

# **Four-Forest Restoration Initiative Coconino and Kaibab National Forests Heritage Specialist Report**

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## **Relevant Federal Laws, Coconino and Kaibab Forest Plans, and Regulatory Directions**

### **Forest Service Heritage Guidance**

The Forest Service Manual (FSM) 2360 and individual forest plans are the primary direction for Heritage resource management practices in the agency. A “Crosswalk” was developed to merge and assess proposed and existing Forest plans for this analysis. See Appendix A for this crosswalk. All standards and guidelines from the existing and proposed plans were incorporated into the evaluation of effects for the 4FRI Heritage analysis.

### **National Historic Preservation Act**

Section 106 of the National Historic Preservation Act NHPA requires Federal agencies to take into consideration the effects of their undertakings on properties listed in or eligible for the National Register of Historic Places. Federal Regulations 36 CFR 800 contains procedures for implementing Section 106.

### **Programmatic Agreement**

A Programmatic Agreement (PA) between the Southwestern Region of the Forest Service, the Arizona, New Mexico, Texas and Oklahoma State Historic Preservation Offices and the Advisory Council on Historic Preservation (USDA 2003) guides national forests in Region 3 in identifying, evaluating and protecting cultural resources on National Forest System lands. Stipulation IV.A 4 of the PA provides for the development of “standard consultation protocols” for certain classes of undertakings where effects on historic properties and resulting protection and treatment are similar and repetitive. A protocol for large-scale fuels reduction, vegetation treatment and habitat improvement projects (Appendix J of the PA) was developed in consultation with and the Arizona, New Mexico, Texas and Oklahoma SHPOs, and the Advisory Council. Additionally, the Kaibab and Coconino Forests developed the *Four Forest Restoration Initiative (4FRI) Heritage Resources Strategy and NHPA Compliance* (Gifford 2011), in consultation with the AZSHPO and the area tribes. The PA, Appendix J, and the 4FRI Heritage Strategy will be used as the primary guidance for how the FS will meet the Section 106 requirements under NHPA for 4FRI for the Coconino and Kaibab National Forests.

### **Other Laws and Regulations**

Several other laws address aspects of Heritage resource management on National Forest lands. These include the *Archaeological Resources Protection Act of 1979 (ARPA)*, as amended. Among other provisions, this act requires tribal notification and consultation regarding permitted removal or damage to archaeological sites on Federal lands. Another relevant legislation is the *Native American Graves Protection and Repatriation Act of 1990 (NAGPRA)*. This legislation recognizes tribal affiliation of Native American human remains, associated funerary objects, sacred items and objects of cultural patrimony that may be discovered on public lands and requires consultation prior to their removal. Finally, *the American Indian Religious Freedom Act of 1978 (AIRFA)* requires Federal agencies to consider the impacts of their actions on Native American traditional cultural practices and to ensure access to cultural sites.

A number of Executive Orders including 11593 (Protection of Cultural Environment), 13007 (Indian Sacred Sites), 13175 (Tribal Consultations) and 13287 (Preserve America) give direction related to Forest Service Heritage Program Management.

### **Tribal Consultation**

In accordance with the NHPA, E. O. 13175, the Region's PA and other regulations and policies, the Coconino Tribal Liaison is conducting the Government-to-Government Consultation for the First EIS of the 4FRI Project. Consultation with Native American tribes was initiated at the onset of this project and would continue throughout its' 10 to 20 year life span. The following Native American tribes have historical ties to the lands administered by the Coconino and Kaibab National Forests and were consulted regarding 4FRI. These tribes are Fort McDowell Yavapai Nation, Yavapai-Prescott Tribe, Hopi Tribe, Hualapai Tribe, Havasupai Tribe, Navajo Nation, San Carlos Apache Tribe, San Juan Paiute, Tonto Apache Tribe, Yavapai-Apache Tribe, White Mountain Apache Tribe, Pueblo of Acoma, Kaibab Band of Paiute and Zuni. Other interested tribal groups that were contacted included the Dine' Medicine Man's Association, Coppermine, Coalmine, Naness, Lechee, Leupp, Bodaway and Cameron Chapters of the Navajo Nation. For a complete list of all tribal consultation prior to the completion of the 4 FRI EIS see the Tribal Relations Specialist Report.

Tribal knowledge is of considerable importance for identifying traditional use areas and Traditional Cultural Places (TCPs). Native American perspectives will continue to be sought out as each forest identifies individual task orders throughout the life of the project.

### **Contemporary/Traditional Tribal Uses**

The 4FRI project area is in close proximity to numerous tribal communities. Therefore, many forest users are tribal members that visit the project area to gather medicinal plants as well as other traditional and cultural purposes. The forests recognize the importance to area tribes of maintaining these traditions and would accommodate traditional use of Forest Service lands by Native Americans provided it complies with existing laws and regulations.

Years of government-to-government consultations with federally recognized tribes have identified numerous traditional uses in or near the 4FRI project area. Examples of these include collection of forest products such as medicinal plants, tree boughs, ceremonial fuelwood, and Piñon nuts as well as ongoing use of ceremonial sites and shrines.

Through consultations with tribes we have learned that they support forest restoration because it promotes the proliferation of native plant species used by traditional practitioners.

In some cases, specific traditional use areas have been identified on the forests through previous consultations. However, it is assumed that most traditional use areas have not yet been identified. While some traditional uses consistently occur in one location, others may occur in a variety of areas based on the availability of resources. Therefore, as noted above, prior to initiating project-specific task orders, the forests will consult with federally recognized tribes to identify traditional use areas and, if necessary, develop project-specific mitigation measures to accommodate traditional use of the forest by tribal members. See the Tribal Relations Specialist Report for discussions about the effects on tribal use areas, Traditional Cultural Places (TCPs) and tribal communities.

**Affected Environment**

Cultural resources, also known as Heritage resources or assets, encompass both the remains of the past as well as portions of the landscape important to modern-day cultures. Remains of the past are usually termed archaeological sites or historic properties and are frequently referred to as “sites.” Cultural resources are also of considerable importance to scientific researchers as well as the American public who seek to learn from the past. Many present day traditional cultures identify with these sites as part of their cultural identity (Hanson 1999).

The Ponderosa Pine ecosystem is the focus of the 4FRI forest restoration project. Within the project area, cultural resources range temporally from prehistoric times through the historic period and into the modern day. Prehistoric sites include rock art, cliff dwellings, pit houses, multiple room pueblos and artifact scatters. Historic resources consist of logging railroad grades, trails and historic roads; cabins and homesteads, Forest Service administrative sites, Basque sheep camps, mining camps, Civilian Conservation Corps remains, and Native American shelters such as sweat lodges and brush shelters.

Cultural resources also include Native American traditional use areas and places known as Traditional Cultural Properties (TCPs). These TCPs hold a central and important position in Native American culture. Three prominent examples found within the project area are the San Francisco Peaks on the Coconino National Forest and Red Butte and Bill Williams Mountain on the Kaibab National Forest (see Appendix A for a discussion on management of TCPs).

