

**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. The current facility in the old maintenance yard provides less than optimal working conditions in deteriorating warehouse-style buildings. Both the 1995 GMP and a 2009 GMP Memo to File identified the current facility for re-assignment to park concessions operations or for demolition. The park prepared an Environmental Assessment (2009 EA) and a revised EA (2010) to evaluate alternatives that fully address the purpose and need for action. The Preferred Alternative includes construction of a new Leadership in Energy and Environmental Design-certified (LEED) SRM facility, utility installation, off-site storage, parking considerations, and several improvements.

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

PREFERRED ALTERNATIVE

The preferred alternative amends the park's General Management Plan (GMP) by constructing a new facility to house SRM staff and functions adjacent to the Magistrate's Office and within Grand Canyon Village National Historic Landmark District (NHL). This site is a vacant, previously disturbed area once the location of the Babbitt Brothers Store, historically an employee pub, recreation center, and currently a picnic area after fire destroyed the original building. 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 will be approximately 8,500 square feet, two floors, universally accessible, and include employee offices and work spaces, meeting space, restrooms, small public-use library, and some storage. Design will allow for after-hours use of meeting space and restrooms while keeping office areas secure. A fire protection system for the entire building, consisting of smoke and heat detection alarms and sprinklers, will also be provided.

The building will be designed to achieve LEED certification. Building design components will include rainwater catchment to irrigate vegetation; solar collectors to provide hot water for an in-floor heating system; passive solar to aid in building heating and cooling; natural cross ventilation to reduce energy consumption; solar tubes and energy efficient interior lighting; open office work stations to allow layout flexibility over the life of the building; exterior lighting to meet dark sky policy; and a sympathetic and compatible design sensitive to its location in the NHLD. The building site will occur on the disturbed lot's south side to avoid conflict with an existing sewer line. Although the Preferred Alternative indicated the building would be located to minimize impacts to the Babbitt Brothers store foundation, it has since been determined that archaeological features are no longer extant. Therefore the building site will shift approximately twenty-five feet northward to incorporate efficiencies with the location of an existing power line. The park expects to realize a substantial fiscal savings from this efficiency.

Use of Additional Facilities

Current employee offices in the Mission 66 maintenance yard buildings will be relocated to the new building. Functions for the Mission 66 maintenance yard will be determined in the future but are expected to be reassigned to other uses, divisions or organizations, or considered for demolition or relocation if appropriate. The Powell building could house historic boats now located in the McKee building, and could provide overflow office and meeting space for temporary staff and volunteers.

Utilities

The building will be served by existing utilities near the site including water, sewer, electric, telephone and data. The park will realize considerable cost savings by consolidating voice and data lines that currently serve other offices in this area. Existing overhead utilities will be placed underground. Connecting to utilities and converting overhead to underground will require trenching in the project area. For the purposes of running underground utilities, the project area will likely include the utility corridor across Center Road in the vicinity of the Ranger Operations building.

Access

Access to the new SRM building will be by footpaths leading to/from parking areas. Additionally, vehicle loading zone access will be provided as needed, likely at the rear of the building off Center Road. Refinement of building access will occur during the design-build phase of this project.

Parking

The proposed SRM building site is near existing parking Lot C, which is currently used by visitors in the village, employees for Ranger Operations and for Magistrate's Office access. The capacity of this parking lot is insufficient to accommodate additional use for visitors and employees using the new building, so employees will be encouraged to walk, bike, or use other nearby parking options. Most SRM employees who will work in the new facility live within ½ mile of the building site as shown in the EA, Figure 5, and most travel that distance or greater by foot or bicycle to the current facilities. The overall number of parking spaces in Lot C will remain as current (39 spaces, 2 of which are handicapped accessible). Additional parking spaces could be developed on the north side of Apache Alley, as needed (see revised EA Figure 6, attached). Also see Mitigation Measures below.

Storage and Staging

Because of constraints associated with site in-fill at this location, the new building will not have adequate storage for all SRM field equipment and supplies. Therefore, supplies and equipment storage and staging will be accommodated in another location, likely in the CCC-era maintenance yard on Juniper Hill. This location is within walking distance of the proposed SRM building location (see EA, Figure 6). Building improvements or new facility construction in the Juniper Hill area will be considered to best accommodate SRM needs. Additional compliance for storage facilities will be completed as needed.

