National Park Service
U.S. Department of the Interior

Grand Canyon National Park
Arizona

SCIENCE AND RESOURCE MANAGEMENT FACILITY
FINDING OF NO SIGNIFICANT IMPACT

Grand Canyon National Park (GRCA) proposes to construct a new science and resource management (SRM) facility on the South Rim because the present facility location and condition are substandard. Office space located in the old warehouse and auto shop have inadequate heating and cooling, poor weatherproofing, leaky roofs, and the area, which is shared with concessioner warehouse facilities, is not easily accessible by the public. In addition, the park's 1995 General Management Plan identified the current SRM facility for re-assignment to park's South Rim hospitality concessioner and the park intends to follow through with this transaction.

The park prepared an Environmental Assessment (2009 EA) and a revised EA (2010) to evaluate alternatives to address the purpose and need for action and objectives. Objectives of the EA include 1) Co-locate SRM offices and functions in one facility to the extent feasible, 2) Minimize harm to natural resources, natural ecological communities and processes, cultural resource, visitor experience, and human health and safety, 3) Attain Leadership in Energy and Environmental Design (LEED) certification in a building adequate for SRM needs, 4) Provide a facility that includes space to enhance visitor experience, and 5) Develop a park research facility.

The revised Environmental Assessment evaluated No Action Alternative and two action alternatives. The preferred alternative (Alternative 2) was selected by the National Park Service (NPS) for implementation and includes construction of a new LEED-certified SRM facility, utility installation, off-site storage, parking considerations, and several additional site improvements. A Finding of No Significant Impact (FONSI) for this alternative was signed by the Director of the NPS Intermountain Region on December 9, 2010.

During the final design phase for the site, the NPS determined that architectural designs were inconsistent with the intent and effects of the selected alternative. Specifically, the design for the SRM facility was incompatible with the Grand Canyon Village National Historic Landmark District (NHLD). The size and scale of the building were too large for its site, a very visible location adjacent to the Magistrate's building and across the street from the Ranger Operations building. A building constructed on the site would need to harmonize in design, size, and scale with both of these buildings and the SRM building design did not do this. Consequently, a new preferred alternative (Alternative 3) was identified and selected by the NPS for implementation. This alternative is described and analyzed in the EA and meets the purpose and need for the action by providing for the construction of a fully functional LEED

certified SRM facility utility installation, on-site storage, parking considerations, and other site improvements.

This document records 1) a Finding of No Significant Impact as required by the National Environmental Policy Act of 1969 associated with the adoption of Alternative 3 as the NPS preferred alternative and 2) a determination of no impairment as required by the National Park Service (NPS) Organic Act of 1916.

PREFERRED ALTERNATIVE

The preferred alternative (Alternative 3) amends the park's GMP by constructing a new facility to house SRM staff and functions just south and east of the park headquarters building. This site is a vacant, previously disturbed area, once the location of the park gas station. 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.

Building Features
The proposed building would be approximately 8,500 square feet, two floors, universally accessible, and include employee offices, general work spaces, meeting space, restrooms, small public-use library, and some storage. Design would allow for after-hours use of meeting space and restrooms while keeping offices secure. A fire protection system for the entire building, consisting of smoke and heat detection alarms and sprinklers, would also be provided.

The building would be designed to achieve LEED certification as described in the EA. This location is not within and not visible from the NHLD.

Facility Use
The new building would primarily be used by NPS employees for science and resource management functions. However, there would be a small library with internet access, park publications, and information available to the public.

Current employee offices in the Mission 66 maintenance yard buildings would be relocated to the new building. Functions for the Mission 66 maintenance yard would occur as described in the EA.

Utilities
Minimal utilities exist in this location. Water, sewer, electric, and communication lines would need to be brought into the area and would require trenching.

Access
Access to the new SRM building would be by footpaths leading to/from the building and parking areas. Nearby shuttle bus stops currently include the Shrine of the Ages and Market Plaza.

Parking
Construction of a parking area for the new facility would be included on-site. It is estimated that 15,000 square feet of the 24,000 square foot area would be developed for 60 parking spaces. Employees would be encouraged to walk, bike, or ride the park shuttle bus to and from the

building to allow adequate parking for some employees to drive, government vehicles, and visitors to the facility.

Revegetation
Native vegetation surrounding the site would be preserved to the extent possible. Native vegetation, rocks, or other natural features would be used as appropriate to landscape around the building and parking area.

Storage and Staging
The existing disturbed area at this location has been found to be adequate for construction of both an office building and additional storage facilities for all SRM field equipment and supplies. It is estimated that an additional acre or less of soil and vegetation disturbance, including removal of several trees, could occur at this location if storage and staging facilities were constructed on site. Although field equipment and supplies could be located at Juniper Hill as described in the EA, for purposes of analysis this alternative assumes additional disturbance and location of all SRM offices, field equipment, vehicles and supplies on site.

MITIGATION MEASURES

The following mitigation measures were developed to minimize the degree of adverse effects and will be implemented as needed during the proposed action's construction phase. The park's Project Manager will be responsible for implementation of mitigation measures.