**Table 1: Proposed Acres by Alternative and by Forest**

<b>Alternative</b>	<b>Forest</b>	<b>Proposed Acres</b>	<b>Forest</b>	<b>Proposed Acres</b>	<b>Total</b>
B	Kaibab	231, 809	Coconino	356, 114	587, 923
C	Kaibab	232, 222	Coconino	360, 989	593, 211
D	Kaibab	231, 621	Coconino	335, 658	567, 279

**Table 2: Kaibab NF Heritage Sites and Surveys**

<b>Forest</b>	<b>Total Acres Previous Survey</b>	<b>Total Cultural Resources Recorded</b>	<b>National Register Listed</b>	<b>National Register Eligible</b>	<b>Unevaluated Sites</b>	<b>Sites Previously Evaluated Ineligible</b>
Kaibab	214,485	2,840	15	257	2,388	180

**Table 3: Coconino NF Heritage Sites and Surveys in Project Area**

Forest	Total Acres Previous Survey	Total Cultural Resources Recorded	National Register Listed	National Register Eligible	Unevaluated Sites	Sites Previously Evaluated Ineligible
Coconino	123,716	2,673	13	1,007	1,500	142

**Basis for Evaluation of Effects**

The proposed activity in the 4FRI DEIS includes ground disturbing activities such as mechanical thinning, hand thinning, stream restoration, temporary road construction, existing and temporary road closures, and fencing. In consultation with the AZ SHPO, the Coconino and Kaibab forests developed a document called the *Four Forest Restoration Initiative (4FRI) Heritage Resources Strategy and NHPA Compliance* (Gifford 2011) otherwise referred to as the “Heritage Strategy.” There were three elements identified in the Heritage Strategy that would assist in reaching a No Adverse Effect determination for this project.

- The first is the focus on Appendix J of the Region 3 Heritage Programmatic Agreement. Appendix J outlines the consultation protocols and strategies for implementing Large-Scale Fuels Reduction, Vegetation Treatment, and Habitat Improvement Projects.
- The second component is the archaeological site density model created by the Coconino and Kaibab forests. This model, created using existing site inventory data, identified high and low site densities areas and assists in the design of survey strategies for specific project locations.
- The third aspect is the heritage strategy. Following Appendix J, areas of intensive ground disturbances and areas of high site densities receive one-hundred percent survey. However, as per the strategy, areas of low site density can receive up to 25% of new or additional survey if existing surveys are not considered adequate. Sample survey needs are to be determined by Heritage managers on a project by project or individual task order basis (see Gifford 2011 for details on the survey strategies).

**Phased Section 106 Compliance**

Because of the size of this undertaking, implementation would be phased over several years. Appendix J allows for the phasing of Section 106 compliance evaluations. Appendix J, the Heritage Strategy and the initial 4-FRI Section 106 report describe the methods to be used to achieve a No Adverse Effect determination for 4FRI as a whole.

Individual task orders or specific project areas will be evaluated by forest Heritage staff for inventory needs and then surveyed to the appropriate level as defined in the Heritage Strategy. A Section 106 report will be produced for each project area as they are identified. Consultation with the AZ SHPO and tribes will be completed prior to implementing each task orders.

## **Existing Condition**

The Area of Potential Effect (APE) for the first Four Forest Restoration Initiative EIS is based on four alternatives. The overall analysis area is 988,930 acres but not all of those acres would be treated. Proposed treatments are as follow: the “no action” alternative will not treat any acres. Alternative B is 587,924 acres; Alternative C is 593,211 acres and Alternative D is 567,279. Throughout the project archaeological site densities range from 1 to 66 sites per square mile per the 4FRI Heritage site density model (see Gifford (2011) for a full explanation of how the model was developed). Within the analysis area there are 5,513 recorded archaeological sites with 123,716 acres on the Coconino and 214,485 acres on the Kaibab that have been previously surveyed for cultural resources.

Long term timber management and grazing activities have been conducted within the 4FRI project area over the past one-hundred years. Historic activities such as skidding logs, temporary road construction and chaining have affected sites over that time span. Hunting and fuel wood gathering activities, which may include driving off existing roads, has also had some effects on cultural resources. Even with these many effects from past activities many sites still retain sufficient integrity to be considered eligible for the National Register of Historic Places.

Though most of the prehistoric sites are likely to have been burned in the past (Covington 1997), many sites are now under threat from unnatural high intensity wild fires due to increasing fuel loads in and around them. A low intensity burn across a site can clear light fuels and not adversely affect sites. However, high intensity fires can cause pueblo rock walls to spall and scorch rock art panels. Though there has been an increase in hazard fuels reduction projects on both forests over the last decade, a large amount of the archaeological resources within the project area still have high levels of dead fuels growing in and around them (Crossley 2003, Coconino and Kaibab records). Heritage resources are also threatened by damage associated with fire suppression tactics like bulldozer constructed fire lines and safety zones. After a site has been intensely burned they are more exposed, consequently more vulnerable to vandalism.

As part of the Travel Management analysis the Coconino and Kaibab identified and recommended road closures that are adversely affecting cultural resources. Many of these roads have not yet been physically close to the public, leaving these cultural sites potentially vulnerable to continued affects from both intentional and opportunistic vandalism.

Habitat for some native plants desired by traditional collectors is also disappearing and natural springs are drying up due to over stocked forests. Plant collection areas and springs were used historically and still have cultural values that are important to the tribes. There are also dry ephemeral stream channels near to or in Heritage sites that in some instances are damaging sites' stratigraphic integrity and eroding cultural materials.

## **Desired Conditions**

### ***Coconino: Existing and Proposed Forest Plan Direction***

- Inventory, evaluate, nominate, protect study, interpret, and enhance cultural resources in accordance with management prescriptions.
- The recreational, educational, cultural, and scientific values of the archaeological sites on the Forest have been recognized as a recreational and scientific niche that the Forest can provide to the public. Promoting and developing that niche, while respecting those

cultural and scientific values through research and conservation, is a goal of the heritage program of the Coconino NF.

- Achieve a balance between National Historic Preservation Act (NHPA) Section 106 activities (ensuring projects are in compliance with legal requirements to evaluate and protect archaeological sites) and NHPA Section 110 activities (actions focused on the cultural resources themselves). Study, document, and preserve sites as well as conduct a program of “public archaeology” to educate people about heritage through site interpretation and hands-on involvement in the archaeological process.
- Tribes have access to areas that provide them an opportunity to practice traditional activities such as plant gathering, and ceremonial activities that are essential in maintaining their cultural identity and the continuity of their culture with reasonable limitations, consistent with public safety and multiple uses by other Forest users. Forest products used by American Indian nations, tribes, and communities with ancestral or historic ties to the Coconino NF continue to be available for traditional practices. Collection of culturally important plants by American Indian tribes does not negatively affect the existence and distribution of the species on the Forest.
- Consult Indian tribes to determine if there are any impacts to traditional cultural values or opportunities to improve plant and animal populations of traditional cultural importance.
- Timber products are available to local American Indian tribes for subsistence and traditional purposes, such as kiva beams.
- Forest botanical products remain on the Forest unless collection is authorized by permit and occurs in a manner that ensures the products collected persist on the Forest.
- Traditional tribal uses for forest botanical products, such as the collection of medicinal plants, wild plant foods, basketry materials, and fire wood, are facilitated.
- Boughs and herbaceous plant parts used for American Indian traditional and ceremonial purposes are available under conditions and procedures that minimize restrictions, and are consistent with laws, regulations, and agreements with tribes.
- Recognize the rights of members of tribes whose aboriginal territories include the land now administered by the Coconino NF to collect forest materials for traditional, ceremonial, and subsistence purposes.
- Collaborate with tribal governments through nation-to-nation agreements, annual project consultations, formal and informal meetings, and other methods on the management of species important to maintaining the social and cultural well-being of tribes.