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.
- Consultation with the Arizona State Historic Preservation Office must be completed prior to construction

- All construction within the Grand Canyon Village National Historic Landmark District will be in accordance with the Secretary of Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes

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, concessionaires, 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, the preferred alternative) and construction of a new facility near Park Headquarters in the former service station site (Alternative 3). 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 (the preferred alternative) is the environmentally preferred alternative. Alternatives 2 and 3 both provide maximum protection of park resources and values, human health and safety, and visitor use and enjoyment of GRCA, thus fulfilling 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, and developing appropriate mitigation to protect park resources, Alternative 2, the preferred alternative, has been determined to better protect important historic and cultural resources identified in Criteria 4 (above) by providing appropriate site in-fill. Additionally, by being centrally located to park housing, the preferred alternative 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.

Some adverse effects will result from implementation of the preferred alternative, but the overall the impacts will be beneficial and less than significant. Minor impacts of the preferred alternative include increased efficiency of park operations, including consolidation of telecommunications and utilities infrastructure, and reduced maintenance needs at the current facility. Appropriate site-infill of a vacant lot within the NHLD represents a moderate beneficial impact to historic resources and cultural landscapes from implementation of the preferred alternative. No measurable effects to natural resources were identified for the preferred alternative.

Degree of effect on public health or safety

Health and safety concerns associated with long-term use of the current SRM offices located in the Mission 66 maintenance yard, include inadequate heating, cooling and ventilation, lack of weather proofing, leaky roofs, ice hazards due to lack of drainage, and building pests. Although these existing concerns need to be remedied, they are considered to be minor. Implementation of the preferred alternative may result in minor adverse short-term impacts on public health and safety during new facility construction or remodeling. The overall effects on public health and safety are expected to be minor and beneficial. This topic was dismissed from further analysis in the EA because impacts will be negligible to minor. Mitigation measures to reduce any temporary effects to public health and safety include public notification of 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.

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. The proposed action to construct a new facility within the National Historic Landmark District will have moderately beneficial impacts to historic resources and cultural landscapes due to appropriate site-infill, consistent with the Village NHL Cultural Landscape Report.

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

Implementation of the preferred alternative will result in construction of a new SRM facility in the area of the former Babbitt Brothers Store near the Center Road/Village Loop intersection. Because the proposed construction in the area is consistent with site-infill objectives, it will have a beneficial impact to the human environment. Although individual stakeholders disagree with site-infill at this location within the NHL, this is not considered highly controversial.

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

This was an issue of some concern to commentors regarding construction of a new facility within the NHL. Because the GMP and SHPO both support appropriate infill within the NHL, action for this project will not set any NPS precedent or represent a decision in principle about a future consideration.

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

No major (significant) cumulative effects were identified in the EA.

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 was addressed in a letter dated November 18, 2010 from the Arizona State Historic Preservation Office. 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. If through design review, the SHPO finds that the design would result in an adverse effect to historic properties, NPS will reinitiate §106 consultation.

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.

APPROPRIATE USE, UNACCEPTABLE IMPACTS, AND IMPAIRMENT

Sections 1.5 and 8.12 of NPS *Management Policies* underscore the fact that not all uses are allowable or appropriate in units of the National Park System. The proposed use was screened to determine consistency with applicable laws, executive orders, regulations, and policies; consistency with existing plans for public use and resource management; actual and potential effects to park resources; total costs to the Park Service; and whether the public interest will be served. As described in the EA, the preferred alternative is consistent with the NHPA, DO28, NPS28, 36 CFR Part 68, the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes*, and with *Management Policies* 2006. Therefore, the Park Service finds that the preferred alternative is an appropriate use. Because the application of mitigating measures is expected to be successful in ensuring that no major adverse impacts will occur, implementation of the preferred alternative will not result in any unacceptable impacts.

In analyzing impairments in the NEPA analysis for this project the NPS takes into account the fact that if impairment were likely to occur, such impacts will be considered to be major or significant under CEQ regulations. This is because the context and intensity of the impact will be sufficient to render what would normally be a minor or moderate impact to be major or significant. Taking this into consideration, NPS guidance documents note that "Not all major or significant impacts under a NEPA analysis are impairments. However, all impairments to GRCA resources and values would constitute a major or significant impact under NEPA. If an impact results in impairment, the action should be modified to lessen the impact level. If the impairment cannot be avoided by modifying the proposed action, that action cannot be selected for implementation." "*Interim Technical Guidance on Assessing Impacts and Impairment to Natural Resources*" National Park Service, Natural Resource Program Center, July 2003.

