss of significance or integrity to the National Register eligibility of the historic structures. Therefore, this alternative would have a long-term minor adverse effect on the park's historic district and historic structures.

Cumulative Effects: Cumulatively, this alternative would have a minor adverse effect on historic structures when considered with other past, present, and reasonably foreseeable future actions. The rehabilitation of the current restroom building would result in a minor adverse effect on the exterior fabric of the historic building with the widening of the restroom doorways.

Conclusion: This alternative would result in a long-term minor adverse effect on historic structures because the entrances to the restrooms would be widened for handicap accessibility. Cumulatively, this alternative would have a minor adverse effect on historic structures when considered with other past, present, and reasonably foreseeable future actions.

Cultural Landscapes

Intensity Level Definitions

For purposes of analyzing potential impacts to cultural landscapes, the thresholds of change for the intensity of an impact are defined as follows:

Negligible: The impact is at the lowest levels of detection, barely perceptible with no measurable consequences to the cultural landscape. For purposes of Section 106, the determination of effect would be *no adverse effect*.

Minor: *Adverse*: The impact is measurable or perceptible, but it is slight and affects a limited area of a group of structures. The impact does not affect the character defining features of a National Register of Historic Places eligible or listed cultural landscape and would not have a permanent effect on the integrity of the cultural landscape. For purposes of Section 106, the determination of effect would be *no adverse effect*.

Beneficial: Stabilization/preservation of features is in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*.

Moderate: *Adverse*: The impact is measurable and perceptible. The impact changes one or more character defining feature(s) of a cultural landscape, but does not diminish the integrity of the resource to the extent that its National Register eligibility is jeopardized. For purposes of Section 106, the determination of effect would be *no adverse effect*.

Beneficial: Rehabilitation of a cultural landscape is in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*.

Major: *Adverse*: The impact is substantial, noticeable, and permanent. For National Register eligible or listed cultural landscapes, the impact changes one or more character defining features(s) of the historic resource, diminishing the integrity of the resource to the extent that it is no longer eligible for listing on the National Register. For purposes of Section 106, the determination of effect would be an *adverse effect*.

Beneficial: The impact is of exceptional benefit and the rehabilitation of a cultural landscape is in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*.

Impacts of Alternative A (No-Action Alternative)

No disturbance or new impacts would occur to the cultural landscape. Under this alternative, existing disturbances would continue. The historic restrooms would continue to have high use for which they were not designed. This existing disturbance is a minor adverse effect; it does not diminish the significance or integrity of the cultural landscape to the extent that their National Register eligibility is jeopardized.

Cumulative Effects: Cumulatively, this no-action alternative would not contribute to any disturbance to the cultural landscape when considered with other past, present, and reasonably foreseeable future actions.

Conclusion: The no-action alternative would result in no impacts to the cultural landscape because no construction activities would be conducted. As such, this alternative would not contribute to any disturbance to the cultural landscape because the historic features in the project area would not change. Cumulatively, this alternative would not contribute to any disturbance to the cultural landscape when considered with other past, present, and reasonably foreseeable future actions.

Impacts of Alternative B

The proposed new restrooms building would complement the Pueblo Revival architecture reflected in the park's historic district and cultural landscape. The restrooms would be constructed with modern materials but would have the look of an adobe building. The walls would taper toward the roof parapet, the exterior would be stuccoed to match the historic district and the roofline would be in scale with the surrounding buildings. The rehabilitation of the interior of the current restroom building would not impact the exterior fabric of the historic visitor center restroom building, however, the introduction of a new structure would adversely impact the cultural landscape. Therefore, this alternative would have a long-term moderate adverse effect on the park's cultural landscape, resulting in little loss of significance or integrity to the National Register eligibility of the cultural landscape.

Cumulative Effects: Cumulatively, this alternative would have a moderate adverse effect on the park's cultural landscape when considered with other past, present, and reasonably foreseeable future actions.

Conclusion: The proposed restrooms design would be compatible with the existing buildings and would have no significant visual impact. The effect of constructing the proposed restroom facility would be a long-term moderate adverse effect on the cultural landscape.

Impacts of Alternative C

Under this alternative, existing disturbances would continue. The historic restrooms would continue to have high use for which they were not designed. This existing disturbance is minor; it does not diminish the significance or integrity of the cultural landscape to the extent that the National Register eligibility is jeopardized. Minor impacts would occur to the historic visitor center building; the entrances to the restrooms would be widened to make them handicap accessible. Therefore, this alternative would have a long-term minor adverse effect on the park's cultural landscape, resulting in little loss of significance or integrity to the National Register eligibility of the cultural landscape.

Cumulative Effects: Cumulatively, this alternative may have a minor adverse effect on the cultural landscape when considered with other past, present, and reasonably foreseeable future actions. The rehabilitation of the current restroom building would result in a minor adverse effect on the exterior fabric of the historic building with the widening of the restroom doorways.