Contractor Orientation Contractors working in the park are given orientation concerning proper conduct. This orientation is provided both in writing and verbally at a preconstruction meeting. This policy will continue for this project. Orientation will include, but will not be limited to

- Wildlife should not be approached or fed
- Collecting any park resources including plants, animals, and historic or prehistoric materials, is prohibited
- Contractor must have a safety policy and a vehicle fuel-spill and leakage policy

Limitation of Area Affected The following mitigation measures will be implemented to minimize area affected by construction activities and potential for adverse impacts

- Staging areas for a construction office (trailer), construction equipment, and material storage will either be located in previously disturbed areas near the project site or in other disturbed areas that best meet project needs and minimize new ground disturbance. All staging areas will be returned to pre-construction conditions or better once construction is complete. Standards for this, and methods for determining when standards are met, will be developed in consultation with the park's Vegetation Program Manager
- Construction zones will be fenced with construction tape, snow fencing, or similar material before construction begins. Fencing will define the construction zone and confine activity to the minimum construction area required. All protection measures will be clearly stated in construction specifications, and workers will be instructed to avoid conducting activities beyond the construction zone as defined by fencing

Soil Erosion To minimize soil erosion, the following mitigation measures will be implemented

- Standard erosion control measures such as silt fences, sand bags, or equivalent control methods will be used to minimize any potential soil erosion
- Grading and trenching operations will be by backhoe, track hoe, Pionjar, ditch digger and/or trencher, with excavated material side-cast for storage. Any trenching restoration operations will follow guidelines approved by park staff. Compacted soils will be scarified, and original contours reestablished
- Any revegetation efforts will use site-adapted native species and/or site-adapted native seed, and park policies regarding revegetation and site restoration will be incorporated

Vegetation To minimize vegetation impacts, prevent exotic vegetation introduction, and minimize spread of noxious weeds, the following mitigation measures will be implemented

- The park's Vegetation Program staff will provide input on salvage potential or will complete the salvage process on their own. They will provide guidance to park staff and contractors on tree avoidance at project sites where necessary and will also spot-check work progress
- All construction equipment that leaves the road will be pressure-washed prior to entering the park and will be clean of any soil, plant matter, or other materials. The Contracting Officer's Representative (COR) or a Vegetation Program representative will check the equipment for cleanliness prior to work beginning
- Staging area locations for construction equipment will be determined and approved by the COR and Vegetation Staff. If necessary, as determined by Vegetation staff, exotic vegetation will be treated prior to beginning construction and in staging areas
- Pruning necessary for this project, and for any future periodic maintenance in the area, will adhere to the park's tree pruning guidelines with the goal of retaining health and integrity of trees and shrubs treated. Damage to trees or roots in or adjacent to project areas during construction will be avoided as much as possible. Any damaged plant material will be pruned or removed, under Vegetation Program guidance
- All fill materials will be obtained from a park-approved source. Project area topsoil will be retained whenever feasible for reuse onsite when the project is completed. Topsoil will be windrowed onsite or in another approved location to retain soil health
- All restoration efforts will use site-adapted native seed and/or plants obtained from the South Rim Nursery and managed by the Vegetation Program
- A construction erosion control plan will be developed and implemented to prevent soil loss and plant material transport offsite

Special Status Species To protect any unknown or undiscovered threatened, endangered, or special status species, the construction contract will include provisions for discovery of such. These provisions will require cessation of construction activities until park staff evaluated the impact, and will allow contract modification for any measures determined necessary to protect the discovery. Mitigation measures for known special status species are

California Condor

- If a condor lands within 300 feet of the construction site, construction will cease until it leaves on its own or permitted personnel employ techniques that result in the individual condor leaving the area
- Construction workers and supervisors will be instructed to avoid interaction with condors, and to contact appropriate park or Peregrine Fund personnel immediately if and when condor(s) occur at a construction site
- The construction site will be cleaned at the end of each day work is conducted (i.e., trash disposed of, scrap materials picked up) to minimize likelihood of condors visiting the site. Park condor staff will complete a site visit to ensure adequate clean-up measures are taken
- To prevent water contamination and potential condor poisoning, the park-approved vehicle fluid-leakage and spill plan will be adhered to for this project. This plan will be reviewed by the park's Wildlife Biologist to ensure adequacy in condor protection for this project
- If condor nesting activity is known within 0.5 miles of the project area, light and heavy construction in the project area will be restricted during the active nesting season, if viable nests persist. Active nesting season is February 1 to October 15, or until young are fully fledged. These dates may be modified based on the most current information, in consultation with the park's Wildlife Biologist and the U.S. Fish and Wildlife Service

Mexican Spotted Owl (MSO)

- Prior to construction activities, the park's Wildlife Biologist will be contacted for any new information related to MSO or their status near the project area

Soundscapes To reduce noise, construction equipment will not be left idling any longer than necessary for safety and mechanical reasons, and no construction will occur at night

Cultural Resources The following mitigation measures will minimize construction impacts on cultural resources

- If previously unknown archeological resources are discovered during the project, a park Archeologist will be contacted immediately. All work in the immediate vicinity of the discovery will be halted until the resources could be identified, documented, and an appropriate mitigation strategy developed, if necessary, in accordance with stipulations of the applicable programmatic agreements among the NPS, the Arizona State Historic Preservation Officer, and the Advisory Council on Historic Preservation
- All workers will be informed of the penalties of illegally collecting artifacts or intentionally damaging any archeological or historic property. Workers will also be

informed of correct procedures if previously unknown resources are uncovered during construction activities

- Areas selected for equipment and materials staging are expected to be in existing disturbed areas where there is no potential for archeological resource disturbance. If sites selected for these activities change during later design phases for implementation, additional archeological surveys will be conducted
- Monitoring by a cultural resource specialist will occur for ground disturbing activities, specifically trenching, associated with the project. An archeological monitor will be on site for all excavations as an added precaution when upgrading utility systems within any areas of previous construction for the, no longer extant, Babbitt Brothers Store.