***Kaibab: Existing and Proposed Forest Plan Direction***

- Inventory, evaluate, nominate, protect study, interpret, and enhance cultural resources in accordance with the management prescriptions. Coordinate planning for these activities with the State Historic Preservation Office, State Archaeologist, and other State and Federal agencies.
- Cultural resources including known American Indian sacred sites and traditional cultural properties are preserved, protected, or restored for their cultural and scientific importance and are generally free from inappropriate impacts.

- Archaeological artifacts are protected, either in-place in their original contexts or are curated in a secure location.
- Historically-significant heritage properties are either evaluated for their eligibility for inclusion on and/or are listed on the National Register of Historic Places.
- Archaeological, ethnographic, and historical data can provide important information for guiding the design of management activities.
- The Arizona State Historic Preservation Plan outlines strategies including fostering the educational, aesthetic, inspirational, cultural, and economic benefits of historic preservation and conservation; encouraging public interpretation at historic sites where it contributes to the region's sense of community and inter-cultural understanding; and facilitating cross-boundary heritage tourism to contribute to the region's economy and sense of place.
- Resource protection from natural forces, visitor use, and vandalism may include signing, fencing, administrative closure, patrolling, interpretive signs, stabilization, and data recovery.
- Prioritizing of survey areas should consider 1) site density; (2) potential for unique or underrepresented site types; (3) traditional importance (4) potential or unknown impacts.
- The Forest should ensure that archaeological projects conducted on the Forest address topics of known importance to tribes as necessary and appropriate.
- Traditional practitioners have access to Traditional Cultural Properties (TCPs) for ceremonial use and privacy to conduct ceremonies.
- TCPs are preserved, protected, or restored for their cultural importance and are generally free from inappropriate impacts.
- The significant visual qualities of TCPs are preserved consistent with the TCP designation.
- Traditional use of TCPs by associated communities is accommodated by the Forest.
- Traditional use of TCPs important to maintaining the continuing cultural identity of associated communities would be accommodated and facilitated by the Forest.
- Inappropriate development of TCPs would be minimized and controlled. The Forest would take an active role in educating the public on the importance of TCPs and issues related to their management while protecting confidential and/or sensitive information regarding TCPs.

**The Forest would collaborate with affiliated groups on appropriate management of TCPs:**

- Development of new facilities, commercial and recreational activities are minimized
- Use temporary closure authority of Food, Conservation, and Energy Act of 2008 SEC8104 to accommodate traditional use of TCPs whenever practical
- Consultation should be conducted for all proposed special uses permits within TCPs.



- The Forest should conduct ethnographic/ethnohistoric research to identify and evaluate TCPs
- Mining activities are generally inconsistent with the desired conditions for Traditional Cultural properties.
- Commercial development of TCPs is generally inconsistent with desired conditions.
- Use Food, Conservation, and Energy Act of 2008 SEC 8106 to exempt confidential information from Freedom of Information Act requests
- Forest leadership recognizes that all lands managed by the Forest were once tribal lands.
- Traditional uses such as the collection of medicinal plants and wild plant foods are recognized as important uses.
- Traditionally used resources are not depleted and are available for future generations.
- Tribal members have access to sacred sites for individual and group prayer and traditional ceremonies and rituals.
- There are opportunities for solitude and privacy at ceremonial sites.
- Tribal traditional use of medicinal plants and other botanical resources should take priority over applications for commercial harvesting.
- Important traditional use resources should be monitored to ensure healthy sustainable plant populations available for traditional uses

## **Environmental Consequences**

### **No Action Alternative (A)**

#### *Direct and Indirect Effects*

Existing fuels in and around archaeological sites would continue to increase. This may result in more frequent and intense wildfires which could result in site and artifact damage such as spalling of rock art and cracking of artifacts as well as post fire erosion. Fire suppression actions, particularly bulldozer operations, may also damage or destroy surface and subsurface archaeological sites resulting in the loss of those resources and their research potential. Additionally, sites are more visible after a fire, especially high intensity fires, and much more vulnerable to vandalism.

Soil erosion due to uncharacteristic wildfires could have both a direct and indirect effect on cultural resources. Rain and snow melt can cause channels to form within denuded sites, or mud slides from nearby slopes may deposit soil and debris within site boundaries leading to the loss of data potential and characteristics that make historic properties eligible for the National Register of Historic Places.

A “No Action” may result in the possible reduction over time of pre-settlement adapted native plants. Some of which have been collected since historical times by Native Americans for food and medicine. Additionally, springs and seeps are important locations to Native Americans and other members of the public and increasingly overstocked forests may have some effect on those historic water sources.

## **Proposed Action Alternative (B)**

### ***Direct and Indirect Effects***

Unnatural fuel loading should be reduced around National Register listed or eligible cultural resources. Uncharacteristic fire behavior should also be reduced. Thinning and low intensity prescribed fires can reduce current fuel loads which would then assist in preventing extensive heat damage during wildfires. There would be less need for fire suppression activities, consequently reducing the threat of ground disturbing activities like bulldozer fire-line construction.

Mechanical thinning treatments, temporary road construction and closures, skidding and other ground disturbing activities associated with 4FRI have the potential to affect cultural resources. Impacts can include rutting, erosion, dislocation or breakage of artifacts and features and destruction of sites and site stratigraphy. Prescribed burning also has the potential to affect fire sensitive sites. These potential effects are addressed through site avoidance strategies and implementing the site protection measures listed in Region 3 PA, Appendix J and in the Heritage Strategy (Gifford 2011).

Initial reduction of heavy fuels may lead to an increase in site visibility, public visitation, and possible vandalism. Those issues are reduced through management actions that include project specific as well as long term monitoring. Initial entry prescribed burns are periodically revisited and burned to reduce natural fuel accumulation and archaeological site monitoring is part of that process. Possible road decommissioning can also assist in limiting access to some archaeological sites thus reducing post burn visibility and visitation at those sites.

Project implementation may impact some Native American uses as tribal members commonly access forest lands for ceremonial activities and to gather forest products. Access may be temporarily restricted during implementation but entry would be ensured and any concerns can be addressed through on-going consultations. See Environmental Justice in the Economics Report.

There is the possibility that cultural resources would be discovered during project implementation. Discovery guidance is found in Appendix J of the Region 3 Programmatic Agreement (PA).

## **Alternative (C)**

### ***Direct and Indirect Effects***

This alternative is focused on preserving an undisclosed numbers of trees 16” in diameter and larger. It is more of a socio-political concern to contemporary culture rather than an impact to historic properties. Many of the ground disturbing activities associated with this alternative are similar to those identified in Alternative B, and have the same potential to affect cultural resources. Key components of this alternative include additional mechanical and prescribed burning on specific grasslands; wildlife and watershed research and restoration as related to the Large Tree Retention Strategy (LTRS) identified by the 4FRI partnership. This alternative includes similar actions as Alternative B, with maintaining large trees and expanded grassland restoration as the primary differences.

One concern for heritage resources under this alternative is the increases in mechanical treatments. The 4FRI heritage survey strategy does address this concern. Per the strategy, intensive ground disturbing activities are inventoried for historic properties at 100 percent prior to implementation thus identifying cultural resources prior to ground disturbing actions. If additional

high impact or intense mechanical treatments are needed under this alternative, additional archaeological survey would be necessary per the heritage survey strategy.