Conclusion: This alternative would result in a long-term minor adverse effect on the cultural landscape because the entrances to the restrooms would be widened for handicap accessibility. All other construction activities would be limited to the interior of a non-historic building. Cumulatively, this alternative may have a minor adverse effect on the cultural landscape when considered with other past, present, and reasonably foreseeable future actions.

Impacts of Alternative D

Under this alternative, existing disturbances would continue. The historic restrooms would continue to have high use for which they were not designed. This existing disturbance is minor; it does not diminish the significance or integrity of the cultural landscape to the extent that the National Register eligibility is jeopardized. Minor impacts would occur to the historic visitor center building; the entrances to the restrooms would be widened to make them accessible to visitors with disabilities. Therefore, this alternative would have a long-term minor adverse effect on the park's cultural landscape, resulting in little loss of significance or integrity to the National Register eligibility of the cultural landscape.

Cumulative Effects: Cumulatively, this alternative may have a minor adverse effect on the cultural landscape when considered with other past, present, and reasonably foreseeable future actions. The rehabilitation of the current restroom building would result in a minor adverse effect on the exterior fabric of the historic building with the widening of the restroom doorways.

Conclusion: This alternative would result in a long-term minor adverse effect on the cultural landscape because the entrances to the restrooms would be widened for handicap accessibility. Cumulatively, this alternative may have a minor adverse effect on the cultural landscape when considered with other past, present, and reasonably foreseeable future actions.

Visitor Use and Experience

Intensity Level Definitions

For purposes of analyzing potential impacts to visitor use and experience, the thresholds of change for the intensity of an impact are defined as follows:

Negligible: Visitors would not be affected or changes in visitor use and/or experience would be below or at the level of detection. Any effects would be short-term. The visitor would not likely be aware of the effects associated with the alternative.

Minor: Changes in visitor use and/or experience would be detectable, although the changes would be slight and likely short-term. The visitor would be aware of the effects associated with the alternative, but the effects would be slight.

Moderate: Changes in visitor use and/or experience would be readily apparent and likely long-term. The visitor would be aware of the effects associated with the alternative, and would likely be able to express an opinion about the changes.

Major: Changes in visitor use and/or experience would be readily apparent and have substantial long-term consequences. The visitor would be aware of the effects associated with the alternative, and would likely express a strong opinion about the changes.

Impacts of Alternative A (No-Action Alternative)

The no-action alternative would have a long-term moderate adverse effect on visitor use and experience because the existing restrooms and the visitor center would remain unchanged. In

particular, the existing restrooms have been updated but they have a limited capacity and do not serve groups on tour busses or increased crowds during special events well. Also, the restrooms are not accessible to visitors with disabilities. Additionally, visitor satisfaction with the park wide restroom facilities is rated at 63 percent, which does not meet the park's goals.

Cumulative Effects: Cumulatively, this alternative would have a moderate adverse effect on visitor use and experience when considered with other past, present, and reasonably foreseeable future actions. High use of the historic restrooms would continue. Disturbance to visitor use and experience has been and would continue to be a long-term moderate adverse effect.

Conclusion: The no-action alternative would have a moderate adverse effect on visitor experience due to the continued use of small, disability-prohibitive restrooms. Cumulatively, this alternative would have a moderate adverse effect on visitor use and experience when considered with other past, present, and reasonably foreseeable future actions.

Impacts of Alternative B

Implementation of this alternative would result in a long-term moderate beneficial effect on visitor use and experience. A larger, modern public restroom facility accessible to visitors with disabilities would be provided. Parking and traffic patterns would not be significantly changed.

Although the project area is not currently used by visitors, noise and dust from construction activities would have a short term minor adverse effect to visitor use and experience. However, all construction-related impacts would be temporary and cease following construction activities. During construction, the existing northwest parking lot would be used by construction crews, thereby reducing the capacity for visitors and employees. To help mitigate this effect, employees and construction crews would be required to park in the back of the lot to ensure easier access for visitors.

Visually, the changes to the project area would have a minor adverse effect on visitor experience. The location, size, and aesthetics of the new restrooms were chosen so as not to visually interfere with visitor center; however, temporary changes to the visual environment would be noticeable. The primary visual changes would result from the construction of new restrooms, excavation for utility connections, and the temporary presence of construction equipment, materials, and crews. Despite these changes to the visual environment, the new restrooms would likely be visually pleasing to visitors in relation to the existing visitor center.

Cumulative Effects: Any construction activities have the potential to affect visitor use and experience. Construction projects have had or could have an adverse effect on visitor use and experience because of the inconvenience of construction noise, dust, and possible off-limit areas. Ultimately, however, improvements to the restrooms would have a moderate beneficial effect on visitor use and experience because of long-term improvements to the human health and safety aspects and functionality of the Monument. Considering past, present, and reasonably foreseeable future actions, the moderate beneficial effect of constructing the new restrooms would have a moderate cumulative benefit to the overall visitor use and experience at the Monument.