Visitor Experience Unless otherwise approved by the park, operation of heavy construction equipment will be restricted to dawn to dusk, year-round, thereby minimizing construction impacts on visitor experience

Park Operations and Safety GRCA, concessioners, other park employees, and residents will receive public notification on project implementation and road delays or road closures, as appropriate, to minimize construction impacts on park operations, and minimize safety risks to employees, visitors, and residents

Air Quality The following mitigation measures will minimize impacts to air quality

- To reduce entrainment of fine particles from hauling material, sufficient freeboard will be maintained, and loose material loads (aggregate, soils, etc.) will be tarped
- To reduce tailpipe emissions, construction equipment will not be left idling any longer than necessary for safety and mechanical reasons
- To reduce construction dust in the short term, water will be applied to problem areas. Equipment will be limited to the fenced project area to minimize soil disturbance and consequent dust generation
- Landscaping and revegetation will control long-term soil dust production. Mulch and plants will stabilize soil and reduce ground surface wind speed/shear

ALTERNATIVES CONSIDERED

Alternatives considered include no action (Alternative 1), construction of a new facility near the Magistrate's Office (Alternative 2) and construction of a new facility near Park Headquarters in the former service station site (Alternative 3, the preferred alternative). Two other alternatives were considered but not carried forward for full analysis: construction of a new facility on Shuttle Bus Road, and an extensive redesign and remodel of the buildings currently in use at the maintenance and warehouse complex (Dutton, Powell, McKee).

ENVIRONMENTALLY PREFERRED ALTERNATIVE

The environmentally preferred alternative is the alternative that will promote the national environmental policy as expressed by §101 of the National Environmental Policy Act. This includes alternatives that:

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

Alternative 2 is the environmentally preferred alternative. However, both Alternatives 2 and 3 both provide protection of park resources and values, human health and safety, and visitor use and enjoyment of GRCA and thus fulfill the requirements of all six NEPA goals. After consideration of public comments throughout the scoping and planning process, careful review of potential resource and visitor impacts, developing appropriate mitigation to protect park resources, Alternative 3, the preferred alternative, has been determined to better protect important historic and cultural resources identified in Criteria 4 (above) by avoiding an adverse effect on the NHLD due to the incompatible nature of the final design with respect to the characteristics that make the district eligible for listing on the National Register of Historic Places. Although the site identified in the preferred alternative is not as centrally located as the site identified in the EA, which results in increased distances that staff have to travel to access the facility, the preferred alternative (Alternative 3) best achieves a balance between population and resource use and best strikes a balance between the widest range of use and enjoyment of GRCA without degradation of the environment or risk of health or safety impacts.

WHY THE PREFERRED ALTERNATIVE WILL NOT HAVE A SIGNIFICANT EFFECT ON THE HUMAN ENVIRONMENT

As defined in 40 CFR §1508.27, significance is determined by examining the following criteria:

Impacts that may be both beneficial and adverse. A significant effect may exist even if the agency believes that on balance the effect will be beneficial.

Although some adverse effects will result from implementation of the preferred alternative, overall impacts will be beneficial. Beneficial impacts of the preferred alternative include

increased efficiency of park operations, improved work conditions for SRM staff, consolidation of telecommunications and utilities infrastructure, and reduced maintenance needs at the current facility. No measurable effects to natural resources were identified for the preferred alternative.

Degree of effect on public health or safety

Implementation of the preferred alternative will result in minor beneficial, long-term impacts to public health and safety from improved working conditions, specifically adequate heating, cooling and ventilation, weatherproofing, reduced ice hazards due to lack of drainage, and less building pests. Some minor adverse short-term impacts could result during new facility construction. However, mitigation measures have been identified to reduce these effects to public health and safety.

Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas

The preferred alternative will not have measurable effects to natural resources. No prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas will be affected. Impacts to historic resources and cultural landscapes outside the NHDL would not be expected. The postponement of appropriate infill in the NHLD would result in minor adverse long-term impacts to historic resources and cultural landscapes, however the opportunity for future appropriate infill would be maintained.

Degree to which effects on the quality of the human environment are likely to be highly controversial

The project generated some public interest and contention due to the proposed locations of the facilities, parking and traffic concerns, and sustainability. The impacts themselves were not controversial as evidenced by the fact that only four, out of the total 14 comments, challenged the impact analysis.

Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risks

Implementation of the proposed action will result in an improved quality of the human environment for those employees and visitors utilizing the SRM facility. The only risks involved relate to typical minor public and employee safety concerns during construction; these are addressed through mitigation measures. Therefore, no highly uncertain, unique, or unknown risks were identified.

Degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration

Setting a precedent was an issue of some concern to commentors regarding construction of a new facility within the NHLD under Alternative 2. The adoption of Alternative 3 as the preferred alternative does not set a precedent for future construction within the NHLD. Any future project would require additional compliance documentation with National Historic Preservation Act and NEPA, as appropriate. Further, this project does not represent a decision in principle about any future considerations.

Whether the action is related to other actions with individually insignificant but cumulatively significant impacts

Cumulative impacts resulting from Alternative 3 (Construct New SRM Facility near Park Headquarters) will be minor beneficial and long term with regard to park operations, historic resources and cultural landscapes. Cumulative effects were analyzed in the environmental assessment and no significant (major) cumulative impacts were identified.

Degree to which the action may adversely affect districts, sites, highways, structures, or objects listed on National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

Compliance with §106 of the National Historic Preservation Act (NHPA) was completed in a letter dated November 18, 2010 from the Arizona State Historic Preservation Office (SHPO). SHPO concurrence with the NPS determination of no adverse effect to historic properties is based on review of 15% and 30% design drawings and incorporation of SHPO comments into the design. It was anticipated that if, through design review, the SHPO found that the design would result in an adverse effect to historic properties, NPS would reinitiate §106 consultation. After evaluating the final site and building designs of the SRM complex and through consultation with the SHPO, the NPS determined that the intent of the building would be better served in an alternative location as to avoid an adverse effect on the NHLD. This location is sited in a vacant, previously disturbed area that was once the location at the park gas station. There are no known archaeological resources, historic structures, cultural landscapes, or ethnographic resources within the project area. Consequently, no historic properties would be affected. Compliance with §106 of the NHPA was completed in a letter dated May, 16 2011 from the SHPO, which concurred with the NPS determination of no historical properties affected.

The 11 traditionally associated tribes were contacted during the scoping period. One response was received from the Navajo Nation stating that the project will not impact any Navajo traditional cultural properties.

Degree to which the action may adversely affect an endangered or threatened species or its critical habitat

The park's wildlife biologist and Section 7 Coordinator determined that this project would have no effect on special status species. Additionally, this project was reviewed and found consistent with the components and conservation measures identified in informal batch consultations (2-21-01-I-124) and (22410-2008-I-0213). .

Whether the action threatens a violation of Federal, state, or local environmental protection law

This action violates no federal, state, or local environmental protection laws.

IMPAIRMENT

The 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 practical, adversely impacting park resources and values.

However, the laws do give the NPS 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 NPS must leave park resources and values unimpaired, unless a particular law directly and specifically provides otherwise. A prohibited impairment is an impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of park resources or values. This includes impacting opportunities that otherwise would be present for the enjoyment of these resources or values. An impact to any park resource or value may, but does not necessarily, constitute impairment. However, an impact would be more likely to constitute 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 would be less likely to constitute 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 would 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 relate 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 resources and cultural landscapes, archeological and ethnographic resources, vegetation, general wildlife, water resources, and wilderness character. In both the initial and revised EA, only two of these impact topics were carried forward - historic resources and cultural landscapes and archeological and ethnographic resources.

Fundamental resources and values for Grand Canyon National Park are identified in the 1995 General Management Plan and 2010 Foundation Statement. Of the impact topics carried forward in the environmental assessment, historic resources and cultural landscapes, archeological and ethnographic resources, 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 General Management Plan or other relevant NPS planning document.

- **Historic Resources and Cultural Landscapes** – Grand Canyon National Park contains a large number of historic resources that are nationally significant with over 500 resources listed or eligible for listing on the National Register of Historic Places. In addition, nine buildings are individually listed National Historic Landmarks and three districts are National Historic Landmark Districts. There are no historic structures or cultural landscapes within the project area; there will be no historic properties affected. Based on these impacts and because they will not exceed a minor adverse impact, the preferred alternative will not result in impairment to historic resources or cultural landscapes.

- **Archeological and Ethnographic Resources** – The Grand Canyon protects an important cultural history. More than 12,000 years of human occupation have resulted in an extensive archeological record. The park preserves thousands of archeological sites many of which remain unknown. Eleven American Indian tribes have known ties to Grand Canyon, and some consider the canyon their original homeland and place of origin. The site location for construction of the SRM building in accordance with the preferred alternative was previously surveyed, and no extant archeological resources were identified in the immediate project area (South Rim Developed Area Survey, Partial Parkwide Inventory, 2003). Therefore, the proposed project area is not expected to contain archeological deposits or ethnographic resources and no historic properties would be affected. However, historic documentation has identified historic construction projects and other previous disturbances in this area. Thus, appropriate steps will be

taken to protect any archeological resources inadvertently discovered during construction. Because the project does not propose to disturb any extant archeological sites, effects on archeological and ethnographic resources would be negligible and impacts of this proposed action will not result in impairment.

In addition, the mitigation measures described in the EA and listed in this FONSI starting on page 3 will further lessen the degree of impact to and help promote the protection of these resources.

In conclusion, as guided by this analysis, as well as 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.

PUBLIC INVOLVEMENT

Internal and public scoping was conducted in the spring of 2009. In November, 2009, GRCA released an EA for this project that evaluated two action alternatives. That EA was available for public review and comment during a 30-day period ending December 19, 2009. A total of three responses were received from individuals through the online Planning, Environment and Public Comment system (PEPC). A revised EA, released in 2010, was prepared to respond to comments received from the public and from agency staff. A primary change is that the revised EA analyzes three action alternatives, one of which had been dismissed in the 2009 EA.