In addition to reviewing the definition of "significantly" under the NEPA regulations, the NPS has determined that implementation of the preferred alternative will not constitute an impairment to the integrity of Grand Canyon National Park's resources or values as described by NPS *Management Policies* (NPS 2006 § 1.4). This conclusion is based on analysis of the environmental impacts of the proposed action as described in the EA, the public comments

received, relevant scientific studies, and the professional judgment of the decision-maker guided by the direction in 2006 NPS *Management Policies*. The EA identified minor to moderate impacts to Historic Resources, Cultural Landscapes and Park Operations. This conclusion is further based on the Superintendent's professional judgment, as guided and informed by the General Management Plan, the Grand Canyon Village National Historic Landmark District Cultural Landscape Report, and the Grand Canyon South Rim Historic Maintenance and Warehouse Complex Historic Structure Report. Although the project has some negative impacts, in all cases these adverse impacts are the result of actions taken to preserve and restore other park resources and values. Overall, the project results in benefits to park resources and values, opportunities for their enjoyment, and it does not result in their impairment.

Appropriate Use

Sections 1.5 and 8.1.2 of NPS *Management Policies* underscore the fact that not all uses are allowable or appropriate in units of the National Park System. The proposed use was screened to determine consistency with applicable laws, executive orders, regulations, and policies; consistency with existing plans for public use and resource management; actual and potential effects to park resources; total costs to the Park Service; and whether the public interest would be served. Construction of a new SRM facility on the South Rim will provide centralized space for SRM functions, provide space to enhance visitor experience, develop a park research facility, and address human health and safety concerns associated with currently inadequate facilities. Proper location, sizing, selection of construction materials, and construction methods will ensure that unacceptable impacts to park resources and values will not occur. The proposed building is consistent with the park's general management plan and other related park plans. With this in mind, the NPS finds that construction and use of this facility is an appropriate use at Grand Canyon National Monument.

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 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. A prohibited impairment is an impact that, in the professional judgment of the responsible National Park Service 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.

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. Implementation of the Preferred Alternative will result in minor adverse long-term impacts with the potential for moderate beneficial long-term impacts from appropriate National Historic Landmark District infill. 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. Citing 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 (NPS 2003, NPS 2010). Therefore, the proposed project area is not expected to contain archeological deposits 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 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.

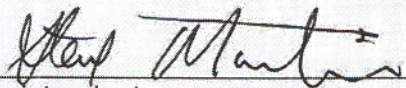
The revised EA was available for public review and comment during a 30-day period ending March 9, 2010. A total of ten responses were received from unaffiliated individuals, most through PEPC. Most respondents clearly supported construction of a new facility for SRM functions however, most indicated 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.

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:

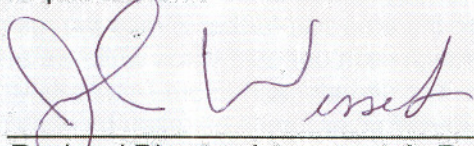


Superintendent

11/23/10

Date

Approved:



Regional Director, Intermountain Region

12/9/10

Date

ERRATA SHEETS

Science and Resource Management Facility

Grand Canyon National Park

GRCA received responses from a total of ten 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.

Many individuals expressed support for a new facility to house SRM offices and functions; there was however, little public support for constructing the facility in the proposed location. Lack of support is, in part, attributed to misunderstandings regarding parking for the facility. Other persons are opposed to any new construction in the NHLD.

SUBSTANTIVE COMMENTS AND RESPONSES (including text changes)

Topic: Parking and Traffic Concerns

Comment: Visitor intrusion would be increased. Visitors already come into the alley to chase deer, park to look at the mules, park for day hiking, etc... To place a parking lot there would be to increasingly invite the public into the area and further invade the resident's privacy and parking spots. Too often visitors approach us in our own yards while we are cooking, socializing or finishing home projects. The already bothersome contacts would increase ten-fold. The parking spaces reserved for employees would be taken by early morning by visitors...signing the parking lot as "Employees Only" would not help.