One potential benefit of this alternative is the preservation of culturally modified trees. The 4FRI heritage survey strategy incorporates various levels of survey but not 100 percent across the entire project area. Since sample surveys do not identify all historic resources, leaving a larger number of 16 inch and above trees in place may preserve some of these unrecorded culturally modified trees. Conversely, one negative aspect of leaving large trees in place was noted during the bark beetle infestation on the Coconino National Forest. During that period a number of larger ponderosa pines died in drier parts of the forest. Some of those trees had taken root in archaeological sites. When these dead trees fell they uprooted portions of sites. Both of these examples are very limited in scale and would be minimized through implementing the 4FRI project. Landscape-level forest restoration can potentially decrease bark beetle impacts through a healthier forest and culturally modified trees on the Coconino and Kaibab National Forests occur primarily in aspen stands; not ponderosa pine, the focus of this project. So any effects under 4FRI are very limited.

Also see Environmental Justice in the Economics Report for potential impacts to Tribes.

## **Alternative (D)**

### ***Direct and Indirect Effects***

Alternative D focuses on reducing prescribed burning by over 50 percent across the project in comparison to the proposed action (B). The alternative was developed in response to social concerns regarding smoke impacts in and around the area. Actions under Alternative D are similar to those found in the proposed action (Alternative B) with the principle difference being decreases in levels of prescribed burning and other options to remove thinning debris. Potential impacts to cultural resources are similar to Alternative B. The Heritage Strategy is flexible enough to respond to all of the various levels of implementation under Alternatives B, C and D.

Alternative D may benefit some fire sensitive cultural resources in areas of the forest with lower site densities. Per the Heritage Strategy (Gifford 2011), burn units with high site densities are surveyed at 100 percent. In areas of low density, the Heritage Strategy option is to survey an additional 25% if necessary. Current forest data, along with the 4FRI site density models and local heritage personnel's resource knowledge, will be used to identify and protect the majority of fire sensitive sites found in both high and low density areas. Nonetheless, there is always the possibility that small numbers of these fire sensitive sites could be affected and a reduction in prescribed burning may assist in preserving them.

Consultation with Native Americans has indicated that some groups in surrounding communities have concerns regarding the amount of smoke that may result from project prescribed burning. The proposed reduction in burning under this alternative addresses those concerns. Also see Environmental Justice in the Economics Report for potential impacts to Tribes.

A 50 percent reduction of prescribed burning leaves a significant amount of post thinning debris and slash on the forests. Without prescribed burning, actions identified in the alternative such as chipping, shredding, mastication and off-site removal of material would be required. Some of these activities may include ground disturbing actions that could have an effect on cultural resources. Forest and district archaeological staff can address these effects by increasing the

amount of archaeological survey within the area of these ground disturbing activities and ensuring that cultural resources are avoided or the adverse effects are mitigated.

## **Cumulative Effects**

### **No Action Alternative (A)**

Under the no action alternative, the proposed large scale, landscape level forest health project does not occur, and there will be no additional effects as a result of this project. The present and foreseeable future undertakings will continue to have the potential to affect cultural resources. These undertakings will go through the Section 106 review process and all cultural resources that are listed on the National Register or eligible for the Register will be avoided or the adverse effects will be mitigated. Any cumulative effects to cultural resources that could occur would not be considered to be adverse.

### **Proposed Action Alternative (B)**

Alternative B has the potential to increase the amount of ground-disturbing activities, including mechanical treatments, temporary road construction, skidding, stream restoration, fence construction and other ground disturbing activities. When considered together with the past present and foreseeable future actions, these activities have the potential to affect cultural resources. All undertakings that have the potential to affect cultural resources will go through the Section 106 review process, however, and all cultural resources that are listed on the National Register or eligible for the Register will be avoided or the adverse effects will be mitigated. In addition, protection measures including archaeological monitors during mechanical activities, keeping ground disturbing activities out of site boundaries by flagging and avoiding the sites, and post prescribed burn site monitoring to assess the effects of the low intensity burns, will help to minimize the effects. The potential cumulative effects to cultural resources from increased ground disturbing activities and prescribed burning resulting from this alternative are therefore not considered to be adverse.

There is a possibility for an increase in archaeological site vandalism resulting from increased visibility once the project is implemented. This visibility will be greater than that caused by past, present or foreseeable future undertakings in the area. However, the management practice of implementing low to moderate intensity prescribed fire typically does not sterilize soil or completely remove ground fuels like a high intensity uncontrolled wildfire. Low intensity fires also tend to leave some trees in place that would eventually cover the surface with a recurring needle cast. Sites are periodically monitored both during project implementation as well as for NHPA Section 110 purposes by agency and volunteer personnel. Proposed road closures would reduce access to some of these areas as well, reducing the potential for increased vandalism. The cumulative effect of increased visibility is not considered to be adverse.

The cumulative effects on cultural resources resulting from any potential increase in erosion are also minimal. Reducing fuel loads and implementing low to moderate intensity prescribed fires does not cause soil sterilization or hydrophobic soils as high intensity wildfires do. As noted previously, low intensity prescribed fires leave some vegetation in place and re-vegetation occurs soon afterwards if soils are not sterilized. However, as implementation occurs, archaeologists would monitor for erosion concerns examining sites in the project areas, focused on slopes, drainages, and other high probability areas with cultural resources present. The cumulative effects to cultural resources caused by an increase in erosion are not considered to be adverse.

### **Alternative (C)**

The addition of the Large Tree Retention Strategy in this alternative would have little additional effect on cultural resources. However, an increase in prescribed burning, as well as similar actions identified under Alternative B, such as mechanical treatments, prescribed burning, stream restoration and fence construction have the potential to affect cultural resources. These issues are identified under the Cumulative Effects section under Alternative B and not repeated here. As noted previously, all undertakings that have the potential to affect cultural resources will go through the Section 106 process and all cultural resources that are listed on the National Register or eligible for the Register will be avoided or the adverse effects will be mitigated. An increase in these types of activities will not result in an adverse effect to cultural resources as long as the projects comply with Section 106.

### **Alternative (D)**

As with Alternatives B and C, similar increases in activities under Alternative D such as mechanical treatments and ground disturbances can add to the effects on cultural resources. Additionally, specific to this alternative, is a reduction in prescribed burning which may involve other means of slash and debris removal. Actions such as chipping, shredding and mastication as well as removal of material off-site may include an increase in ground disturbing actions. As noted above, all undertakings that have the potential to affect cultural resources will go through the Section 106 process and all cultural resources that are listed on the National Register or eligible for the Register will be avoided or the adverse effects will be mitigated. Overall, the cumulative effects on cultural resources as a result of Alternative D are not considered to be adverse.