The revised EA was available for public review and comment during a 30-day period ending March 9, 2010. A total of ten responses were received from unaffiliated individuals, most through PEPC. Most respondents clearly supported construction of a new facility for SRM functions however, most indicated a preference for construction in locations other than the proposed site near the Magistrate's Office.

Substantive comments on the revised EA centered on these topics: parking and traffic, location of facility, sustainability, project scope, and clarity or accuracy of the document. These concerns resulted in some changes to the text of the environmental assessment as noted in errata sheets attached to this FONSI. Responses to substantive comments are also contained in the errata sheets. The FONSI and errata sheets will be made available on PEPC and to all commentors who provided address information.

The 11 traditionally associated tribes were contacted during the scoping period for the initial EA. One response was received from the Navajo Nation stating that the project will not impact any Navajo traditional cultural properties. Based on known information about ethnographic resources at South Rim and the APE characteristics, additional consultation with Native American tribes was not needed for because there is no potential to affect ethnographic resources.

CONCLUSION

As described above, the preferred alternative does not constitute an action meeting the criteria that normally require preparation of an environmental impact statement (EIS). The preferred alternative will not have a significant effect on the human environment. Environmental impacts that could occur are limited in context and intensity, with localized beneficial and adverse long-term impacts that range from negligible to moderate. There are no unmitigated adverse effects on public health, public safety, threatened or endangered species, sites or districts listed in or eligible for listing in the National Register of Historic Places, or other unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risks, significant cumulative effects, or elements of precedence were identified. Implementation of the action will not violate any federal, state, or local environmental protection law. Based on the foregoing, it has been determined that an EIS is not required for this project and thus will not be prepared.

Recommended: _____ 5/31/11

Barclay Trimble — Date
Acting Superintendent, Grand Canyon National Park

Approved: _____ 5/23/11

John Wessels — Date
Regional Director, Intermountain Region

ERRATA SHEETS
Science and Resource Management Facility
Grand Canyon National Park

GRCA received responses from a total of 10 individuals during the 30-day public comment period for the Science and Resource Management Facility Environmental Assessment (February 2010). An interdisciplinary team reviewed these responses to identify and respond to substantive comments. Substantive comments are those which

- Question, with reasonable basis, the accuracy of information in the EA
- Question, with reasonable basis, the adequacy of environmental analysis
- Present reasonable alternatives other than those presented in the EA
- Cause changes or revisions in the proposal

Comments centered on five topics: parking and traffic concerns, location of facility, sustainability, project scope, and clarity or accuracy of the EA. Substantive comments are grouped by topic and addressed below. Some comments, especially regarding accuracy, adequacy or clarity resulted in changes to the text of the environmental assessment as noted below. Strikeouts in responses to comments indicate deleted text and bold italics indicate revised wording. Minor changes to punctuation and grammar were made to improve readability.

TEXT CHANGES

Several comments received during the public comment period on the 2009 EA voiced concerns about inadequate parking options. To address those concerns, the revised EA included additional text and illustrated, in Figure 6, where additional parking could be developed.

The text of the EA Table of Contents is modified under **List of Figures** to read:

Figure 6b Apache Alley parking detail

The text of the EA on page 14 is modified under **Parking** to read:

The overall number of parking spaces in ~~this lot~~ ***Lot C*** would remain as current (39 spaces, 2 of which are handicapped accessible). ~~Approximately 50 parking spaces are identified for construction of an employee parking area on Apache Alley, north and west of the proposed building site, see Figure 6.)~~. ***Additional parking spaces may be developed on the north side of Apache Alley, as needed (see EA, Figure 6b, attached).***

The text of the EA on page 14 is modified to read:

The building site would occur on the disturbed lot's south side to avoid conflict with an existing sewer line and minimize impacts to the Babbitt Brothers store foundation. At the same time the building would be located to use solar energy and, therefore, could not be situated too close to the tall ponderosa trees on the project area's south side. ***The original Babbitt Brothers store lot is larger than what is required by the new SRM building; therefore it is possible to avoid the sewer line and the***

existing foundation by leaving an open space with native vegetation on the north side of the SRM facility.

The text of the EA on page 19 is modified to add the following mitigation measure under **Limitation of Area Affected:**

Development of a parking area in Apache Alley would only be implemented if needed. No "parking lot" or paving of parking areas in the alley is proposed. If, after building construction and occupancy, the need for additional parking is determined, sites will be located on the north side of the alley. Parking sites would be located between existing trees with minimal vegetation disturbance.

The text of the EA on page 22 is modified to read:

Through site-selection analysis, the park found the Preferred Alternative and Alternative 3 locations met more project selection criteria; therefore *~~these~~ other* two locations *(current maintenance complex and the Mission 66 maintenance yard)* were dismissed from further analysis.

The text of the EA on page 36 is modified under the second paragraph of Alternative 2 – preferred alternative to read:

~~SRM~~ ***Consolidation of SRM offices*** into one building in close proximity to other park operations ***and housing*** would alleviate some traffic concerns***....Development of*** ~~new~~ employee parking ***spaces*** along Apache Alley would ~~eliminate~~ ***lessen congestion*** ~~concerns~~ at parking lot C***, but may slightly increase congestion in Apache Alley***.

