

National Park Service
U.S. Department of the Interior



Saguaro National Park
Arizona

COMPREHENSIVE TRAILS MANAGEMENT PLAN
FINDING OF NO SIGNIFICANT IMPACT

Saguaro National Park is located in Pima County, AZ and consists of two distinct districts, separated by the city of Tucson: The Rincon Mountain District (RMD), located east of the Tucson metro area and the Tucson Mountain District (TMD), located west of the Tucson metro area. When the park districts were created, dirt roads connected these distant areas to the city. The 30 miles separating the two districts are now completely filled by the city of Tucson. The city limits are nearly at the park boundaries, and the park districts have become islands of preservation amidst growing urban development.

Many trails within the park are unsafe and present logistical problems associated with trail work and maintenance. Extensive visitor use has led to trail widening, soil erosion, vegetation loss, and introduction of exotic species. Areas that have high densities of archeological sites have also experienced problems with vandalism and theft. The plan is needed to protect natural and cultural resources, while providing safe, reasonable access to the park's trail system for a wide variety of user groups.

The purpose of the Comprehensive Trails Plan / Environmental Assessment (EA) is to provide Saguaro National Park with a plan to locate, add, eliminate, manage, and maintain trails and associated infrastructure in a comprehensive trails system based on resource protection and visitor use and enjoyment.

The EA evaluates a no action alternative and four action alternatives including the preferred alternative in the Rincon Mountain District (RMD) of the park and a no action alternative and three action alternatives including the preferred alternative in the Tucson Mountain District (TMD). All action alternatives are based on laws, regulations and policies, public health and safety, and the objectives of this plan. The no action alternative represents current conditions and is also a baseline for comparison to the action alternatives for each respective district.

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 NPS Organic Act of 1916.

PREFERRED ALTERNATIVE

Public comments were received on alternatives A, B, and C during public meetings and newsletter comment periods. After review and careful consideration of public comments, the preferred alternative was constructed from desired components of each of the alternatives based on public comments and the objectives of this trails plan.

A summary of actions included in the preferred alternative is listed below.

Rincon Mountain District

Trailheads:

- Improve/enlarge Douglas Springs Trail Head (TH) parking
- Add/construct equestrian parking area at Wildhorse TH
- Add/construct hiker parking area at Broadway TH
- Add/construct separate equestrian parking area east of Broadway TH
- Improve/enlarge Loma Alta TH parking
- Improve/enlarge equestrian parking area at Loma Alta TH

Trails:

- Re-establish old Ernie's Falls Trail (connects to USFS lands)
- Convert eastern most end of Wentworth Trail (from Garwood to Douglas Springs) to hiker only and change name to Converse Trail
- Change name of Wentworth Trail (from Wentworth access to Kennedy Trail) to Vanover Trail
- Remove 4 miles of parallel or duplicative trails in Cactus Forest Planning Area
- Re-align Loma Verde Trail (between Pink Hill and Vanover) to southern end of former Saguaro Trail, add/construct short connector trail
- Add/construct western extension of Bajada Vista Trail from Kennedy
- alignment to northern end of Squeeze Pen
- Formally designate 10.2 miles of washes as trails (Javelina, Loma Verde, Monument, Deer Valley and Bajada Washes)
- Convert northern portion of Mica View Trail, from picnic area to Broadway TH to ADA challenge trail – horses will be prohibited on this section of trail
- Add/construct eastern extension of Lime Fall Trail to Cactus Forest Drive
- Add/construct trail around Javelina Rocks
- Add/construct new Nature Loop Trail if/when proposed Rocking K Education Center is built

- Add/construct new North Coyote Wash Trail, connecting Coyote Creek access with Hope Camp Trail
- Add/construct new Ruiz Trail, from North Coyote Wash Trail to Hope Camp Trail
- Add/construct eastern extension of Hope Camp Trail, from Hope Camp to park's southern boundary
- Add/construct Quilter Trail (Arizona Trail) from Hope Camp Trail to Manning Camp Trail
- Convert Hope Camp Trail to multi-use (to include mountain bicycles)

Access Points:

- Establish new Ernie's Falls access
 - Formalize hiker access at Monument Wash
 - No change to Wentworth access, however, if public access is closed on Wentworth Corridor the Wentworth access will be relocated to east end of 5th Avenue
 - No change to Irvington access, however, if Pima County constructs Shurban Wash TH park will consider moving Irvington access to align with Shurban Wash
 - Establish new Coyote Creek access for North Coyote Wash and Ruiz Trails
 - Establish new Hope Camp access
-

Tucson Mountain District

Trailheads:

- Add/construct trailhead at north end of Golden Gate Trail (at Picture Rocks Road) for hikers and equestrians
 - Improve/enlarge trailhead at Sendero-Esperanza TH (as approved in GMP)
 - Add/construct trailhead at north end of Belmont Trail (on Belmont Road)
 - Work with Pima County to relocate King Canyon TH west of current location
 - Add/construct trailhead at Camp Pima on Rudasill Road
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Trails:

- Formalize social trails in Northeast Planning Area (Scenic, Packrat and Passey Loop Trails)
- Formalize northern portion of Picture Rocks Wash Trail (from Harvey Property to Ina alignment)
- Formalize social trails in East Boundary Planning Area (Veteran's, Vertical Cliffs, Belmont, Animal Wash, Abington Trails)
- Add/construct connector trail between Prophecy Wash and Picture Rocks Wash Trails
- Formally designate King Canyon Wash Trail
- Add/construct Bobcat trail, if/when Central Arizona Project Trail is constructed
- Add/construct ADA nature trail loop adjacent to Bobcat Trail and across Kinney Road from Red Hills VC
- Add/construct Bajada Wash Trail extension to Dobe Wash Trail
- Convert Wild Dog Trail to hiker only
- Convert Golden Gate Road (from Sendero-Esperanza TH to Picture Rocks Road) to multi-use trail (as approved in GMP)
- Construct short by-pass trail around northwest side of Signal Hill, connecting Manville and Cactus Wren Trails (establishing loop trail for equestrians)
- Convert southern end of Cactus Wren and Manville Trails from hiker only to hiker/equestrian
- Formalize Desert Winds Trail in area south of Camp Pima
- Add/construct ADA interpretive trail at Camp Pima
- Add/construct Panther Peak Trail
- Add/construct Safford Peak Spur Trail

Access Points:

- Formalize Scenic Drive access
 - Formalize North Continental Reserve access
 - Formalize South Continental Reserve access
 - Formalize Veteran's Trail access
 - Formalize Tucson Mountain Reserve access
 - Formalize Abington access
 - Establish new access near Mile Wide and Sandario (west end of Bobcat Trail), to align with Central Arizona Project (CAP) TH, if/when CAP Trail is constructed
 - Establish new Sanders access (across from Picture Rocks Community Center)
 - Formalize Ina access (at north end of Roadrunner and Panther Peak Wash Trails)
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MITIGATION MEASURES

The following mitigation measures will be used to minimize impacts on natural resources in general and threatened and endangered species in particular:

Overall

- The park will implement low impact, wilderness-compatible techniques and tools (i.e., hand tools) where applicable and feasible on all trail maintenance and rehabilitation work within the designated wilderness. Power tools might be used when appropriate in non-wilderness areas.
- Out-sloping will be used whenever possible. This technique, in which workers shovel and scrape the berm back onto the trail, is the quietest and fastest way to repair a trail and produces the fewest resource impacts.
- Removal of, or impact on, native vegetation adjacent to trails will be minimized as much as possible.
- Impacted bare areas (i.e., old trail sections that have been realigned, impacted areas along the trail corridor) will be revegetated.
- Rehabilitation/revegetation of disturbed sites will require notification/consultation with the park's restoration ecologist.
- A park biologist will provide trail crews with an orientation/briefing that will appraise them of and sensitize them to threatened and endangered species and other relevant natural resource issues.

- Care will be taken not to disturb any other sensitive wildlife species (reptiles, migratory birds, raptors, or bats) found nesting, hibernating, estivating, or otherwise living in or immediately nearby the worksites.
- Resource Management personnel will be notified/consulted when wildlife, must be disturbed or handled. Staff will assist with handling and moving Gila monsters, snakes, and other wildlife, when necessary.
- Sonoran desert tortoise, a sensitive species, shelters in burrows, which are usually found on rocky slopes below boulders and rocks. Thus, holes and crevices large enough to house an adult tortoise (more than 20 centimeters wide at the opening) will not be disturbed. Resource management staff should be consulted regarding the discovery or relocation of any tortoise.
- Efforts will be made to reduce the potential for nonnative animals, such as bullfrogs, crayfish and goldfish, to escape into the park in order to prevent them from becoming a threat to native species.

Above 4,000 feet elevation (Mexican spotted owl (MSO); lesser long-nosed bat/agave)

- The trail crew will be advised of the sensitivity of the local threatened and endangered species and their habitats and behave accordingly (working quietly on site and minimizing time in or near MSO Protected Activity Centers (PACs) and peregrine eyries as well as minimizing impacts on agave).
- Work in MSO PACS will be minimized to the extent possible during the MSO breeding season (March 1 – August 31).
- When it is necessary to work within PACS, no habitat features (e.g., large trees, dense canopy, multistoried vegetation, snags and large logs) for the MSO will be disturbed; all work will be on the existing trail corridor with only minimal re-routing or widening of the trail, and crew sizes will be kept to a minimum (ideally 3–5 people).
- When the breeding status of MSOs is unknown, it will be assumed that the owls are breeding and appropriate mitigations implemented.
- All work will be completed with hand tools (no motorized/power tools).
- The trail reroutes will have minimal impact on the environment, especially with regard to cutting trees (especially above 6,000 feet) and impacting agave plants (4,000 feet to 6,000 feet).

The following mitigation measures will be used to minimize impacts on cultural resources.

- Cultural Resources will be considered during all phases of planning for the comprehensive trails plan. Many of the current trails in the park pass through or near

historic and archeological sites. The greatest risk to these sites is ground-disturbing activities, such as those associated with trail construction, maintenance, or closure. Although none of the alternatives propose construction of new trails on or adjacent to known cultural resources, 106 NHPA compliance will be completed on a project by project basis, especially for maintenance and closure projects.