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**Table 4. Appendix A Existing and Draft Forest Plan Crosswalk for Heritage Resources**

<b>Heritage Resources</b>			
<b>Current Plan DC (Goals)]</b>	<b>Current Plan Management Direction)</b>	<b>Draft Plan Management Direction</b>	<b>Consistent? Why or Why Not?</b>
<b>Coconino National Forest Land</b>			
Outdoor Recreation: Inventory, evaluate, nominate, protect, study, interpret, and enhance cultural resources in accordance with the management prescriptions. Coconino National Forest Plan – Amendment No. 9 – 12/92 Replacement Page 22		Goal: The recreational, educational, cultural, and scientific values of the archaeological sites on the Forest have been recognized as a recreational and scientific niche that the Forest can provide to the public. Promoting and developing that niche, while respecting those cultural and scientific values through research and conservation, is a goal of the heritage program of the Coconino NF. Coconino National Forest Draft Land Management Plan – February 2011, p. 68	Consistent: Heritage routinely inventories and evaluates sites for all projects. 4FRI survey plan uses Region 3 PA, Appendix J, site density model and up to 25% additional survey if needed in low site density areas.
	Coordinating Requirements for Cultural Resources: A complete or sample cultural resources survey is done on project undertakings. Intensity of sampling is determined by using FSM 2360. Ground disturbing projects receive cultural resources clearance. This includes projects proposed in areas that have been previously cleared for other projects. Projects, not areas, receive clearance. Projects receive clearance without additional archaeological field work whenever sufficient prior field	Management Approaches (MA) for Heritage Site Conservation and Evaluation: Achieve a balance between National Historic Preservation Act (NHPA) Section 106 activities (ensuring projects are in compliance with legal requirements to evaluate and protect archaeological sites) and NHPA Section 110 activities (actions focused on the cultural resources themselves). Studying, documenting, and preserving sites as well as conducting a program of “public archaeology” to educate people about heritage through site interpretation and hands-on involvement in the archaeological process. ) Coconino National Forest Draft Land Management Plan – February	Consistent: Survey strategy and site nomination/eligibility are addressed under 4FRI N/A for 110 activities under 4FRI 4FRI survey strategy would be completed prior to undertakings. May revise as needed. Eligible cultural resource sites would be protected from project activities under 4FRI

<b>Heritage Resources</b>			
<b>Current Plan DC (Goals)]</b>	<b>Current Plan Management Direction)</b>	<b>Draft Plan Management Direction</b>	<b>Consistent? Why or Why Not?</b>
	<p>work has been done to clear the project. Cultural resource reports are reviewed by the Forest Archaeologist who also determines site significance and recommends, through the Forest Supervisor, nomination of sites to the National Register of Historic Places, as prescribed in FSM 2360 and in consultation with the State Historic Preservation Officer. Pertinent reports and documentation are completed before cultural resource clearance is granted and projects proceed, unless otherwise agreed to with the SHPO and, if necessary, Advisory Council on Historic Preservation (ACHP).</p> <p>Any area, even those that have been inventoried at a 100 percent level, may have cultural resource sites present that have not been identified or marked. Project administrators and operators are alert for such sites. It is the project administrator's responsibility to mark, protect, and report such unreported sites.</p>	2011 69	



<b>Heritage Resources</b>			
<b>Current Plan DC (Goals)]</b>	<b>Current Plan Management Direction)</b>	<b>Draft Plan Management Direction</b>	<b>Consistent? Why or Why Not?</b>
	<p>Cultural resource sites are located and protected from project activities according to direction in FSM 2360 and 2430. Unauthorized disturbance of cultural resource sites is handled according to appropriate laws and FSM direction.</p> <p>Coconino National Forest Plan – Amendment No. 1 – 12/87 Replacement Pages 49, 50</p>		
	<p>Standard: Consult with Native Americans when projects and activities are planned in sites or areas of known religious or cultural significance. Coconino National Forest Plan Amendment No. 18 – 1/2004 replacement page 52</p>	<p>Desired Conditions for Tribal Relations and Uses Management: Tribes have access to areas that provide them an opportunity to practice traditional activities, such as plant gathering, and ceremonial activities that are essential in maintaining their cultural identity and the continuity of their culture with reasonable limitations, consistent with public safety and multiple uses by other Forest users. Forest products used by American Indian nations, tribes, and communities with ancestral or historic ties to the Coconino NF continue to be available for traditional practices. Collection of culturally important plants by American Indian tribes does not negatively affect the existence and distribution of the species on the Forest.</p>	<p>Consistent: Native Americans have been contacted regarding 4FRI and on-going consultations are planned under the direction of the Coconino NF (4FRI) Tribal liaison.</p>

<b>Heritage Resources</b>			
<b>Current Plan DC (Goals)]</b>	<b>Current Plan Management Direction)</b>	<b>Draft Plan Management Direction</b>	<b>Consistent? Why or Why Not?</b>
		Approaches for Tribal Relations and Uses: Consult Indian tribes during plant, fish (water), and botanical to determine if there are any impacts to traditional cultural values or opportunities to improve plant and animal populations of traditional cultural importance.	
	Standard: The Forest complies with the National Historic Preservation Act (NHPA) in decisions involving interactions between cultural and other resources. Cultural resources are managed in coordination with the State Historic Preservation Plan (SHPO). Until evaluated, the minimal level of management for all sites is avoidance and protection. Coconino National Forest Plan Amendment No. 18 – 1/2004 replacement page 52		Consistent: Standard for all projects including 4FRI.
	Standard: Project undertakings are inventoried for cultural resources and areas of Native American religious use. Inventory intensity complies with Regional policy, and the settlement agreement for the Save The Jemez Lawsuit, and is determined in consultation with the State Historic Preservation Officer (SHPO). Generally, inventory standards are:		Consistent: Standard for all projects including 4FRI.

<b>Heritage Resources</b>			
<b>Current Plan DC (Goals)]</b>	<b>Current Plan Management Direction)</b>	<b>Draft Plan Management Direction</b>	<b>Consistent? Why or Why Not?</b>
	<ul style="list-style-type: none"> <li><input type="checkbox"/> One hundred percent survey of all projects causing complete surface disturbance;</li> <li><input type="checkbox"/> When less than 100 percent survey is deemed appropriate, the specific sample fraction surveyed is determined in consultation with the State Historic Preservation Officer and is generally greater than 10 percent. Factors determining when sampling is appropriate include projects with dispersed or minimal impacts, low expected archaeological site density, ground cover, and types of archaeological sites present in the area;</li> <li><input type="checkbox"/> Consultation with appropriate Native American groups;</li> <li><input type="checkbox"/> Consultation with the SHPO, and if necessary, the Advisory Council on Historic Preservation (ACHP), before project implementation. Coconino National Forest Plan Amendment No. 9 – 12/92, new page 52-1</li> </ul>		
	<p>Standard: Significant, or potentially significant, inventoried sites are managed to achieve a "No Effect" determination, in consultation with the SHPO and ACHP (36 CFR 800).</p> <p>- Monitoring during and after project</p>		<p>Not Consistent under old plan: Under 4FRI a determination of No Adverse Effect is recommended. All fuels projects for the past ten years have been No Adverse Effect. A plan amendment has been needed. All</p>

<b>Heritage Resources</b>			
<b>Current Plan DC (Goals)]</b>	<b>Current Plan Management Direction)</b>	<b>Draft Plan Management Direction</b>	<b>Consistent? Why or Why Not?</b>
	<p>implementation is done to document site protection and condition.</p> <ul style="list-style-type: none"> <li>- Management strives to achieve a "No Effect" determination.</li> <li>- When sample surveys, rather than 100 percent survey coverage, are done for project clearances, survey locations and sample intensity are based on areas of greatest project impact, likely locations for cultural resource sites based on archaeological experience, land management planning, dispersion of sample coverage, certain topographic features specified in the Save the Jemez lawsuit settlement agreement, and likely areas based on the Forest site density predictions.</li> <li>- Identified sites are evaluated for their National Register eligibility when they are severely damaged, when they would be impacted by an undertaking, or information about the uniqueness, commonness, and characteristics of their site class are sufficiently known to make an informed decision. Sites for which determinations of eligibility have not been made are managed as if they are eligible, unless consultation with the SHPO indicates otherwise.</li> </ul>		<p>unevaluated sites are managed as eligible and would be done so under 4FRI.</p>