An additional paragraph is added to read:

Locating the SRM facility at this location would allow consolidation of voice and data lines, including the elimination of two to three T-1 lines and other circuitry, at an estimated cost savings of $11,000 per year.

The text of the EA on page 33 is modified to read:

Based on this information, construction of a facility in the proposed location would fulfill this recommendation and have moderate beneficial impacts on the cultural landscape. ***Design of the site and facility will be consistent with the CLR Landscape Treatment and Design Recommendations.***

The text of the EA on page 36 is modified under the first paragraph of Alternative 3 – Construct New SRM Facility near Park Headquarters to read:

Construction of a new facility under ~~the preferred~~ ***this*** alternative would....

An additional paragraph is added to read:

Locating the SRM facility at this location would require new voice and data lines and possibly new circuitry at park headquarters to support the system. This site does not allow the consolidation or elimination of voice and data lines and would incur greater up-front and monthly expenditures for telecommunications over Alternative 2.

The text of the EA on page 45, Appendix A, Site B column, is modified under the Criteria "Is site served by existing greenway/bike trails?" to read:

No***, but within 400 feet of existing trails***

The text of the EA on page 45, Appendix A, Site B column, is modified under the Criteria "Will user travel to site require minimum energy?" to read:

~~No~~ ***Yes, but slightly more than for Site A***

The text of the EA on page 46, Appendix A, Site A column, is modified under the Criteria "Will proposed use affect surrounding neighborhoods" to read:

...increase in traffic; natural buffers to ***nearby*** residential areas ***would remain***

The text of the EA on page 46, Appendix A, Site B column, is modified under the Criteria "Will proposed use affect surrounding neighborhoods" to read:

...increase in traffic; ***natural buffers to nearby lodging would remain***

The text of the EA on page 46, Appendix A, Site B column, is modified under the Criteria "GMP provisions" to read:

...transit use***; infill consistent with provision to build in disturbed areas***

The text of the EA on page 46, Appendix A, Site B column, is modified under the Criteria "Is site development consistent with GMP?" to read:

~~No~~ ***Yes***

RESPONSE TO SUBSTANTIVE COMMENTS

The following responses to substantive comments are associated with initial preferred alternative identified by the NPS (Alternative 2). With the adoption of a new preferred alternative (Alternative 3), the NPS believes that the majority of the comments received related to parking and traffic concerns, location of the facility, sustainability, clarity or accuracy of the EA and natural resources have been addressed and the concerns ameliorated due to the new site location outlined in the preferred alternative.

Parking and Traffic Concerns

Comment: Development of a parking lot in Apache Alley would result in increased traffic, increased noise, additional visitors in this residential area, decreased privacy for residents, and could impact residents' access to storage sheds and garages.

Response: The development of parking spaces will be based on need. A paved and striped "parking lot" is not proposed; instead parking spaces would be similar to existing informal residential parking. This type of parking area is less likely to draw visitors and proper signage could be installed to discourage visitor parking and visitation in the area. See text changes above as well.

NPS agrees that there could be increased traffic and disturbance along Apache Alley. The alley is large and designs show that there would be ample room for parking without crowding residents. However, if traffic becomes a problem in this area, residents would need to alert park management to develop a solution to address these impacts.

Comment: Apache Street cannot handle increased traffic, particularly in the winter when there is limited space for residents to park on the street. In addition, the speed limit on Apache Street is 15 mph and it is often exceeded. Additional traffic would increase safety concerns for children and pets and possibly increase the number of accidents.

Response: It is not the intent for SRM staff to park on Apache Street or use the street to access the new building. However, it may be necessary to instruct employees to park in other areas and limit access to Apache Street to less safety concerns.

Comment: Why are an additional 50 parking spaces needed when ample parking is in the area? Other spaces can be attempted to be reserved and marked as reserved if needed in the larger lots.

Response: The Village area has a number of parking areas, however, on high visitation days these can fill up. NPS would develop parking spaces along Apache Alley as needed. Over time up to 50 spaces could be developed, but only if needed. NPS would like to limit the impacts of administrative parking needs on visitor parking and therefore is not considering reserving or marking parking spaces in those larger lots.

Comment: There is not enough parking in the Grand Canyon Village and the construction of a new facility will make it worse.

Response: NPS agrees that there is limited parking in the Village area. GRCA recognizes parking limitations at Lot C, adjacent to the proposed facility, and in Apache Alley. However, development of additional parking lots at CVIP is expected to relieve the need for additional visitor parking in the village.

Comment: Appendix A does not mention that Alternative 3 also has natural buffers to surrounding areas (in fact, more dense vegetation and deeper buffers than for Alternative 2). It also fails to mention that there is no buffer between Apache Alley parking and adjacent housing (Alternative 2).

Response: NPS agrees that there are natural buffers at the Alternative 3 building site and no buffer between proposed parking on Apache Alley and adjacent housing. See text changes above that address this comment.

Comment: Appendix A states that in both alternatives the use is compatible with surrounding uses, character, and scale. It could be argued that the presence of parking on Apache Alley is not compatible with adjacent residential land use.

Response: Change in character of the alley is not anticipated. Parking spaces will be developed as needed. NPS agrees that there will be a minor change in land use on Apache Alley.