- Although there is no surface evidence of archeological resources in areas of proposed construction, clearance to proceed is recommended with the condition that if concealed archeological resources are encountered during project activities, all necessary steps will be taken to protect them and to notify the park consulting archeologist immediately.

Adverse effects on the eligible sites should be avoided if at all possible. If not, then the NPS shall consult with the State Historic Preservation Officer (SHPO) and other consulting parties, including Indian tribes, to develop and evaluate alternatives or modifications to the undertaking that could avoid, minimize, or mitigate adverse effects on historic properties. The NPS shall notify the Advisory Council on Historic Preservation (ACHP) of the adverse effect finding and invite the ACHP to participate in the consultation when: (1) the NPS wants the ACHP to participate; (2) the undertaking has an adverse effect upon a National Historic Landmark; or (3) a programmatic agreement (PA) should be prepared, as specified in 36 CFR 800.14(b).

ALTERNATIVES CONSIDERED

Other alternatives considered included a no action alternative and three action alternatives in addition to the preferred alternative in the Rincon Mountain District (RMD) of the park and a no action alternative and two action alternatives in addition to the preferred alternative in the Tucson Mountain District (TMD). All action alternatives are based on laws, regulations and policies, public health and safety, and the objectives of this plan. The no action alternative represents current conditions.

Alternative A for both districts focuses on providing reasonable access and a variety of trail recreational experiences while minimizing redundancy in some high density areas. Both existing and new trails were evaluated in terms of access to attraction sites, variety in terrain, vegetation type, user type, popularity, safe travel, as well as resource protection and sustainability. As a result, some trails in high density areas would be eliminated from the trail system. New trails would link with U.S. Forest Service (USFS) and Pima County lands to ensure continuity of appropriate trail recreation on neighboring lands

Alternative B for both districts focuses on retaining sustainable trails in some of the more popular or well-established areas of the park, while protecting natural and cultural resources in other areas of the park. To offset resource and maintenance concerns associated with higher densities, some multiuse trails that have sustainability issues would be converted to single-use trails.

Alternative C (RMD only) was submitted by the Saguaro Concerned Trail Users, a local interest group. The stated concept of this alternative is “providing trails that are safe, offer variety and convenience, are sustainable over the long term, meet user demand for multiuse, and disperse users to reduce perceptions of crowding.”

The selected preferred alternative is also the 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.

Although alternatives A, B and C (RMD only) are very close in meeting the goal that identifies the environmentally preferred alternative, the preferred alternative was selected primarily because of its greater certainty in achieving the goal. Alternatives A, B and C were not considered environmentally preferred because the overall locations of a subset of proposed trails and access points would result in potential adverse effects on the biological and physical resources of the park over the life of the plan.

The preferred alternative is the alternative that would best protect the biological and physical environment by diverting park visitors away from sensitive species habitats and reducing redundant trails. Use would be concentrated to specific trails, ensuring protection of the biological and physical environment as well as of historic structures and archeological resources.

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

The NPS used the following NEPA criteria and factors defined in 40 CFR §1508.27 to evaluate whether the preferred alternative would have a significant impact on the environment.

Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial, but that may still have significant adverse impacts that require analysis in an EIS.

Whether taken individually or as a whole, the impacts of the project do not reach the level of significance. Many of the adverse impacts would be temporary and occur during construction. Other adverse impacts would be both short and long term; site-specific and local; and negligible to moderate impacts. These adverse impacts would occur to visitor use and experience, park maintenance and operations, vegetation, soils, and wildlife.

The preferred alternative would also have short and long-term, site-specific and local; and negligible to moderate beneficial effects on the human environment. Overall, closing and restoring redundant trails and washes would reduce habitat fragmentation, improve natural conditions, and help park visitors with wayfinding. Locally, the project would produce a net gain of 15.9 miles of trails in the RMD and 15 miles of trail in the TMD.

The project has many long-term beneficial impacts: improved trail and site conditions, access to destination points on safe trails, and a balanced experience for all users. Long-term benefits will result from the removal of social trails, stabilization of erosion areas, and removal of redundant trails would reduce overall potential hazards to visitors.

Degree of effect on Public Health or Safety.

Overall, the preferred alternative will promote safe trail use, stabilize dangerous eroded areas, and reduce potential hazards to visitors.

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.

There are no prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas affected. Consultation has occurred with appropriate regulatory agencies and work will be completed in compliance with all permitting requirements.

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

The project effects on the quality of the human environment are not highly controversial but some members of the public may show disfavor for the selected trail use designation. Both comments from scoping and on the EA were supportive of the overall plan; however, preferences for trail use designation among each interest group varied. The project will provide opportunities for all user groups to enjoy while still protecting natural resources of the park. The alternatives, including the preferred, were constructed with careful consideration of public comments and the objectives of this trails plan. The

alternatives include a number of different ideas presented by the public during public comment periods.