<b>Heritage Resources</b>			
<b>Current Plan DC (Goals)]</b>	<b>Current Plan Management Direction)</b>	<b>Draft Plan Management Direction</b>	<b>Consistent? Why or Why Not?</b>
	Coconino National Forest Plan Amendment No. 9 – 12/92, new page 52-1		
	General Crook National Historic Trail: Standard: Use of motorized vehicles, except vehicles designed to travel over-the-snow, such as snowmobiles, on any portion of the route not already designated and designed for general vehicle travel is prohibited. Coconino National Forest Plan, p. 55		Consistent: Would be protected during implementation at the district level during 4FRI as Task Orders are identified.
	General Crook National Historic Trail Standard: Manage resource activities to meet Visual Quality Objective (VQO) of foreground Retention, considering the historic qualities of the characteristic landscape. Coconino National Forest Plan, p. 55	Desired Conditions for General Crook National Recreation Trail : The historic route and associated values are preserved. Foot and horse travel are the emphasized recreation activities on the Trail.  Standards for General Crook National Recreation Trail Protect General Crook National Recreation Trail chevrons and route markers and historic mile post markers.  Management Approaches (MA) General Crook National Recreation Trail	Consistent: Would be protected during implementation at the district level during 4FRI as Task Orders are identified.

<b>Heritage Resources</b>			
<b>Current Plan DC (Goals)]</b>	<b>Current Plan Management Direction)</b>	<b>Draft Plan Management Direction</b>	<b>Consistent? Why or Why Not?</b>
		<p>MA: Manage the 138-mile trail General Crook Trail corridor on National Forest Land from Fort Whipple to Fort Apache and associated historic sites and side trails for potential Congressional designation as a National Historic Trail.</p> <p>Coconino National Forest Draft Land Management Plan – February 2011, p. 114</p>	
	<p>MA 2: Historic and Cultural is an ORV: All management activities in and near the river corridor shall be administered in such a manner as to protect and/or enhance the identified outstandingly remarkable values for the Verde Wild &amp; Scenic River (PL 90-542, Wild &amp; Scenic Rivers Act, 1968, as amended, Section 10(a) and Section 12(a)) Coconino National Forest Plan – Amendment No. 19 – 6/2004 Replacement Pages 115-116</p>	<p>Verde Wild and Scenic River: The remainder of the management standards are identified in the Verde Wild and Scenic River Comprehensive River Management Plan as “Standards and Guidelines” (CRMP, 2004). Included in the CRMP is unique direction for the Verde Wild and Scenic River along with other management direction that is duplicated elsewhere in the plan but was highlighted for the CRMP as a matter of emphasis. In addition, the CRMP has some site-specific direction not suitable for the plan, such as project-specific trail and road obliteration.</p> <p>Coconino National Forest Draft Land Management Plan – February 2011, p. 112</p>	N/A under current 4FRI project area.
	<p>MA 37: Changes in management can occur in response to demonstrated (through monitoring) negative impacts to archeological resources.</p>		<p>Consistent: Adaptive management is identified in the 4FRI section 106, NHPA compliance document.</p>
		<p>Forest Products: Desired Condition:</p>	<p>Consistent: Forest and district policies are in place and through on-going</p>

<b>Heritage Resources</b>			
<b>Current Plan DC (Goals)]</b>	<b>Current Plan Management Direction)</b>	<b>Draft Plan Management Direction</b>	<b>Consistent? Why or Why Not?</b>
		<p>DC: Timber products are available to businesses and individuals in a manner that is consistent with other desired conditions and that is on a sustainable basis within the capacity of the land.</p> <p>DC: Timber products are available to local American Indian tribes for subsistence and traditional purposes, such as kiva beams.</p> <p>DC: Forest botanical products remain on the Forest unless collection is authorized by permit and occurs in a manner that ensures the products collected persist on the Forest.</p> <p>DC: Traditional tribal uses for forest botanical products, such as the collection of medicinal plants, wild plant foods, basketry materials, and fire wood, are facilitated.</p> <p>DC: Boughs and herbaceous plant parts used for American Indian traditional and ceremonial purposes are available under conditions and procedures that minimize restrictions, and are consistent with laws, regulations, and agreements with tribes.</p> <p>Coconino National Forest Draft Land</p>	<p>Tribal consultations would be reinforced and refined.</p>

<b>Heritage Resources</b>			
<b>Current Plan DC (Goals)]</b>	<b>Current Plan Management Direction)</b>	<b>Draft Plan Management Direction</b>	<b>Consistent? Why or Why Not?</b>
		<p>Management Plan – February 2011, p. 97</p> <p>Management Approaches (MA) for Forest Products:</p> <p>MA: Recognize the rights of members of tribes whose aboriginal territories include the land now administered by the Coconino NF to collect forest materials for traditional, ceremonial, and subsistence purposes.</p> <p>MA: Collaborate with tribal governments through nation-to-nation agreements, annual project consultations, formal and informal meetings, and other methods on the management of species important to maintaining the social and cultural well-being of tribes.</p> <p>Coconino National Forest Draft Land Management Plan – February 2011, p. 97</p>	
Kaibab National Forest			
Goals: Inventory, evaluate, nominate, protect, study, interpret, and enhance heritage resources in		No specific stand alone goals – goals are expressed as desired conditions	Consistent: Required by Law



<b>Heritage Resources</b>			
<b>Current Plan DC (Goals)]</b>	<b>Current Plan Management Direction)</b>	<b>Draft Plan Management Direction</b>	<b>Consistent? Why or Why Not?</b>
<p>accordance with the management prescriptions. Coordinate planning for these activities with the State Historic Preservation Office, State Archaeologist, and other State and Federal agencies. Corrected 06/08 Kaibab NF Land Management Plan, p. 18</p>			
		<p>GL: Cultural resources including known American Indian sacred sites and traditional cultural properties, are preserved, protected, or restored for their cultural and scientific importance and are generally free from inappropriate impacts. Kaibab Land Management Plan working DRAFT 46</p>	<p>Pending Tribal Consultation</p>
		<p>GL: Archaeological artifacts are protected, either in-place in their original contexts or are curated in a secure location. Kaibab Land Management Plan working DRAFT 46</p>	<p>Consistent: Kaibab Heritage policy is to leave artifacts in place whenever possible. If artifacts are collected they would be curated in a secure location.</p>
		<p>DC: Historically-significant heritage properties are either evaluated for their eligibility for inclusion on and/or are listed on the National</p>	<p>Consistent: Sites would be evaluated, unevaluated sites are treated as</p>

<b>Heritage Resources</b>			
<b>Current Plan DC (Goals)]</b>	<b>Current Plan Management Direction)</b>	<b>Draft Plan Management Direction</b>	<b>Consistent? Why or Why Not?</b>
		Register of Historic Places. Kaibab Land Management Plan working DRAFT 46	eligible for project purposes.
		DC: Outreach to public and educational institutions to promote knowledge and research opportunities.  Kaibab Land Management Plan working DRAFT 46	NA- Section 110
		DC: Forest facilities that are eligible for the National Register of Historic Places are available for continued use, for forest administration, public recreation and interpretation, and cultural events.  Kaibab Land Management Plan working DRAFT 46	N/A for 4FRI
		DC: The Forest’s historic documents, including photographs, maps, journals, and Forest Service (FS) program management records, are available for research and interpretation by the FS, other agencies, universities, Tribes, and the public.  Kaibab Land Management Plan working DRAFT 46	NA- Section 110