Location of Facility

Comment: Alternative 3 may be superior in protecting important historic and cultural resources because it does not introduce a new building in a historic district. The discussion

of the impacts on Historic Resources and Cultural Landscapes on pages 33 and 34 rationalizes the construction of a new facility in the National Historic Landmark District. Under Alternative 2 (paragraph 3), the EA states, "The Village NHLD CLR recommends new construction be minimized as much as possible." That is the primary statement in the CLR. It clearly implies that no new construction is better than introducing new buildings. Paragraph 3 skips over that primary statement and concludes that constructing a new building would have a moderate beneficial impact. If the Village NHLD CLR recommends new construction be minimized as much as possible, then why is it a good idea to build on this site?

Response: There is no prohibition against infill in the historic district. The Arizona SHPO recommended the preferred alternative location as long as the building is distinctive, yet compatible, with the existing architecture in design and massing. The preferred location housed the employee recreation center, community library and pub until it burned down in 1993. The building was constructed as the original grocery store and post office. Since the building burned down, the SHPO has consistently recommended site infill so that a vacant lot is not the center piece at the end of Center Road. NPS and the SHPO believe that placement of this type of building at this location is appropriate.

In addition, the CLR recommends that NPS "Minimize new construction to the greatest extent possible while accommodating required new changes to meet visitor, safety, and operations needs...When necessary, construct limited new facilities to increase the functionality of the site, enhance the visitor experience, or achieve interpretive goals."

Comment: Is site development consistent with the GMP? For Alternative 2, the EA states "[GMP] indicates new building site for "Visitor and Community Services, infill consistent to build in disturbed areas" and for Alternative 3, "[GMP] indicates site to be converted to transit use."

Response: Although the SRM facility is not a visitor and community service, the construction of a facility in the Babbitt Brother's Store location is partially consistent with the GMP. Similarly, the GMP stated that the gas station site (Alternative 3) would be a transit facility and construction of the SRM facility at that location would also be partially consistent with the GMP. Therefore, neither Alternative 2 nor 3 are completely consistent with the GMP. As the EA stated, the decision to construct a new SRM facility at either location will amend the GMP.

Comment: The Alternative 2 site is not of adequate size to house all SRM offices, field equipment, supplies, vehicles and parking at one location. Appendix A states that both action alternatives would be adequate, but Alternative 2 does not provide for parking, storage of field equipment, vehicles or supplies on-site. However, Alternative 3 does provide for these functions.

Response: The proposed building site (Alternative 2) will accommodate SRM office and meeting space needs. Off-site storage and parking will be needed and was identified as part of the preferred alternative. NPS has determined that there are appropriate locations for storage and parking in close proximity to this location and therefore the site would meet core program needs.

Comment: Consider a fourth alternative for any further build-out of park support facilities near the new maintenance area. Create an employee campus that would include park headquarters functions as well as resource management and other administrative needs in the future. The headquarters building could be re-assigned to interpretation, and they could move out of the community building, the Shrine, various trailers, etc. Divisions currently in substandard facilities could have proper offices, either at the current headquarters if appropriate or at the maintenance yard.

Response: NPS considered the suggested new alternative to construct this facility as part of a new headquarters compound on Shuttle Bus Road and determined that it did not meet the objectives of the EA to be accessible to visitors and researchers and was not at all consistent with the GMP. NPS will separately consider opportunities for consolidation of Interpretation and Education Division offices and functions.

Sustainability

Comment: Appendix A describes the Alternative 3 site as less desirable for environmental sustainability than the Alternative 2 site. However, solar applications such as photovoltaic panels actually benefit from an orientation that is slightly to the west of south similar to Alternative 3.

Response: During the site selection process, park staff analyzed possible credits for LEED certification. That preliminary analysis, which is documented in part in the EA, Appendix A, indicates that new construction at the site of the former Babbitt's store would garner more LEED credits than new construction at the site of the former service station or at the new Facilities Management compound. Specific LEED credits that the preferred site provides better attainment for are not provided directly in the EA because this will be part of the design process for the new facility. However, specific LEED credits and the LEED credentialing process shall be conducted in accordance with all U.S. Green Building Council requirements, and shall follow the checklist contained in the LEED reference guide for Green Building Design and Construction, 2009 edition. Solar design is only one component of energy efficient design; other elements will also be utilized.

Comment: Appendix A also states that Alternative 3 is not served by existing greenway/bike trails. However, a trail comes within 400 feet of this site.

Response: NPS agrees that this is in close proximity to the building, see text changes above.

Comment: Appendix A says "Yes" for Alternative 2 and "No" for Alternative 3 in answering whether travel to the site will require minimum energy. For Alternative 3, the vast majority of NPS housing is within one and one-fourth miles of the site – a reasonable walking or biking distance with existing paved paths available to within 400 feet of the site. Also consider that most NPS employees travel daily to the Post Office to pick up their mail. A worksite near the Post Office means that a reduction in travel time and distance to the Post Office compensates for additional travel time and distance to work.

Response: NPS agrees that park housing is relatively close to both Alternative 3 locations and that proximity to the post office could be beneficial. See text changes above.