Comment: Apache Alley and Apache Street cannot handle increased traffic. In winter time...there is barely enough space for vehicles to pass safely. Residents are forced to park in the roadway. If traffic and parking is increased in the area emergency apparatus will have a hard time, if not be totally forced out, of the area. Apache Alley is for the residents and access to their storage and what some could call a garage. Again, employees and visitors would overtake that area and residents would be inconvenienced. The speed limit on Apache Street is 15 mph. Even in light traffic some find this hard to accomplish on a daily basis. There are several children and pets in the area who barely avoid serious accidents as

is. With increased traffic, and parking on the street and alley, these children and pets would be even more difficult to see. By increasing traffic there will be an increase in accidents.

Comment: By placing the parking lot behind Apache Alley the residents will be continuously forced to deal with increased noise. As residents I feel we are already placed in an area where we have extreme and daily exposure to the public and the noise and intrusion they bring by being on the main thoroughfare of the village. Busses can be heard, residents of other areas cut through yards, streets and alleys. Visitors park and come to our doors and walk on our sidewalk and yards to chase elk and take pictures. By placing a parking lot behind the houses there will be increased noise due to parking, loading and unloading, possible car alarms, etc... The pinion and juniper trees act as a buffer for noise and people and are essential to the residents on Apache. I feel we would lose the small amount of privacy we have on Apache. At this time we can look out and see a small view of the canyon and have some trees present. We are not forced to look at vehicles or totally see the visitors, busses, automobiles...that are making the noise. We can look out of our windows and see some of the beauty the park was created for. If a parking lot is placed in the area we will no longer be able to see the trees and be sheltered from the visitors and other people but we will give others opportunities to see what we are doing through our windows, doors, etc... We will walk out of our back doors with our pets, children...and instead of taking a leisurely walk down the alley, through the trees to do daily business we will have that area taken away and have a concrete platform to view.

Comment: I feel the parking lot is in total discord with the whole purpose of science and resource management. I cannot understand why an additional 50 spaces are needed when ample parking is in the area. We have never seen overflow parking in the lots surrounding the proposed area. Other spaces can be attempted to be reserved and marked as reserved if needed in the larger lots.

Comment: I am a resident of Apache Street. I am totally opposed to having parking for the new facility along Apache Alley. If there is not room for a decent parking lot, do not build in that location.

Comment: There are more than enough parking areas already existing around the proposed areas that are not filled even in the summer days. It has already been stated in the proposal that most employees of the Science and Resource Management building would walk or bike to work as they live close by. Parking in the lot by the train tracks would not be a far walk.

Comment: The Apache Street area is a historic area filled with historic housing. As residents we are held to a standard to keep our houses in this fashion such as no mounting of satellite dishes, several comment periods for things such as fences and storage buildings, etc... To put in a parking lot and destroy what vegetation is left would be to seriously impact the "historic" aspect of the area.

Comment: The Preferred Alternative is a...public area and would appear to result in a loss of more public parking in an area that already has little.

Comment: There hasn't been enough parking in the Historic District for years and this will make it worse.

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.

Comment: I am extremely concerned that it could go in the historic part of the Grand Canyon rim area. There is not enough parking there now and although some additional parking is planned on or near a residential street nearby I don't think that is a good idea.

Comment: Work parking should not encroach on residential parking and regardless I think there will not be enough parking.

Comment: The discussion of the impacts on Park Operations on pages 35 to 37 uses identical language to describe the two alternatives, with the exception of a one sentence statement about parking along Apache Alley. If the EA is to portray parking along Apache Alley as a benefit for Park Operations, the EA must also acknowledge that parking along Apache Alley will have an adverse impact on the adjacent residential neighborhood.

Comment: Will proposed use affect surrounding neighborhoods? Appendix A refers to a slight increase in traffic for both alternatives and mentions that Alternative 2 has natural buffers to residential areas. Appendix A fails to 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). It also fails to mention that removal of vegetation for Apache Alley parking (Alternative 2) will reduce the vegetative buffer / screen between the Apache Alley residential area and development to the north.

Comment: Is proposed use compatible with surrounding uses, character / scale? Appendix A says "Yes" for both Alternatives. It could be argued that the presence of parking on Apache Alley is not compatible with adjacent residential land use.

Response: 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 showed, in Figure 6, where additional parking could be developed. 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. If parking spaces are developed along Apache Alley, they will not differ in style from existing residential parking, nor is a significant increase in traffic anticipated. No changes are anticipated for emergency vehicle access, access to dumpsters or snow removal.