Conclusion: Under this alternative, the construction of new restrooms would have a long-term moderate beneficial effect on visitor use and experience. Construction disturbances (noise, dust, limited areas) would have a short term minor adverse effect to visitor use and experience. The visual changes to the area from construction of a new building would have a minor adverse effect on visitor experience because the changes would be noticeable, but not take away from the integrity of the surrounding historic structures. Cumulatively, this alternative would have a long-term moderate beneficial effect on visitor use and experience because ultimately this

project combined with other past, present, and reasonably foreseeable future actions would benefit visitor resources.

Impacts of Alternative C

Implementation of this alternative would result in a long-term minor beneficial effect on visitor use and experience. A larger, modern public restroom facility accessible to visitors with disabilities would be provided along with the current restroom facilities which would also be accessible to visitors with disabilities. Parking and traffic patterns would not be significantly changed.

Although the project area is not currently used by visitors, noise and dust from construction activities would have a short term minor adverse effect to visitor use and experience. However, all construction-related impacts would be temporary and cease following construction activities. During construction, the existing north parking lot would be used by construction crews, thereby reducing the capacity for visitors and employees. To help mitigate this effect, employees and construction crews would be required to park in the back of the lot to ensure easier access for visitors.

Visually, the changes to the project area would have a minor adverse effect on visitor experience. The location, size, and aesthetics of the new restrooms were chosen so as not to visually interfere with visitor center; however, changes to the visual environment would be noticeable. The primary visual changes would result from the construction of new restrooms inside of an existing building, excavation for utility connections, and the temporary presence of construction equipment, materials, and crews.

Cumulative Effects: Any construction activities have the potential to affect visitor use and experience. Construction projects have had or could have an adverse effect on visitor use and experience because of the inconvenience of construction noise, dust, and possible off-limit areas. Ultimately, however, improvements to the restrooms would have a minor beneficial effect on visitor use and experience because of long-term improvements to the human health and safety aspects and functionality of the Monument. Considering past, present, and reasonably foreseeable future actions, constructing the new restrooms would have a minor beneficial effect to the overall visitor use and experience at the Monument.

Conclusion: Under this alternative, the construction of new restrooms would have a long-term minor beneficial effect on visitor use and experience. Construction disturbances (noise, dust, limited areas) would have a temporary minor impact and an adverse effect to visitor use and experience. The visual changes to the area from construction of new restrooms would have a minor beneficial effect on visitor experience because the changes would be readily noticeable. Cumulatively, this alternative would have a minor beneficial effect on visitor use and experience because ultimately this project combined with other past, present, and reasonably foreseeable future actions would benefit visitor resources.

Impacts of Alternative D

Implementation of this alternative would result in a long-term minor beneficial effect on visitor use and experience. A public restroom facility accessible to visitors with disabilities would be provided by rehabilitating the current restroom facilities. The restrooms, however, would not increase in size, and would continue to be overwhelmed by large groups of visitors. Parking and traffic patterns would not be significantly changed.

The project area is currently used by visitors, so noise and dust from construction activities would have a short term minor adverse effect to visitor use and experience. However, all construction-related impacts would be temporary and cease following construction activities.

During construction, the existing north parking lot would be used by construction crews, thereby reducing the capacity for visitors and employees. To help mitigate this effect, employees and construction crews would be required to park in the back of the lot to ensure easier access for visitors.

Visually, the changes to the project area would have a short-term minor adverse effect on visitor experience. The location, size, and aesthetics of the current restrooms would not change except for the widening of the entrances; however, short term changes to the visual environment would be noticeable. The primary visual changes would result from excavation for utility connections and the temporary presence of construction equipment, materials, and crews.

Cumulative Effects: Any construction activities have the potential to affect visitor use and experience. Construction projects have had or could have an adverse effect on visitor use and experience because of the inconvenience of construction noise, dust, and possible off-limit areas. Ultimately, however, improvements to the restrooms would have a minor beneficial effect on visitor use and experience because of long-term improvements to the human health and safety aspects and functionality of the Monument. Considering past, present, and reasonably foreseeable future actions, renovating the existing restrooms would have a minor cumulative beneficial effect to the overall visitor use and experience at the Monument.

Conclusion: Under this alternative, the rehabilitation of the existing restrooms would have a long-term minor beneficial effect on visitor use and experience. Construction disturbances (noise, dust, limited areas) would have a temporary minor adverse effect on visitor use and experience. The visual changes to the area from construction activities would have a minor adverse effect on visitor experience because the changes would be readily noticeable but minor. Cumulatively, this alternative would have a minor beneficial effect on visitor use and experience because ultimately this project combined with other past, present, and reasonably foreseeable future actions would benefit visitor resources.