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

The potential impacts are well defined and analyzed in the Comprehensive Trails Plan EA. The degree or possibility that the effects on the human environment will be highly uncertain or will involve unique or unknown risks is remote.

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.

The preferred alternative will not predetermine or establish a precedent for future actions with significant effects at Saguaro National Park and does not represent a decision in principle about a future consideration. Future actions and decisions at Saguaro National Park not identified in this EA will be reviewed in an independent NEPA analysis.

Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.

Cumulative effects were analyzed in the environmental assessment and no significant cumulative impacts were identified.

The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

This environmental assessment determined that no new trails, trailheads or parking lots will directly impact cultural sites. Some archeology sites within the park are public knowledge and attract park users. By developing formalized trails to these locations, the park can choose the route park visitors will take to these locations and provide education and enforcement to the valued sites. The NPS will continue to avoid sensitive cultural sites and exercise caution and restraint when trails that pass through sites are being maintained or closed. Additional cultural compliance on site specific trails and trail heads will provide additional oversight and keep the public involved in protecting cultural resources in the park. The Park has consulted with State Historic Preservation Office (SHPO) and affiliated tribes on this EA and conducted a study of historic trails in the park. The SHPO reviewed and concurred with the NPS recommendations for protecting historic trail segments. A programmatic agreement, dated August 2009, between the NPS, Advisory Council on Historic Preservation, and SHPO provides measures for protecting cultural resources within the park as it relates to the Comprehensive Trails Management Plan / EA.

The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

A Biological Assessment (BA) was prepared in accordance with legal requirements set forth under Section 7 of the Endangered Species Act [16 U.S.C. 1536(c)]. The BA provided the Arizona Ecological Services Field Office staff of the U.S. Fish & Wildlife Service (USFWS) with assessments of how the preferred alternative is expected to affect federally threatened and endangered species for the next ten years. For the four federally listed or candidate species (Gila topminnow, yellow-billed cuckoo, Mexican spotted owl, and lesser long-nosed bat) known to occur or have occurred in the Park, there was a determination that the preferred alternative may affect, but is not likely to adversely effect these species.

In a letter dated April 17, 2009, the USFWS concurred with the Park's determination on federally threatened and endangered species.

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. The EA considered the cumulative impacts of the preferred alternative with several past, present and ongoing future projects. The analysis for all impact topics indicated that the preferred alternative could result in minimal but not collectively significant cumulative effects.

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 would be served. 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 would occur and that satisfactory reclamation of the disturbed area is expected to be achievable, implementation of the preferred alternative would not result in any unacceptable impacts.

In addition to reviewing the list of significance criteria, the National Park Service has determined that implementation of the preferred alternative and mitigation measures would not constitute an impairment to the integrity of Saguaro National Park's resources and values. There would be no major adverse impacts to a resource or value whose conservation is 1) necessary to fulfill specific purposes identified in the park's

establishing legislation; 2) key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park; or 3) identified as a goal in the park's general management plan or other relevant NPS planning documents. This conclusion is based on NPS' analysis of the environmental impacts of the proposed action as described in the EA. The EA identified less than major adverse impacts on visitor use and experience, wilderness values, park management and operations, cultural resources, vegetation, soils and wildlife. This conclusion is further based on the Superintendent's professional judgment, as guided and informed by the *Saguaro National Park 2008 General Management Plan*. Although the plan/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 plan results in benefits to park resources and values, opportunities for their enjoyment, and it does not result in their impairment.

PUBLIC INVOLVEMENT

In January 2009, a mailing was sent to 3,293 individuals on the mailing list for this project, including units of local, state, and federal government. This mailing announced that the Comprehensive Trails Plan Environmental Assessment (EA) was forthcoming and included an option for postcard recipients to request either an electronic hardcopy or CD version of the EA for review. In addition, there was an option to view and submit comments directly in the Planning, Environment, and Public Comment (PEPC) web site for Saguaro national Park. Upon completion of the production and printing process in February 2009, copies were mailed to the 160 people who had requested a copy and the document was posted on the Saguaro PEPC webpage.

Comments on the EA were due March 6, 2009. Within the 30-day review period, 39 comments were received.

These letters were sorted into those that offered substantive comments and those that were non-substantive. Substantive comments are defined as those that do one or more of the following: (source: The NPS Director's Order 12, Conservation Planning, Environmental Impact Analysis, and Decision Making Handbook, January 2001)

- (a) question, with reasonable basis, the accuracy of information in the EIS.
- (b) question, with reasonable basis, the adequacy of environmental analysis.
- (c) present reasonable alternatives other than those presented in the EIS.
- (d) cause changes or revision in the proposal.

All comments, whether substantive or not, were acknowledged and considered. Of the 39 comments received, 15 contained at least one substantive comment.

Substantive comments to the EA centered on 5 topics: access points, trail connections, cultural resources, and natural resources. These concerns resulted in no changes to the text of the environmental assessment but are addressed in errata sheets attached to this FONSI.

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 generally adverse impacts that range from localized to widespread, short- to long-term, and 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, major 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.