<b>Heritage Resources</b>			
<b>Current Plan DC (Goals)]</b>	<b>Current Plan Management Direction)</b>	<b>Draft Plan Management Direction</b>	<b>Consistent? Why or Why Not?</b>
		<p>GL: Partnerships with tribes, universities, colleges, professional organizations, volunteers, and avocational archaeologists are integral to making progress towards the desired conditions. It is important to coordinate and cooperate with other land-managing agencies, tribes, and public private alliances that advance the stewardship of the Nation’s diverse heritage.</p> <p>GL: Archaeological, ethnographic, and historical data can provide important information for the guiding the design of management activities.</p> <p>Kaibab Land Management Plan working DRAFT 46</p>	No ethnographic study planned at this time for project.
		<p>GL: The Arizona State Historic Preservation Plan outlines strategies including fostering the educational, aesthetic, inspirational, cultural, and economic benefits of historic preservation and conservation; encouraging public interpretation at historic sites where it contributes to the region’s sense of community and inter-cultural understanding; and facilitating cross-boundary heritage tourism to contribute to the region’s economy and sense of place.</p> <p>Kaibab Land Management Plan working DRAFT 46</p>	NA- Section 110

<b>Heritage Resources</b>			
<b>Current Plan DC (Goals)]</b>	<b>Current Plan Management Direction)</b>	<b>Draft Plan Management Direction</b>	<b>Consistent? Why or Why Not?</b>
		<p>GL: Actions to protect cultural resources from natural forces, visitor use, and vandalism may include signing, fencing, administrative closure, patrolling, interpretive signs, stabilization, and data recovery. On-site interpretation can include interpretive trails, signs, exhibits, and self-guided and specialist-guided tours at historic and prehistoric sites. Off-site interpretation can include lectures, professional reports and publications, brochures, programs and displays. Interpretation of cultural resources can be integrated with other resource interpretation, and with other recreation facilities and programs.</p> <p>Kaibab Land Management Plan working DRAFT 47</p>	NA- Section 110
		<p>GL: Prioritizing of survey areas should consider 1) site density; (2) potential for unique or underrepresented site types; (3) traditional importance (4) potential or unknown impacts.</p> <p>Kaibab Land Management Plan working DRAFT 47</p>	Consistent: Standard Operating Procedure. Stipulated in the 4FRI Section 106 clearance and EIS
		<p>The purposeful excavation of human remains for educational purposes such as research or field schools should be not be permitted.</p> <p>The Forest should ensure that archaeological projects conducted on the Forest address topics of known importance to tribes as necessary and</p>	NA for 4FRI

<b>Heritage Resources</b>			
<b>Current Plan DC (Goals)]</b>	<b>Current Plan Management Direction)</b>	<b>Draft Plan Management Direction</b>	<b>Consistent? Why or Why Not?</b>
		appropriate.	
		Traditional practitioners have access to TCPs for ceremonial use and privacy to conduct ceremonies.	Unknown at this time. Pending tribal consultation. Would be addressed in project specific 106 clearances as specified in Heritage Specialist report.
		TCPs are preserved, protected, or restored for their cultural importance and are generally free from inappropriate impacts.	Unknown at this time. Pending tribal consultation. Would be addressed in project specific 106 clearances as specified in Heritage Specialist report.
		The significant visual qualities of TCPs are preserved consistent with the TCP designation.	Unknown at this time. Pending tribal consultation. Would be addressed in project specific 106 clearances as specified in Heritage Specialist report.
		Traditional use of TCPS by associated communities is accommodated by the Forest.	Unknown at this time. Pending tribal consultation. Would be addressed in project specific 106 clearances as specified in Heritage Specialist report.
		The Forest would continue to work to identify, evaluate and protect Traditional Cultural Properties and work with associated communities to collaboratively manage TCPs by developing programmatic agreements, management plans, Memoranda of Understanding, or other management tools. Traditional use of TCPs important to maintaining the continuing cultural identity of associated	Unknown at this time. Pending tribal consultation. Would be addressed in project specific 106 clearances as specified in Heritage Specialist report.

<b>Heritage Resources</b>			
<b>Current Plan DC (Goals)]</b>	<b>Current Plan Management Direction)</b>	<b>Draft Plan Management Direction</b>	<b>Consistent? Why or Why Not?</b>
		<p>communities would be accommodated and facilitated by the Forest. Inappropriate development of TCPs would be minimized and controlled. The Forest would take an active role in educating the public on the importance of TCPs and issues related to their management while protecting confidential and/or sensitive information regarding TCPs. The Forest would collaborate with affiliated groups on appropriate management of TCPs</p>	
		<p>Development of new facilities, commercial and recreational activities are minimized</p> <p>Use temporary closure authority of Food, Conservation, and Energy Act of 2008 SEC8104 to accommodate traditional use of TCPs whenever practical</p> <p>Consultation should be conducted for all proposed special uses permits within TCPs.</p> <p>The Forest should conduct ethnographic/ethnohistoric research to identify and evaluate TCPs</p> <p>Mining activities are generally inconsistent with the desired conditions for Traditional Cultural properties.</p> <p>Commercial development of TCPs are generally inconsistent with desired conditions.</p> <p>Use Food, Conservation, and Energy Act of 2008 SEC 8106 to exempt confidential information</p>	<p>Unknown at this time. Pending tribal consultation. Would be addressed in project specific 106 clearances as specified in Heritage Specialist report.</p>

<b>Heritage Resources</b>			
<b>Current Plan DC (Goals)]</b>	<b>Current Plan Management Direction)</b>	<b>Draft Plan Management Direction</b>	<b>Consistent? Why or Why Not?</b>
		from Freedom of Information Act requests	
		Traditional and Cultural Uses:	
		<p>Forest leadership recognizes that all lands managed by the Forest were once tribal lands. Traditional uses such as the collection of medicinal plants and wild plant foods are recognized as important uses.</p> <p>Traditionally used resources are not depleted and are available for future generations. Tribal members have access to sacred sites for individual and group prayer and traditional ceremonies and rituals. There are opportunities for solitude and privacy at ceremonial sites.</p> <p>The Forest provides a setting for the education of tribal youth in culture, history, and land stewardship and for the exchange of information between tribal elders and youth.</p> <p>Kaibab Land Management Plan working DRAFT 59</p>	Consistent. Specific resource issues would be addressed in future project specific Section 106 reports.
		<p>Activities and uses should be administered in a manner that is sensitive to traditional American Indian beliefs and cultural practices.</p> <p>Use temporary closure authority of Food, Conservation, and Energy Act of 2008 SEC8104 to accommodate traditional use.</p> <p>Tribal traditional use of medicinal plants and</p>	Consistent contingent upon future monitoring of traditionally important plants

<b>Heritage Resources</b>			
<b>Current Plan DC (Goals)]</b>	<b>Current Plan Management Direction)</b>	<b>Draft Plan Management Direction</b>	<b>Consistent? Why or Why Not?</b>
		<p>other botanical resources should take priority over applications for commercial harvesting. Important traditional use resources should be monitored to ensure healthy sustainable plant populations available for traditional uses</p>	
		Forestry and Forest Products	
		<p>Bill Wouldiams Mountain *Note: Outside of analysis area)</p> <p>Risk of substantial damage to municipal water supply, infrastructure, water quality, visual quality, and cultural integrity (e. g. tribes and local communities) is very low.</p> <p>Risk of damage to electronic sites is low and communications related to the site is uninterrupted.</p> <p>Bill Wouldiams Mountain provides quality habitat for Arizona Bugbane, Mexican spotted owls, and culturally important plants.</p> <p>Kaibab Land Management Plan working DRAFT 84</p>	N/A Outside 4FRI Project
		<p>GL: The existing term permit for the Elk Ridge Ski Area on Bill Wouldiams Mountain should be restricted to the existing established permit area.</p> <p>High use roads within the Municipal watershed should be maintained to prevent erosion and sedimentation.</p>	N/A Outside 4FRI Project