Park Operations

Intensity Level Definitions

For purposes of analyzing potential impacts to park operations, the thresholds of change for the intensity of an impact are defined as follows:

Negligible: Park operations would not be affected or the effect would be at or below the lower levels of detection, and would not have an appreciable effect on park operations.

Minor: The effect would be detectable, but would be of a magnitude that would not have an appreciable adverse or beneficial effect on park operations. If mitigation were needed to offset adverse effects, it would be relatively simple and successful.

Moderate: The effects would be readily apparent and would result in a substantial adverse or beneficial change in park operations in a manner noticeable to staff and the public. Mitigation measures would probably be necessary to offset adverse effects and would likely be successful.

Major: The effects would be readily apparent and would result in a substantial adverse or beneficial change in park operations in a manner noticeable to staff and the public, and be markedly different from existing operations. Mitigation measures to offset adverse effects would be needed, could be expensive, and their success could not be guaranteed.

Impacts of Alternative A (No-Action Alternative)

The no-action alternative would have a long-term moderate adverse effect on park operations at White Sands National Monument. The existing restrooms would continue to be used, and the employee offices located in the visitor center would remain.

High impact use of the historic 1930's era restroom facility would continue, along with the associated preservation efforts on the historic buildings. The intensive maintenance of the historic facilities related with visitor use would not improve. Space for the Monument's interpretive and volunteer staff would remain inadequate. The present administrative space used by the park's interpretive and volunteer staff is exceedingly limited. Three small offices totaling approximately 556 square feet house records and files, plus 3 permanent interpretive employees, 5 to 8 seasonal employees, 2 Western National Parks Association employees, and a number of park volunteers. The effects would result in a continued long-term moderate adverse effect on park operations in a manner noticeable to staff and the public.

Cumulative Effects: Any project that occurs in the Monument has an effect on park operations; therefore, most of the actions listed in the cumulative scenario in the introduction of this chapter would have some degree of effect on employees and park operations. Planning projects such as improvements to the visitor center typically involve the majority of Monument staff to contribute their expertise and assistance. Resource management projects such as exotic vegetation management would primarily involve resources staff. Visitor contact, interpretation, and safety activities usually involve rangers and interpretive specialists. Under this no-action alternative, there would be a moderate adverse effect on park operations associated with the current and future use of the existing restrooms and office space; therefore, there would be a moderate adverse effect on park operations when considered with other past, present, and reasonably foreseeable future actions.

Conclusion: The increased maintenance to repair structural deficiencies in the existing restrooms coupled with the lack of administrative space would have a moderate adverse effect on park operations. There would be no improvement in the efficiency of maintenance of Monument operations, and there would be no enhancement of space for the interpretive staff. Cumulatively, these effects would have a moderate adverse effect on park operations when considered with other past, present, and reasonably foreseeable future actions.

Impacts of Alternative B

The construction of new restrooms under this alternative would provide additional administrative space for Monument employees once the rehabilitation to the interior of the current historic restroom building is complete, and made available to the interpretive staff. This would improve the working conditions for employees by providing much needed work space. Also, the construction of new restrooms would reduce the workload for the maintenance staff on the historic restroom building. Discontinued high impact use of the historic 1930's era restroom facility would make preservation and maintenance of the historic building much easier. Although there would be some additional square footage to maintain in the new facility, the new modern space would require less intensive maintenance than the historic restroom being removed from public use. However, the rehabilitated historic restroom building would continue to need a moderate level of maintenance, and together with the new restroom building, the total amount of square footage requiring maintenance will increase. These long-term moderate impacts would have a beneficial effect on the efficiency of park operations.

The typical work load for employees would be increased during implementation of this alternative from the need to finalize project plans, hire contractors, and monitor construction. Once the new restrooms are constructed, normal work loads and patterns should return.

Construction noise and dust may also adversely affect the monument's employees, but these inconveniences would be minor and short term, lasting only as long as the construction process.

Cumulative Effects: Any project that occurs in the Monument has an effect on park operations; therefore, most of the actions listed in the cumulative scenario in the introduction of this chapter would have some degree of effect on employees and park operations. Planning projects such as improvements to the visitor center typically involve the majority of Monument staff to contribute their expertise and assistance. Resource management projects such as exotic vegetation management would primarily involve resources staff. Visitor contact, interpretation, and safety activities usually involve rangers and interpretive specialists. Park operations associated with the current and future use of the new restrooms would be improved to a moderate degree, which would cumulatively have a moderate beneficial effect on park operations when considered with other past, present, and reasonably foreseeable future actions.

Conclusion: Construction of new restrooms under this alternative would have a long-term moderate beneficial effect on park operations at the Monument because the new building would provide for additional administrative space and there would be fewer impacts to the current historic restroom building. A temporary, minor adverse effect to park operations would occur during construction, which would require employees to manage the construction of the project. Cumulatively, the improvements associated with this alternative would have a moderate beneficial effect on park operations when considered with other past, present, and reasonably foreseeable future actions.