Approved: Murkel Saylor 7/21/09
Regional Director, Intermountain Region Date

Errata Sheets
Comprehensive Trails Plan Environmental Assessment
Saguaro National Park

Text Changes

Chapter 2 Alternatives (page 32), *Table 1: Trail Mileage for all Alternatives* has been replaced. The revised table is included on Page 12.

Chapter 5: Consultation and Coordination (page 239), a *List of Preparers* has been added. This list is included on Page 13.

No text changes have been made as a result of submitted comments.

Table 1: Trail Mileage for all Alternatives					
RMD	No Action	Alternative A	Alternative B	Alternative C	Preferred Alt.
RETAINED HIKER	16.3	16.3	16.3	16.3	16.3
RETAINED HORSE/HIKER	100.0	88.6	88.7	87.6	90.1
RETAINED MULTI-USE	2.5	2.5	2.5	2.5	2.5
USE CHANGE TO HIKER			4.5		0.6
USE CHANGE TO MULTIUSE		2.8		2.8	2.8
REMOVE HORSE/HIKER		-7.2	-4.3	-7.1	-4.0
ADD HIKER		0.4	0.4	0.4	1.1
ADD HORSE/HIKER		5.2	3.9	8.4	7.3
ADD MULTI-USE		0.3		1.2	0.3
ADD HORSE/HIKER - WASH		4.5	5.7	10.2	10.2
ADD HIKER - WASH					0.2
ADD - ADA					0.8
TOTAL TRAIL MILES	118.8	108.9	112	112.1	117.8
TOTAL TRAIL MILES w/WASHES		113.4	117.7	122.3	128.2
ADDED TRAIL MILES		5.9	4.3	10.0	9.5
ADDED TRAIL MILES - WASH		4.5	5.7	10.2	10.4
REMOVED TRAIL MILES		-7.2	-4.3	-7.1	-4.0
NET + OR - IN MILEAGE		3.2	5.7	13.1	15.9
TMD	No Action	Alternative A	Alternative B	Preferred Alt.	
RETAINED HIKER	10.3	10.3	10.3	8.4	
RETAINED HORSE/HIKER	35.9	35.0	35.9	35.0	
RETAINED MULTI-USE					
USE CHANGE TO HIKER				0.9	
USE CHANGE TO MULTIUSE					
USE CHANGE TO				1.9	

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HORSE/HIKER				
REMOVE HORSE/HIKER		-0.9		
ADD HIKER			0.7	
ADD HORSE/HIKER		11.8	14.4	11.4
ADD MULTI-USE		2.6	3.3	3.3
ADD HORSE/HIKER - WASH				
ADD HIKER - WASH				
ADD - ADA		1.0	0.3	0.3
TOTAL TRAIL MILES	46.2	59.8	64.9	61.2
ADDED TRAIL MILES		15.4	18.7	15.0
ADDED TRAIL MILES - WASH				
REMOVED TRAIL MILES		-0.9		
NET + OR - IN MILEAGE		14.5	18.7	15.0

List of Preparers

Saguaro National Park

Sarah Craighead, Superintendent

Jeremy Curtis, Trail Supervisor

Dave Evans, Cultural Resource Management

Natasha Kline, Biologist

Bob Love, Chief Ranger

Barney Riley, Facility Manager

Todd Roeder, District Ranger

Robert Stinson, District Ranger

Michelle Torok, Administrative Officer

Meg Weesner, Chief, Science and Resource Management

Others

Sue Wells, Supervisory Archeologist with Western Archeological and Conservation Center

Consultants

Laurie Domler, Planner/Project Manager, NPS Intermountain Region

Jeff Pinkard, GIS Specialist, NPS Intermountain Region

URS Group, Denver, CO — Pamela McWharter, NEPA Project Manager

URS Group, Denver, CO — Gordon Tucker, Cultural Resources Specialist

URS Group, Denver, CO — Carly Collins, Soil Resources Specialist

David Evans and Associates, Denver, CO — Patti Steinholtz, NEPA Specialist

Errata Sheets

Substantive Comments

Substantive comments are summarized, grouped into themes and responded to below.

Comment Theme: New Access Points

1. Nine commenters disagreed with the locations of access points presented in the Preferred Alternative. Seven commenters suggested the addition of the Freeman Access Point as presented in Alternative C. Additional comments included requests for the addition of horse access at the proposed Monument Wash Access Point at Speedway, the addition of horse and hiker access from Camino Loma Alta and disappointment with the closure of the Freight Wagon Trail.
2. One commenter expressed concern for residents on North Abington Rd west of the section line (specifically from 5750 to 5630 N. Abington Rd) who have paid to have the road paved and maintained. These residents are concerned about formalization of a trailhead at the end of N. Abington Rd. and do not want additional traffic on this section of the road. Any parking on the shoulder would negatively impact the pavement's maintenance, as it breaks down the edges.
3. The Tucson Mountain Reserve Homeowners Association submitted concerns questioning whether there is, or is not, a formalized access point or trailhead planned on Abington Road at the intersection of the El Palo Gas Pipeline, between Belmont Road and the existing trailhead at the southern terminus of Abington Road. To minimize any impact to the community and residents, they submitted a specific request to eliminate any access point or trailhead on Abington Road at or near the gas pipeline, between Belmont Road and the existing trailhead at the southern terminus of Abington Road.