Most SRM employees walk or bike to work now, and with the office being more centrally located to employee housing, even fewer staff will need to drive. The primary building entrance would be on the north side and there is no reason to anticipate a measurable increase in visitor traffic in the alley. Informal observations by interdisciplinary team members and SRM staff before and during preparation of both EAs indicated no need for additional on-site parking spaces for employees. Additionally, the preferred alternative indicates only transitory use of the area for SRM government vehicles; SRM field vehicles would continue to park near the Powell building. The preferred alternative indicates possible

future development of storage and parking facilities for SRM in the Juniper Hill area, further relieving the possibility of on-site parking and traffic concerns.

GRCA recognizes parking limitations at Lot C, adjacent to the proposed facility, and in Apache Alley. Additionally, an EA prepared for Train Operations in GRCA in 2009 would allow the opening of tracks 5 and 6, south of the railroad tracks (across Village Loop road from the proposed facility). Currently, these tracks are partially covered with gravel and used as Parking Lot D. If tracks 5 and 6 are opened in the future, this would reduce available parking within the historic district. Development of additional parking lots at CVIP is expected to relieve the need for additional visitor parking in the village.

The revised EA clarified on page 14 and Figure 6 how vehicular access may be provided to the building. Many design features such as this will be finalized by the Project Management Team and a contractor with consideration of the concerns raised here. In the future the park may consider actions such implementing 2-way traffic on Apache Street from the Center Road intersection to the first Apache Alley intersection or designating Lot C as employee-only parking.

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 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 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 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 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**

SUBSTANTIVE COMMENTS AND RESPONSES (including text changes)

Topic: Location of Facility

Comment: I do not feel that the new Science & Resource building should be put into the National Historic Landmark District. I feel that these Historic areas in all of our Parks should be left undisturbed to preserve the historic character that currently exists. It seems to me that alternative 3 that puts the building at the old gas station site which is not in the Historic District is a much more logical choice.

Comment: I know it is going to be built where a building used to be but a new building in a historic area is not good. I totally prefer the alternative to put the new resource and science building where the gas station used to be. It is near other park offices and makes much more sense there and will not detract from a historic area. Plus it has good access to visitors there.

Comment: Page 25 states that the Preferred Alternative "protects important historic and cultural resources". It could be argued that Alternative 3 is actually superior in protecting important historic and cultural resources because it does not introduce a new building in a historic district.

Comment: Is site sufficient to accommodate core program needs? Appendix A says "Yes" for both alternatives. But, Alternative 2 does not provide parking on-site and does not provide for storage of field equipment, vehicles and supplies on-site. Alternative 3 does provide for all of these on-site. A more accurate listing in Appendix A would be "No" for Alternative 2 and "Yes" for Alternative 3.

Is site development consistent with GMP? For Alternative 2, Appendix A says "[GMP] indicates new building site for "Visitor and Community Services, infill consistent to build in disturbed areas." and says the site development (for an SRM facility) is consistent with the

GMP. For Alternative 3, Appendix A says "[GMP] indicates site to be converted to transit use." and indicates the site development (for an SRM Facility) is not consistent with the GMP.

Comment: The discussion of the impacts on Historic Resources and Cultural Landscapes on pages 33 and 34 is quite disturbing. That discussion rationalizes the construction of a new facility in the National Historic Landmark District. In other words, it attempts to justify construction of a facility by stretching the logic. 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. This is a controversial and debatable conclusion.

The pertinent question to ask is this. 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?

Comment: The advantages of Alternative 3 include facility will be closer to Park Headquarters which will reduce driving, plus parking and storage needs would be met on-site. It does not bring additional facilities into an already crowded area of the park

Comment: The Alternative 2 site is not the best location for the SRM Facility. The site is not of adequate size to house all SRM offices, field equipment, supplies, vehicles and parking at one location. The site and its associated parking development will have adverse impact on the adjacent residential area. The proposed land use (an SRM Facility) is not consistent with the GMP intent to use this site for construction of a new store where the original Babbitt's store once stood. The site is a confined area that will limit flexibility in building layouts, particularly to take advantage of passive and active solar design.

Comment: The preferred alternative, #2, puts a new, inadequately sized facility in the middle of the historic landmark district. It's not a big enough location for the equipment, personnel and vehicles used by resource management staff, a modern building would be a jarring visual statement, and the potential that money will be available to staff the building for public contact over the long term is doubtful.