Impacts of Alternative C

This alternative would have a long-term moderate adverse effect on park operations at White Sands National Monument. Along with the construction of new restrooms in the warehouse, the existing restrooms would continue to be used, and the employee offices located in the visitor center would remain.

High impact use of the historic 1930's era restroom facility would continue, along with the associated preservation efforts on the historic buildings. The intensive maintenance of the historic facilities related to visitor use would not improve, and the new restrooms would also require additional maintenance. The location of the new restrooms would result in a decrease of warehouse space for the concessioner. Space for the Monument's interpretive staff would remain inadequate. The present office space occupied by the Monument's interpretive staff is exceedingly limited. Three small offices totaling approximately 556 square feet house records and files, plus 3 permanent interpretive employees, 5 to 8 seasonal employees, 2 Western National Parks Association employees, and a number of park volunteers. The effects would result in a long-term moderate adverse effect to park operations in a manner noticeable to staff and the public.

Cumulative Effects: Any project that occurs in the Monument has an effect on park operations; therefore, most of the actions listed in the cumulative scenario in the introduction of this chapter would have some degree of effect on employees and park operations. Planning projects such as improvements to the visitor center typically involve the majority of Monument staff to contribute their expertise and assistance. Resource management projects such as exotic vegetation management would primarily involve resources staff. Visitor contact, interpretation, and safety activities usually involve rangers and interpretive specialists. Under this alternative, there would be a moderate adverse effect on park operations associated with the current and future use of the existing restrooms and office space; therefore, there would be a moderate adverse effect on park operations when considered with other past, present, and reasonably foreseeable future actions.

Conclusion: The increased maintenance to repair structural deficiencies in the existing restrooms and the maintaining of additional restrooms coupled with the lack of employee working space would have a long-term moderate adverse effect on park operations. There would be no improvement in the efficiency of maintenance of monument operations, and there would be no enhancement of space for the interpretive staff. Cumulatively, these effects would have a moderate adverse effect on park operations when considered with other past, present, and reasonably foreseeable future actions.

Impacts of Alternative D

This alternative would have a long-term moderate adverse effect on park operations at White Sands National Monument. The existing restrooms would continue to be used, and the employee offices located in the visitor center would remain.

High impact use of the historic 1930's era restroom facility would continue, along with the associated preservation efforts on the historic buildings. The intensive maintenance of the historic facilities related with visitor use would not improve. Space for the Monument's interpretive staff would remain inadequate. The present office space occupied by the Monument's interpretive staff is exceedingly limited. Three small offices totaling approximately 556 square feet house records and files, plus 3 permanent interpretive employees, 5 to 8 seasonal employees, 2 Western National Parks Association employees and a number of park volunteers. The effects would result in a long-term moderate adverse effect to park operations in a manner noticeable to staff and the public.

Cumulative Effects: Any project that occurs in the Monument has an effect on park operations; therefore, most of the actions listed in the cumulative scenario in the introduction of this chapter would have some degree of effect on employees and park operations. Planning projects such as improvements to the visitor center typically involve the majority of Monument staff to contribute their expertise and assistance. Resource management projects such as exotic vegetation management would primarily involve resources staff. Visitor contact, interpretation, and safety activities usually involve rangers and interpretive specialists. Under this alternative, there would be a moderate adverse effect on park operations associated with the current and future use of the existing restrooms and office space; therefore, there would be a moderate adverse effect on park operations when considered with other past, present, and reasonably foreseeable future actions.

Conclusion: The increased maintenance to repair structural deficiencies in the existing restrooms coupled with the lack of employee working space would have a long-term moderate adverse effect on park operations. There would be no improvement in the efficiency of maintenance of monument operations, and there would be no enhancement of space for the interpretive staff. Cumulatively, these effects would have a moderate adverse effect on park operations when considered with other past, present, and reasonably foreseeable future actions.

Conclusion

Because there would be no adverse impacts to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing proclamation of White Sands National Monument; (2) key to the natural or cultural integrity of the Monument or to opportunities for enjoyment of the monument; or (3) identified as a goal in the Monument's master plan or other relevant National Park Service planning document, there would be no anticipated impairment of the Monument's resources or values.

CONSULTATION AND COORDINATION

Internal Scoping

Internal scoping was conducted by an interdisciplinary team of professionals from White Sands National Monument. Interdisciplinary team members met on April 5, 2011 to discuss the purpose and need for the project; various alternatives; potential environmental impacts; past, present, and reasonably foreseeable projects that may have cumulative effects; and possible mitigation measures. The team also gathered background information and discussed public outreach for the project. Over the course of the project, team members have conducted individual site visits to view and evaluate the proposed construction site. The results of the April 5, 2011 meeting are documented in this environmental assessment.