Response:

1. The Freeman Access Point was evaluated by park staff during the development of the Preferred Alternative. The evaluation concluded that safety issues associated with this access would present an unhealthful environment for visitors and employees. Identified safety risks included:
 - all users (Horse, hiker, ADA) would access this trail, resulting in congestion,
 - there would be no horse parking available creating safety issues with potential parking along Freeman,
 - traffic at Broadway and Freeman could contribute to unsafe conditions due to the horse / vehicle mix, and
 - the access location would present an attraction and safety hazard for cyclists on Freeman and/or Broadway.

Errata Sheets

While the park recognizes that the Freeman Trailhead would serve the neighbors in the community as a convenient access point, the National Park Service Management Policy (Section 8.2.5.1) states that, “The saving of human life will take precedence over all other management actions as the Park Service strives to protect human life and provide for injury-free visits”. Therefore, this access location was eliminated from the Preferred Alternative.

The Comprehensive Trails Plan strives to provide reasonable access to the trails network and trailheads in addition to ensuring that the trails network is safe, maintainable, and minimizes visitor conflicts. We feel the plan provides reasonable access for equestrians. Horse access was not included at the

Monument Wash Access point or the existing Camino Loma Alta access points in order to reduce visitor conflicts.

The proposed system incorporated a redesign of the existing Cactus Forest section of trails to eliminate unnecessary trails and provide improved trails. Freight Wagon Trail was chosen for closure because it is a redundant and unsustainable trail.

2. At the end of N. Abington Rd there will be an access point, but not a formalized trailhead. This access point was incorporated into the Comprehensive Trails Management Plan in order to provide access to the park’s trail system for the residents in this neighborhood. Otherwise, with the implementation of off-trail travel restrictions, residents would not be able to directly enter the park near their neighborhood. The next closest location to enter the park would be at the parking lot on Belmont, at the north end of the Pipeline Trail. Because access points are designed to be entryways for local residents; they do not include parking areas as a component and are unlikely to attract non-residents into the neighborhood as non-residents would likely use the available parking lot on Belmont.
3. Pipeline and the El Paso Gas Pipeline are the same. Pima County expressed a desire to keep the Pipeline Trail as a component of the Comprehensive Trails Management Plan in order to tie into the Pima County Trail System as a component of the Regional Trail Master Plan. There is not a formalized access point or trailhead planned on Abington Road at the intersection of the El Paso Gas Pipeline, between Belmont Road and the existing trailhead at the southern terminus of Abington Road. There is, however, an access point located approximately 175 yards North-West of Abington Rd. located on Pipeline Trail at the park boundary. This access point was incorporated into the Comprehensive Trails Management Plan in order to provide access to the park’s trail system for the residents in this neighborhood. Otherwise, with the implementation of off-trail travel restrictions, residents would not be able to directly enter the park near their neighborhood. The next closest location to enter the park would be at the parking lot on Belmont.

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Comment Theme: New Trail or trail connection

1. One commenter requested an increase in the number of new horse trails to be equal to the existing old wagon roads that are in Section 10, Township 13 South, Range 12 East.
2. Another commenter suggested a new trail to Tanque Verde Peak in order to enjoy the cardio-vascular workouts and magnificent views without backpacking or hiking from sunrise to sunset.

Response:

1. The proposed system incorporated a redesign of the existing Cactus Forest section of trails to eliminate unnecessary trails and provide improved trails. Freight Wagon Trail was chosen for closure because it is a redundant and unsustainable trail. The Comprehensive Trails Plan strives to provide reasonable access for equestrians while balancing the needs of hikers and bikers. Within the Rincon Mountain District there is a net gain of horse/hiker trails which includes 10.3 miles of washes designated as trails.
2. In regards to cardio-vascular workouts and magnificent views, many trails within the preferred alternative provide for a cardio-vascular workout and magnificent views. Many individuals run the Douglas Springs Trail, from the trailhead to the campground and back (12 miles roundtrip). The 6 mile roundtrip Douglas Springs/Three Tanks loop also provides a good cardio-vascular workout. Another alternative includes one of the trails to Wasson Peak (at Tucson Mountain District). From the King Canyon Trailhead or the Camino del Cerro Trailhead, this is about an 8 to 10 mile roundtrip hike. Also, once the Quilter Trail (AZ Trail) is constructed, it too would provide a trail which gains significantly in elevation, thereby providing a good cardio-vascular workout.

Comment Theme: Cultural Resources: Impact of Proposal and Alternatives

1. Two commenters felt the new trails to archeology sites would mean these sites are no longer valued and protected, and would present adverse impacts to cultural resources, and the plan fails to identify cultural resources adjacent to or on proposed new trails.

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Response:

1. A National Park Service staff archeologist was involved in developing the trails plan. Because cultural resources are protected under federal law and can not be printed in a public document, the plan did not identify cultural resources relative to existing or proposed trails. However, existing trails and proposed sites were examined on the ground by the consulting National Park Service archeologist and park staff. This assessment determined that no new trails, trailheads or parking lots will directly impact cultural sites.