Comment: Please do not build a new building in an historic district. You made that mistake with the Thunderbird and Kachina Lodges with disastrous results. A new building, no matter what design, will dwarf the tiny magistrate's office, destroy the historic character of the Ranger Operations building, and ruin the character of the homes along Apache Street.

The Science and Resource Management facility does not need to be in the Historic Village area. There is very little reason for the building to provide visitor services. The Science staff needs a new building, but it should be located where they have plenty of room, plenty of parking, and easy access to move equipment. I suggest an area adjacent to the new maintenance area off Shuttle Bus Road.

Comment: Of the three proposed sites for a new science and resource building in the EA, only one meets the goals of providing (perhaps) adequate space for the activity, location in

an area that is accessible to the public, and not contributing excessively to crowding and congestion in a historic district. That is alternative 3, the use of the old gas station site between Yavapai and park headquarters. However, there is a far superior site, as I will explain below.

I would propose that you seriously and deliberately consider a fourth alternative: the use of the new maintenance area for any further build-out of park support facilities. A long-term view would weigh the fact that park headquarters is inadequately sized for its current staff and purpose, and is in desperately poor condition. Why not, over time, create an employee campus in the neighborhood of the maintenance compound that would include park headquarters functions as well as resource management and anyone else who needed updated accommodations through the years?

The headquarters building could be re-assigned to interpretation, and they could move out of the many squirrel holes they are crammed into at the community building, the Shrine, various trailers, etc. Divisions currently shoehorned into various nooks and crannies could have proper offices, either at the current headquarters if appropriate or at the maintenance yard.

Consolidating park administrative functions (including maintenance, etc.) in one compound has the major virtue of saving time for personnel trying to meet with each other and do park business, while reducing road traffic and promoting safety through that reduction. Concessioner and cooperating association administrative functions could also be moved and consolidated at the current location of the resource management office.

I realize that some will say that placing the resource management activities in the new maintenance area would not meet the goal of providing a "public contact" location. I would argue that alternative #1, the existing condition, does not meet that goal either. I do believe that (again, taking the long view), that over time, the maintenance area could be built out into an administrative campus that would have some public contact aspect to it, perhaps in a location that had a separate entry from the current long and narrow drive back to the helispot. (Perhaps the best location for park headquarters would be early on that drive, rather than back at the maintenance area).

Response: There is no prohibition against infill in the historic district; on the contrary, it is recommended by the SHPO as long as the building is distinctive, yet compatible, with the existing architecture in design and massing. The preferred location had a large building housing the employee recreation center, community library and pub until it burned down in 1993. It was built as the original grocery store and post office and offered a central place for residents. 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. The park and the SHPO believe that placement of this type of building at this location is appropriate.

Although the comment was beyond the scope of this EA, park management considered the suggested new alternative to construct this facility as part of a new headquarters compound on Shuttle Bus Road and determined that it represents a significant enough change from the GMP to generate a new GMP planning process. While doing so may have merit, the decision is to separately consider some elements of this comment—such opportunities for consolidation of Interpretation and Education Division offices and functions—at this time.

Additionally, construction at the Facilities Management site on Shuttle Bus Road was considered in the EA.

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**

SUBSTANTIVE COMMENTS AND RESPONSES (including text changes)

Topic: Sustainability

Comment: Does site lend itself to environmentally sustainable and energy efficient design? Appendix A describes the Alternative 3 site as less desirable than the Alternative 2 site due to its orientation. This commenter is presuming that this characterization is related to a desire for both passive solar design and active solar design to help this facility qualify for LEED certification. A field visit to both locations shows that the Alternative 2 site is much more "hemmed in" by surrounding tall tree vegetation than is the Alternative 3 site. In other words, the Alternative 2 site is more constrained in its ability to take advantage of solar design. The EA also states that "The building site [Alternative 2] 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." This restriction in location will further limit the ability to take advantage of solar design. In addition, the Alternative 3 site has a much larger footprint which provides much more flexibility in the layout and design of the facility. And, the long axis of the Alternative 3 site is aligned about 23 degrees east of north and 23 degrees west of south. Solar applications such as photovoltaic panels actually benefit from an orientation that is slightly to the west of south. These factors suggest that Alternative 3 is at least as good a site as Alternative 2 for energy efficient design.

Is site served by existing greenway / bike trails? Appendix A says "Yes" for Alternative 2 and "No" for Alternative 3. The Alternative 3 site is within 400 feet of the greenway passing on the north side of Yavapai Lodge cafeteria. A 400 foot connecting path could be built at minimal cost.