External Scoping

External scoping was conducted to inform the public about the proposal to construct new restrooms at White Sands National Monument and to generate input on the preparation of this environmental assessment. This effort was initiated with a public news release which was sent to newspapers in Alamogordo, Las Cruces, Albuquerque and El Paso with notice of the intent to prepare an environmental assessment and requesting comment from concerned citizens or groups. Scoping comments were accepted from March 15 to April 15, 2011. The New Mexico State Historic Preservation Office (NMSHPO) was also contacted since the area is located in an historic district. With this press release, the public was given 30 days to comment on the project.

During the 30-day scoping period, three public responses were received. The majority of respondents were in favor of constructing new restrooms just north of the current restrooms. This alternative was also favored by the interdisciplinary team. One response opposed the alternative to construct a new restroom building, and suggested that the current restrooms be rehabilitated and expanded. Expansion of the restrooms was dismissed by the interdisciplinary team because it does not meet all of the objectives of the proposed project and would adversely impact the historic visitor center restroom building.

Agency Consultation

In accordance with the Endangered Species Act, the National Park Service contacted the U.S. Fish and Wildlife Service with regards to federally listed special status species, and in accordance with National Park Service policy, the Monument also contacted the New Mexico Division of Wildlife with regards to state-listed species. The results of these consultations are described in the *Special Status Species* section in the *Purpose and Need* chapter.

In accordance with Section 106 of the National Historic Preservation Act, the National Park Service provided the New Mexico State Historic Preservation Officer an opportunity to comment on the effects of this project. The results of this consultation is forthcoming.

Native American Consultation

Nine Native American tribes were contacted at the beginning of this project to determine if there were any ethnographic resources in the project area and if they wanted to be involved in the environmental compliance process, including:

- Hopi
- Zuni Pueblo
- Mescalero Apache
- Pueblo of Jemez
- Pueblo of Acoma
- Pueblo of Isleta
- Piro-Manzo-Tiwa Pueblo of Guadelupe
- San Ildefonso Pueblo
- Ysleta del Sur Pueblo

Three Native American tribes responded with no objection to the proposed project. This included the Hopi, Pueblo of Isleta, and the Ysleta del Sur Pueblo. The proposed project will not have an adverse impact on traditional, religious or culturally significant sites or properties that are affiliated with these three tribes. They requested to be kept informed of the project's progress, including immediate notification if Native American materials are discovered during construction.

Environmental Assessment Review

The environmental assessment will be released for public review in August 2011. To inform the public of the availability of the environmental assessment, the National Park Service will publish and distribute a letter or press release to various agencies, tribes, and members of the public on the park's mailing list, as well as place an ad in the local newspaper. Copies of the environmental assessment will be provided to interested individuals, upon request. Copies of the document will also be available for review at the Monument's visitor center and on the internet at http://parkplanning.nps.gov/whsa.

The environmental assessment is subject to a 30-day public comment period. During this time, the public is encouraged to submit their written comments to the National Park Service address provided at the beginning of this document. Following the close of the comment period, all public comments will be reviewed and analyzed, prior to the release of a decision document. The National Park Service will issue responses to substantive comments received during the public comment period, and will make appropriate changes to the environmental assessment, as needed.

List of Preparers

The following persons assisted with the preparation of the environmental assessment. All are employees of the National Park Service at White Sands National Monument:

- Richard Greene, Archaeologist, prepared EA
- David Bustos, Chief of Resources, reviewed EA
- Kevin Schneider, Superintendent, reviewed EA

REFERENCES

NMDOW 2010 Concurrence from CDOW on T&E.

EPA 2000 *Arizona State Implementation Plan*, *Chapter 2: Ambient Air Quality Standards, Article 4. Attainment Area Classification*, United States Environmental Protection Agency Region 9, Air Programs Website, 2000.

NPS 2006 *Management Policies*, National Park Service, U.S. Department of the Interior, December 2006.

NPS 2009 *Management Strategy*, White Sands National Monument, 2009.

USFWS 2010 Concurrence from FWS on T&E.

NEW MEXICO NATURAL HERITAGE PROGRAM *White Sands National Monument Vegetation*. Southwest Geographic Information Center, University of New Mexico, Albuquerque, New Mexico.

U.S. DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION SERVICE 1976 *Soil Survey Of White Sands Missile Range, New Mexico.*

U.S. DEPARTMENT OF INTERIOR, NATIONAL PARK SERVICE *Wilderness Recommendation – White Sands National Monument, New Mexico.*

APPENDIX A: IMPAIRMENT

National Park Service's *2006 Management Policies* require analysis of potential effects to determine whether or not actions will impair park resources. The fundamental purpose of the national park system, established by the Organic Act and reaffirmed by the General Authorities Act, as amended, begins with a mandate to conserve park resources and values. National Park Service managers must always seek ways to avoid, or to minimize to the greatest degree practicable, adversely impacting park resources and values.