Some archeology sites within the park are destination spots for park users. These sites are public knowledge and currently attract park users via social trails. By developing formalized trails to these locations, the park can choose the route park visitors will take to these locations and provide education and enforcement to the valued sites. The NPS will continue to avoid sensitive cultural sites and exercise caution and restraint when trails that pass through sites are being maintained or closed. Additional cultural compliance on site specific trails and trail heads will provide additional oversight and keep the public involved in protecting cultural resources in the park. The Park has consulted with State Historic Preservation Office (SHPO) and affiliated tribes on this EA and conducted a study of historic trails in the park. The SHPO reviewed and concurred with the NPS recommendations for protecting historic trail segments. In addition, there is a signed programmatic agreement between the NPS, Advisory Council on Historic Preservation, and SHPO. This document provides measures for protecting cultural resources within the park as it relates to the Trails Management Plan.

Comment Theme: Natural Resource Issues, Public Involvement and Environmental Analysis Adequacy

In addition to comments submitted for Cultural Resources, one commenter outlined other concerns which also encompassed natural resource issues, concerns about the public involvement and scoping process, and the environmental analysis adequacy.

1. One concern submitted was that the scoping process was inadequate and failed to identify and include the participation of all interested persons, which resulted in an EA biased toward trail development. Membership in the Saguaro National Park Trails Workgroup Committee, the primary planning committee, consisted primarily of those interested in additional multi-use trails.

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Response:

1. The staff at Saguaro National Park, which considered ideas and input from the Workgroup Committee as well as the public, was primarily responsible for development of the trails plan.

The NPS did want to hear from a wide variety of trail users and capture the public's thoughts on ideas for new trails as well as on issues and other concerns about existing trails. To address this need the NPS conducted extensive public involvement in the form of newsletters, public meetings, public scoping and review periods, press releases, and workgroup meetings. The workgroup was formed with the help of the Rincon Institute, a nonprofit conservation organization founded in 1991 to help protect the natural resources of Saguaro National Park East and adjoining lands. The Rincon Institute was responsible for scheduling, facilitating, and preparing all meeting notes from all workgroup meetings. The purpose of the trails workgroup was solely to exchange views, information, or ideas relating to trails management and implementation of a trails plan. These groups did not consist primarily of those interested in additional multi-use trails. The Rincon Institute contacted hiking, equestrian, cycling, environmental, and neighborhood groups associated with the park and asked the interested groups to work within their particular interest to self-select two members to represent them in the trails workgroup.

Because the Workgroup Committee representatives were self-selected from their respective groups, not everyone was invited to participate; however, all the workgroup meetings were advertised and open to the public.

Comment:

2. Another concern submitted was that the stated concept of alternative C for the Rincon Mountain District is inconsistent with the Park's mandate to protect natural and cultural resources and with the purpose of the proposed action. The stated concept of alternative C is "providing trails that are safe, offer variety and convenience, are sustainable over the long term, meet user demand for multiuse, and disperse users to reduce perceptions of crowding." The purpose of the proposed action is to provide Saguaro National Park with a plan to locate, add, eliminate, manage, and maintain trails and associated infrastructure in a comprehensive trails system based on resource protection and visitor use and enjoyment and with the objective of the plan to prevent impairment and unacceptable impacts on natural and cultural resources. The concept of alternative C, which was chosen as the preferred alternative for the southern boundary of RMD, does not include resource protection and therefore is not consistent with the purpose or objective of the plan.

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Response:

2. The preferred alternative includes elements of alternatives A, B and C. Although elements of alternative C were incorporated into the preferred alternative, this does not mean that alternative C was the preferred alternative. The preferred alternative is based on laws, regulations and policies, public health and safety, and the objectives of the plan and is consistent with the purpose and objective of the Comprehensive Trails Management Plan.

Comment:

3. Other comments submitted were:
 - The statement that opening the southern boundary of the park and constructing a new trail is beneficial, local, long-term and minor to wildlife or wildlife habitat is illogical. Increased visitation to any section of the park is not a benefit to wildlife or wildlife habitat. The plan states on page 63 that impacts on wildlife and wildlife habitat along the southern boundary of the RMD will be beneficial, local, long-term, and minor; yet gives no data to support this claim. Instead, the new trails will increase habitat fragmentation.
 - The statement that opening the southern boundary of the park and constructing new trails is beneficial, local, long-term and minor to wilderness value is illogical. Increased visitation to any section of the park decreases wilderness value. The plan states on page 64 that impacts on wilderness value for the southern boundary of the RMD will be beneficial, local, long-term, and minor; yet gives no data to support this claim.