Will user travel to site require minimum energy? Appendix A says "Yes" for Alternative 2 and "No" for Alternative 3. It's all relative. The larger circles in Figure 5 show distances of one-half mile (as the condor flies) from each site. For Alternative 3, the vast majority of NPS housing is still 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: 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.

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 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***

SUBSTANTIVE COMMENTS AND RESPONSES (including text changes)

Topic: Scope of Project

Comment: The General Management plan indicates that the preferred site is to be used for community or visitor services. The Science and Resource Management Building is over 90% office space with some minor visitor services sandwiched in to make it look like it has visitor services.

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.

Comment: ...the potential that money will be available to staff the building for public contact over the long term is doubtful.

Comment: Also, you talk about public access and a library. Our budgets get smaller and smaller yet you are proposing to hire additional staff to meet and greet visitors, can you really manage that long term? You could still have the building accessible to the public in alternative 3 and only get those that really were serious about the facility and not just passersby, thus reducing the amount of staff needed.

Response: As noted in the FONSI, this EA amends the GMP by providing for construction of an SRM facility at this site, rather than a building for community or visitor services. There is no intent 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. Being more centrally located will assist the park in highlighting SRM activities in a facility commensurate with the program needs. Displaying 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.

SUBSTANTIVE COMMENTS AND RESPONSES (including text changes)

Topic: 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: In the matrix, in the row Historic Resources and Cultural Landscapes I must respectfully disagree that alternative 2, the preferred alternative, would have a moderate beneficial long term impact. It would have a negative impact.

Response: GRCA disagrees that the impact will be negative. As described in the EA, see for example page 33, appropriate site in-fill in this location would have minor beneficial impacts to historic resources and moderate beneficial impacts to cultural landscapes.

Comment: It is confusing when you say 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: 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.***

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.

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. It could be argued that Alternative 2 is actually inferior to Alternative 3 in meeting the first objective in Purpose and Need – Co-locate SRM offices and functions in one facility -- because the Alternative 2 site does not have adequate size to house all SRM offices, field equipment, vehicles and supplies (as is true for Alternative 3).

Page 25 states that Alternative 2 best addresses overall NPS objectives and evaluation factors. What are those objectives and evaluation factors? Have those objectives and evaluation factors been articulated in the EA? The objectives and evaluation factors are not obvious and therefore the statement that Alternative 2 best addresses overall NPS objectives and evaluation factors is not supported.

Page 25 may imply that Alternative 2 has lesser impact on park resources than Alternative 3. Is this statement referring to the two categories of: 1) Historic Resources and Cultural Landscapes; and 2) Park Operations? If so, then it is pointed out that Table 2 summarizes Alternatives 2 and 3 as having the same impact for Park Operations. It is also pointed out that Table 2 presents identical statements for Alternatives 2 and 3 for Historic Resources and Cultural Landscapes in that both alternatives have "Cumulative impacts would be minor adverse long term".

Page 25 states that "The Preferred Alternative promotes safe, healthful, productive, esthetically and culturally pleasing surroundings..." but is silent on whether Alternative 3 also promotes these factors. Is the Preferred Alternative superior to Alternative 3 or does Alternative 3 promote these factors equally well?

Page 25 states that the Preferred Alternative "protects important historic and cultural resources". It could be argued that Alternative 3 is actually superior in protecting important historic and cultural resources because it does not introduce a new building in a historic district.

Page 25 states that "the Preferred Alternative best achieves a balance between population and resources use". Where does the EA demonstrate that this is true? Support for the statements and conclusions on Page 25 is lacking.

Response: The preferred location had a large building housing an employee recreation center, community library and an employee pub until it burned down in 1993. It was built as the original grocery store and post office and offered a central place for residents. Since the building burned down, the SHPO has consistently recommended infill in the district so that a vacant lot is not the center piece at the end of Center Road. There is no prohibition against infill in the district; on the contrary, it is recommended as long as the building is distinctive, yet compatible, with the existing architecture in design and massing.

Comment: On page 22, the last phrase in the third paragraph is incorrect. It should read, "therefore the other two locations were dismissed from further analysis."

Response: 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.

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? Are these paragraphs included here just to make Alternative 3 look bad?

Response: The Cumulative Effects determinates for Alternatives 1, 2 and 3 on pages 32-34 are all 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 NHL. 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: GRCA 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.