Scope of Project

Comment: The plan for a small visitor library duplicates services provided at the Community Library and the Park Research Library in the Headquarters Building. Computer access is available at both of those libraries. Wi-Fi access is available in all the lobbies of all the Xanterra lodges and will probably be available through GCA outlets soon. The exhibits on current projects duplicate the exhibits that are proposed as part of the exhibit plan for the Grand Canyon Visitor Center at Canyon View Information Plaza.

Response: NPS does not intend to have a staffed visitor contact station or function in the facility; rather, limited self-service facilities will be available. SRM routinely hosts volunteer groups, Grand Canyon Field Institute classes, meetings, trainings, etc. Those activities will be readily accommodated in the new facility. The central location will assist the park in highlighting SRM activities in a facility commensurate with the program needs. Display of objects from the museum collection is an appropriate use of any park facility that is designed to accommodate them. Specific design elements such as public access to a computer or existing division library/resource center for SRM research are appropriate; however the extent of those facilities will be finalized in the design phase of this project.

Clarity or Accuracy of the Environmental Assessment

Comment: The EA only makes reference to Appendix A as a mechanism to dismiss Sites C and D from further consideration. The Appendix A criteria, however, could be fruitfully used to compare the advantages and disadvantages of Alternative 2 versus Alternative 3. And, it could also be used to evaluate whether one Alternative is superior to the other in terms of the criteria.

Response: Appendix A was developed during the site selection and evaluation process as a means of characterizing each site for later use in decision making. The park appreciates the thoughtful input from this extensive comment and recognizes a constructive intent. Because the site selection criteria were developed based on LEED certification criteria, only minor changes to the appendix are incorporated as noted.

Comment: It is confusing when you say on page 14 of the EA that you are building on the site of the old Babbitt store suggesting that you are using the existing footprint but then you say you are not building directly on that foundation to protect it.

Response: See text changes for clarification of the building site.

Comment: Page 25 states that Alternative 2 is the Environmentally Preferred Alternative. But, the EA does not make a convincing argument that Alternative 2 is superior to Alternative 3.

Comment: Page 25 states that Alternative 2 best meets the purpose and need for action, yet Table 1 on page 23 (which summarizes how well each alternative meets the Purpose and Need project objectives) shows that Alternatives 2 and 3 are identical in meeting the three project objectives that are listed in Table 1.

Response: NPS believes that Alternative 2, the preferred alternative, best meets the project objectives and purpose and need specifically related to enhancing visitor experience and developing a research facility. Although both Alternatives 2 and 3 would meet these objectives, the preferred location would provide easy bus, bike, and pedestrian access to both employees and visitors. Additionally, in consultation with the Arizona SHPO, the preferred location was identified as a good location for construction of an administrative building.

Comment: Page 25 states that Alternative 2 best addresses overall NPS objectives and evaluation factors. What are those objectives and evaluation factors?

Response: The objectives are identified in Chapter 1 of the EA on page 2.

Comment: Page 34 contains two paragraphs of discussion on Cumulative Effects under Alternative 3. Why are these two paragraphs on Cumulative Effects presented under Alternative 3? What does this discussion have to do with the Alternative 3 site? Isn't this commentary equally applicable to the Alternative 2 site?

Response: The Cumulative Effects determinates for Alternatives 1, 2 and 3 on pages 32-34 are the same; minor adverse long term. Because of reviewer preference for not simply stating "the effects would be the same as described for Alternatives 1 and 2", the Alternative 1 wording was selected for the Alternative 3 description.

Comment: The discussion of Alternatives 2 and 3 on pages 33 and 34 refers to the lack of infill where the Babbitt Brothers Store once stood (if the SRM facility is not built there) and states that this lack of infill would be a continued minor adverse impact on the NHLD. The conclusion that there would be a continued minor adverse impact presumes that no other facility would ever be constructed on this site. There could be a future opportunity to construct a facility of more appropriate scale than the SRM Facility, in which case there would not be a minor adverse impact.

Response: NPS agrees that future construction of a different facility in this location could also be appropriate site infill. This action is consistent with the CLR Treatment and Design Guidelines, to "minimize new construction…to the greatest extent possible while accommodating required new changes to meet visitor, safety, and operational needs….When necessary, construct limited new facilities to increase the functionality of the site…." (p. V-5)

Comment: The EA does not include an aerial photo to show the location of Alternative 2 (as is true for Alternatives 1 and 3). Is this to make it less obvious that Alternative 2 is on a confined site?

Response: EA Figure 3 (map) and Figure 4 (aerial photo) show the location of Alternative 1. Figures 5 and 6 schematics depict the location of Alternative 2; it was not felt that an aerial photo was also necessary. Figure 7 (aerial photo) depicts the location of Alternative 3. As noted above, Figure 6b (attached) is added to the EA to clarify the location of possible parking in Apache Alley. Figure 6b is an aerial photo.

Natural Resources

Comment: The area the proposed parking lot is to be is a greenway for animals. Throughout the year there are several elk, deer and other animals that stay in the area, bed down for the night and use the area to cross traffic and retreat from visitors.

Response: Removal of vegetation for parking is not anticipated.

Comment: To put in a parking lot and destroy what vegetation is left would be to seriously impact the "historic" aspect of the area.

Response: The preferred alternative does not propose a paved parking lot or tree removal and will not cause extensive impacts to vegetation or change the character of Apache Street or Apache Alley.