Response:

3. Impacts for the action alternatives were assessed as compared to the no action alternative. Under the no action alternative, wildlife and wildlife habitat would experience adverse impacts. The Southern Boundary Planning Area contains true riparian habitat that is home to many sensitive species, including neotropical migratory bird species and the lowland leopard frog. Visitor use in this area may increase as a result of the Arizona Trail, which would terminate outside the park near the southern boundary. Under the no action alternative, a new route within the park connecting to the Arizona Trail would not be considered. If social trails are created in this area or if illegal camping occurs by visitors attempting to continue farther into the park, sensitive wildlife may be disturbed. The presence of new social trails and illegal camping would also adversely affect wilderness values such as naturalness. In addition, the North Hope Camp Trail, which extends north into

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lands suitable for wilderness, would be removed and restored to natural conditions, resulting in a beneficial impact on wilderness values. The new trails would be designed such that wilderness character would be maintained as much as possible and would also provide opportunity for a sense of solitude

Under the preferred alternative, the trails outlined in the EA would divert visitors away from this sensitive wildlife habitat and encourage them to stay on the managed trails. This action would result in beneficial, local, long-term and minor impacts to the wildlife in this area and beneficial, local, long-term, and minor impacts to wilderness values such as naturalness in this area.

Comment:

4. Additionally, the commenter stated that the EA is over 300 pages long. A thirty-day public comment period was not long enough for the general public to provide meaningful public input.

Response:

4. We feel the 30 day review period was adequate for the public to review and provide meaningful comment. In addition, the public also had an opportunity to participate in public meetings and comment on alternatives early in the scoping process as described in the External Scoping Section of Chapter 1.

Comment Theme: Natural Resource Issues

1. One commenter requested reconsideration of installing a horse trail in any areas but along the old CCC Road and in the vicinity of the old CCC camp, located in the northwest extremity of the Northwest Planning Area. Any horse trail, particularly in the western end, would quickly turn into an ugly trench and manure from the passing horses would be a source of Bufflegrass seed disbursement. This would allow Bufflegrass to establish itself in this as-yet un-colonized area.

Response:

1. The horse trail in the vicinity of the old CCC camp was incorporated into the comprehensive Trails Management Plan to provide access to equestrians and hikers from the local community center and public schools along the park's western boundary. Social trailing in this area has been problematic in the past. The park's 2008 General Management Plan limited travel within the park to designated trails

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only. Therefore, with the designation of a formal trail to the CCC Camp area; the introduction of exotic plants, such as Buffleggrass, will be limited to this equestrian travel corridor.

There are several areas within Saguaro National Park that contain soil types that have moderate to severe erosion potential. The soil in the 'Rudasill' area is shown on the NRCS soil map for Pima County as Hayhook Sandy Loam with 1-5% slope. Erosion factors vary for different layers in the soil, but its suitability for paths and trails is listed as "not limited." This same soil also occurs in the western portion of the district, east of Sandario Road and north of the Signal Hill Picnic Area. Portions of three existing trails - Cactus Wren, Encinas, and Manville - are built on this same soil, and horses are allowed on at least portions of these trails. Our experience has been that although portions of these trails show evidence of some erosion, none of the erosion on these trails is as bad as erosion on other trails in the district. With proper design and maintenance, which is called for in the Comprehensive Trails Management Plan, trails can be built in this area without causing undue concern for extensive erosion.

Buffelgrass is a significant problem along roadways and on south facing slopes in the Tucson Mountain District of the park. However, buffelgrass is rarely consumed by horses and its seed is not spread in horse manure. The park has recently developed a very successful program of Weed-Free Trail volunteers, people who hike trails and remove and map invasive plant species before major infestations occur. This program will help to greatly reduce new species invasions along existing and new trails.

The trails in this area will be designed, engineered and properly maintained, on a regular basis, in order to support sustainable equestrian trail use for these soils types. Reference the Trails Maintenance Handbook located in Appendix E for specifics of erosion control and maintenance.

The purpose of the Comprehensive Trails Management Plan is to provide Saguaro National Park with a plan to locate, add, eliminate, manage, and maintain trails and associated infrastructure in a comprehensive trails system based on resource protection and visitor use and enjoyment and with the objective to prevent impairment and unacceptable impacts on natural and cultural resources. The objective of visitor use and enjoyment can not be overlooked. Proper design and maintenance of these trails will ensure that there will be no impairment or unacceptable impacts to the soils or vegetation in this area.

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Comment Theme: Natural Resource Issues, Visitor Use and Experience Issues

1. One commenter felt alternative B provide the greatest protection for the Rincon Mountain District, particularly its wilderness values. Within the Tucson Mountain District, they generally support the preferred alternative, but do not support converting Cactus Wren and Manville trail from hiker only to hiker/equestrian.

The commenter suggest routing people away from washes because, when horses are allowed to use the washes as trails this diminishes the experience for all trail users Multiple users are also a major disturbance for wildlife dependent on wash corridors.

Response:

1. This trails plan strives to protect natural and cultural resources while providing reasonable access to the park's trail system for a wide variety of user groups. After careful consideration, we felt the preferred action best balanced resource protection with a variety of visitor uses which include hikers, bicyclists and equestrians. In the EA, washes were carefully chosen with regard to slope, size, context, protection of specific sensitive resources, and social considerations and will be closely monitored. Providing some washes as trails balances resource protection with visitor use and enjoyment. Please see Appendix D in the EA for information on criteria for identifying washes as trails.