However, the laws do give the National Park Service the management discretion to allow impacts to park resources and values when necessary and appropriate to fulfill the purposes of a park, as long as the impact does not constitute impairment of the affected resources and values. Although Congress has given the National Park Service the management discretion to allow certain impacts within park, that discretion is limited by the statutory requirement that the National Park Service must leave park resources and values unimpaired, unless a particular law directly and specifically provides otherwise. The prohibited impairment is an impact that, in the professional judgment of the responsible National Park Service manager, will harm the integrity of park resources or values, including the opportunities that otherwise will be present for the enjoyment of these resources or values. An impact to any park resource or value may, but does not necessarily, constitute an impairment, but an impact will be more likely to constitute an impairment when there is a major or severe adverse effect upon a resource or value whose conservation is:

- necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park;
- key to the natural or cultural integrity of the park; or
- identified as a goal in the park's general management plan or other relevant NPS planning documents.

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

The park resources and values that are subject to the no-impairment standard 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 may result from National Park Service activities in managing the park, visitor activities, or activities undertaken by concessioners, contractors, and others operating in the park. The NPS's threshold for considering whether there could be an impairment is based on whether an action will have major (or significant) effects.

Impairment findings are not necessary for visitor use and experience, socioeconomics, public health and safety, environmental justice, land use, and park operations, because impairment findings relates back to park resources and values, and these impact areas are not generally considered park resources or values according to the Organic Act, and cannot be impaired in the same way that an action can impair park resources and values. After dismissing the above topics, topics remaining to be evaluated for impairment include historic structures and cultural landscapes.

Fundamental resources and values for White Sands National Monument are identified in the Management Strategy (2009). According to that document, of the impact topics carried forward in this environmental assessment, only historic structures and cultural landscapes are considered necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park; are key to the natural or cultural integrity of the park; and/or are identified as a goal in the park's Management Strategy or other relevant NPS planning document.

- **Historic Structures** –This project addresses the rehabilitation of a portion of the historic visitor center. The visitor center is one of the contributing buildings in the park's historic district and cultural landscape listed to the National Register of Historic Places in 1988 (LA 135173). The building is a two-story stucco adobe built during the 1930's in Pueblo Revival Style. The proposed project will not impact the exterior of the historic visitor center, or any other historic building. Also, the design of the new restrooms would be compatible with the historic district. Only minor rehabilitation would occur inside the historic building. Because the preferred alternative will result in only minor, short-term, site-specific adverse impacts to the historic visitor center, there will be no impairment to historic structures.
- **Cultural Landscapes** – White Sands National Monument has an historic district encompassing the adobe visitor center, residences and maintenance buildings. The White Sands National Monument Historic District (LA 135173) was listed on the National Register in 1988. A Cultural Landscape Inventory (CLI) was completed for this district in 1994, and revised/updated in 2005. List of Classified Structures (LCS) entries have also been completed for district structures. The addition or removal of buildings within the Historic District will impact the Monument's cultural landscape. However, the design of the new public restrooms would be compatible with the historic district and, subsequently, the cultural landscape. Although the cultural landscape is a fundamental resource at the park, the preferred alternative will result in only negligible to minor (impact ranges from the lowest levels of detection to noticeable), long-term, site-specific adverse impacts to the cultural landscape; therefore, there will be no impairment to the Monument's cultural landscape.

Additionally, mitigation measures for these resources will further lessen the degree of impact to and help promote the protection of these resources. All ground disturbing activities will be monitored by a qualified archeologist. Park Service staff will assist in monitoring additional construction activities to minimize potential damage to the historic building.

In conclusion, as guided by this analysis, good science and scholarship, advice from subject matter experts and others who have relevant knowledge and experience, and the results of public involvement activities, it is the Superintendent's professional judgment that there will be no impairment of park resources and values from implementation of the preferred alternative.

APPENDIX B: THREATENED, ENDANGERED, CANDIDATE SPECIES AND SPECIES OF CONCERN

Doña Ana County:

Common Name	Scientific Name	Listing Status
Rio Grande silvery minnow	*Hybognathus amarus*	federal:endangered
Sneed pincushion cactus	*Coryphantha sneedii sneedii*	federal: endangered
Night blooming cereus	*Cereus greggii var. greggii*	state: endangered federal: species of concern
Dune prickly pear	*Opuntia arenaria*	state: endangered
Mescalero milkwort	*Polygala rimulicola mescalerorum*	state: endangered federal: species of concern
Todsen's pennyroyal	*Hedeoma todsenii*	federal: endangered
Bald eagle	*Haliaeetus leucocephalus*	federal: threatened
Interior least tern	*Sterna antillarum*	federal: endangered
Mexican spotted owl	*Strix occidentalis lucida*	federal: threatened
Northern aplomado falcon	*Falco femoralis septentrionalis*	federal: endangered
Southwestern willow flycatcher	*Empidonax trailii extimus*	federal: endangered
Nodding rock-daisy	*Perityle cernua*	federal: species of concern
Organ Mountain primrose	*Oenothera organensis*	federal: species of concern
Organ Mountain figwort	*Scrophularia laevis*	federal: species of concern
Sand prickly pear	*Opuntia arenaria*	federal: species of concern
Sandhill goosefoot	*Chenopodium cycloides*	federal: species of concern
Standley whitlow-grass	*Draba stanleyi*	federal: species of concern
Desert pocket gopher	*Geomys bursarius arenarius*	federal: species of concern
Organ Mountains Colorado chipmunk	*Eutamias quadrivittatus australis*	federal: species of concern
Townsends big-eared bat	*Corynorhinus townsendii*	federal: species of concern
Western red bat	*Lasiurus blossevillii*	federal: species of concern
Pecos River muskrat	*Ondatra zibethicus ripensis*	federal: species of concern
White Sands woodrat	*Neotoma micropus leucophacea*	federal: species of concern
American peregrine falcon	*Falco peregrinus anatum*	federal: species of concern
Arctic peregrine falcon	*Falco peregrinus tundrius*	federal: species of concern
Baird's sparrow	*Ammodramus bairdii*	federal: species of concern
Black tern	*Chlidonias niger*	federal: species of concern
Desert viceroy butterfly	*Limenitis archippus obsoleta*	federal: species of concern
Anthony blister beetle	*Lytta mirifica*	federal: species of concern
Dona Ana talussnail	*Sonorella todseni*	federal: species of concern
Alamo beard tongue	*Penstemon alamosenis*	federal: species of concern

Otero County:

Common Name	Scientific Name	Listing Status
Kuenzler's hedgehog cactus	*Echinocereus fendleri kuenzleri*	federal: endangered
Sacramento Mountains thistle	*Cirsium vinaceum*	federal: threatened
Sacramento prickly poppy	*Argemone pleiacantha extimus*	federal: endangered
Todsen's pennyroyal	Hedeoma todsenii	federal: endangered
Bald eagle	*Haliaeetus leucocephalus*	federal: threatened
Interior least tern	*Sterna antillarum*	federal: endangered

Mexican spotted owl	*Strix occidentalis lucida*	federal: threatened
Northern aplomado falcon	*Falco femoralis septentrionalis*	federal: endangered
Southwestern willow flycatcher	*Empidonax trailii extimus*	federal: endangered
White Sands pupfish	*Cyprinodon tularosa*	state: threatened
Black-footed ferret	*Mustela nigripes*	federal: endangered
Mountain plover	Charadrius montanus	federal: species of concern
Black-tailed prairie dog	*Cynomys ludovicianus*	federal: species of concern
Desert pocket gopher	*Geomys bursarius arenarius*	federal: species of concern
Penasco (Least) chipmunk	*Tamias minimus atristriatus*	federal: species of concern
Bell's vireo	*Vireo bellii*	federal: species of concern
Rio Grande cutthroat trout	*Oncorhynchus clarki virginalis*	federal: species of concern
Guadalupe southern pocket gopher	*Thomomys umbrinus guadalupensis*	federal: species of concern
New Mexico meadow jumping mouse	*Zapus hudsonius luteus*	federal: species of concern
Townsends big-eared bat	*Corynorhinus townsendii*	federal: species of concern
White Sands woodrat	*Neotoma micropus leucophacea*	federal: species of concern
American peregrine falcon	*Falco peregrinus anatum*	federal: species of concern
Arctic peregrine falcon	*Falco peregrinus tundrius*	federal: species of concern
Baird's sparrow	*Ammodramus bairdii*	federal: species of concern
Black tern	*Chlidonias niger*	federal: species of concern
Northern goshawk	*Accipiter gentilis*	federal: species of concern
Yellow billed cuckoo	*Coccyzus americanus*	federal: species of concern
White Sands pupfish	*Cyprinodon tularosa*	federal: species of concern
Sacramento Mountains salamander	*Aneides hardii*	federal: species of concern
Sacramento Mountains checkerspot butterfly	*Euphydrydryas anicia cloudcrofti*	federal: species of concern
Sacramento Mountains silverspot butterfly	*Icaricia icarioides*	federal: species of concern
Sacramento Mountains blue butterfly	*Icaricia icarioides*	federal: species of concern
Alamo beard tongue	*Penstemon alamosensis*	federal: species of concern
Night blooming cereus	*Cereus greggii var greggii*	federal: species of concern
Goodings onion	*Allium gooddingii*	federal: species of concern
Guadalupe rabbitbrush	*Chrysothamnus nauseosus var texensis*	federal: species of concern
Gypsum scalebroom	*Lepidospartum burgessii*	federal: species of concern
Sierra Blanca cliff daisy	*Chaetopappa elegans*	federal: species of concern
Villard's pincushion cactus	*Escobaria villardii*	federal: species of concern
Wright's marsh thistle	*Cirsium wrightii*	federal: species of concern