<b>Heritage Resources</b>			
<b>Current Plan DC (Goals)]</b>	<b>Current Plan Management Direction)</b>	<b>Draft Plan Management Direction</b>	<b>Consistent? Why or Why Not?</b>
		Commercial plant collection within the Bill Wouldiams LMA should not be permitted.  Kaibab Land Management Plan working DRAFT 85	
		Standards: Artificial snow making within the Bill Wouldiams LMA would not be permitted.  Kaibab Land Management Plan working DRAFT 85	N/A Outside 4FRI Project
		Objective: Implement a fuels reduction project within 5 years of plan approval.	N/A Outside 4FRI Area
		Red Butte Land Management Area	Need clarification on whether Red Butte is outside EIS area. Maps on Public website indicate Red Butte within Analysis area. If so, not currently addressed in specialist report and no consultation at this time.
		DC: The environment is essentially un-modified. The naturally occurring scenery dominates the	

<b>Heritage Resources</b>			
<b>Current Plan DC (Goals)]</b>	<b>Current Plan Management Direction)</b>	<b>Draft Plan Management Direction</b>	<b>Consistent? Why or Why Not?</b>
		<p>landscape.</p> <p>DC: Desired conditions for this area would be consistent with its management as a Traditional Cultural Property. This section under development)</p> <p>Kaibab Land Management Plan working DRAFT 86</p>	
		<p>Mitigation measures should be used to avoid conflicts with ceremonial activities.</p> <p>Temporary closures should be implemented upon request by the tribes to provide privacy for traditional activities.</p> <p>The helipad on Red Butte should only be used for administrative use.</p> <p>Commercial use such as outfitter guides, plant collection, and fuel wood in the Red Butte LMA should not be permitted.</p> <p>Kaibab Land Management Plan working DRAFT 86</p>	
		<p>MA: Because the Forest Service does not have the authority to regulate air traffic (flights), it is important that that the Kaibab works closely with and educate potential operators about the impacts. When temporary closures are in place</p>	

<b>Heritage Resources</b>			
<b>Current Plan DC (Goals)]</b>	<b>Current Plan Management Direction)</b>	<b>Draft Plan Management Direction</b>	<b>Consistent? Why or Why Not?</b>
		for traditional/ceremonial use, request air operators to avoid the area.	
		Buffalo Ranch - N/A - North Kaibab RD  Kaibab Land Management Plan working DRAFT 87	
	GA 2, 10, 13 Standard: 3. Identify heritage properties through on-the ground survey or record search that may be affected by resource operations or improvements; evaluate these properties for their eligibility for inclusion in the National Register of Historic Places. When eligible properties are found, apply criteria of effect as specified in the applicable protocol. Corrected 06/08 Kaibab NF Land Management Plan, p. 38		Consistent: Required by Law
	GA 2, 10, 13: Standard: 6. Consult with appropriate tribal, state, county, or local government agencies regarding existing conditions, desired conditions, management objectives, proposed intervention and resource improvement actions for the landscape.  Corrected 06/08 Kaibab NF Land		Consistent: Standard Operating Procedures. Identified in 4FRI Section 106 clearance and EIS. Required by law.

<b>Heritage Resources</b>			
<b>Current Plan DC (Goals)]</b>	<b>Current Plan Management Direction)</b>	<b>Draft Plan Management Direction</b>	<b>Consistent? Why or Why Not?</b>
	Management Plan, p. 38		
	<p>GA 2, 10, 13: Standard:7. Formulate, design, and propose resource operations or improvements that contribute, over time, to the achievement or maintenance of desired resource or ecological conditions in landscapes. Consult when applicable:</p> <p>c. Formal Consultation Reports. i. Tribal, state, and local government input.</p> <p>Corrected 06/08 Kaibab NF Land Management Plan, p. 38</p>		Consistent: 4FRI would use adaptive management and tribal consultations to refine management direction when necessary.
	<p>GA 2, 10, 13: Standard 8. Consult with appropriate Indian tribes and individuals regarding the formulation and design of on-the-ground resource operations, research activities, or improvements in areas with known or suspected socio-cultural or religious significance.</p> <p>Corrected 06/08 Kaibab NF Land Management Plan, p. 38</p>		Consistent
	Guidelines for Heritage Resource Operations:		

<b>Heritage Resources</b>			
<b>Current Plan DC (Goals)]</b>	<b>Current Plan Management Direction)</b>	<b>Draft Plan Management Direction</b>	<b>Consistent? Why or Why Not?</b>
	1. Revise heritage overviews to meet specific management needs.		N/A under 4FRI project proposal
	2. In consultation with the SHPO and the Advisory Council on Historic Preservation, manage heritage resource sites during the conduct of undertakings to achieve a "No Effect" finding, when possible. When sites would be affected, consult on appropriate treatment measures.		Consistent, No adverse under Appendix J
	3. Provide necessary site protection in advance of undertakings. Utilize rejection, denial, redesign or relocation of proposed resource operations to provide in-place preservation of heritage resources in the following circumstances: a. Present methods of investigation and data recovery cannot realize the current research potential of the sites. b. Sites are likely to have greater importance for addressing future research questions than current ones.  c. Heritage values derive primarily from qualities other than research potential, and those values are fully realized only when the heritage remains		Consistent: To be specified in project specific Section 106

<b>Heritage Resources</b>			
<b>Current Plan DC (Goals)]</b>	<b>Current Plan Management Direction)</b>	<b>Draft Plan Management Direction</b>	<b>Consistent? Why or Why Not?</b>
	<p>exist undisturbed in their original context (e. g. , association with significant historical persons or events, special ethnic or religious values, or unique interpretive values).</p> <p>d. Heritage resources are important primarily for the quality of their architecture and the integrity of their setting.</p> <p>In place preservation is necessary to accomplish the objectives of the State Historic Preservation Plan. In-place preservation is necessary to accomplish the objectives of the State Historic Preservation Plan.</p> <p>f. Site densities make data recovery economically infeasible, or require unattainable operating conditions.</p> <p>Amended 11/04 Kaibab NF Land Management Plan, p. 40-41</p>		
	<p>4. Include site protection and liability clauses in Forest contracts, permits and leases that are likely to affect heritage resources.</p>		<p>Consistent: Included in KNF permits and contracts, need to confirm for Coconino for cross Forest work</p>

<b>Heritage Resources</b>			
<b>Current Plan DC (Goals)]</b>	<b>Current Plan Management Direction)</b>	<b>Draft Plan Management Direction</b>	<b>Consistent? Why or Why Not?</b>
	Amended 11/04 Kaibab NF Land Management Plan, p. 41		
	5. Consult with concerned Indian tribes and individuals for advice and input regarding heritage resource site data recovery programs.  Amended 11/04 Kaibab NF Land Management Plan, p. 41		Consistent; Kaibab consults on a regular basis throughout the year.
	6. Base the frequency and priority for site inspection and monitoring on its relative susceptibility to rapid deterioration or human disturbance. Monitor sites listed and nominated to the National Register biannually. Inspect eligible sites periodically.  Amended 11/04 Kaibab NF Land Management Plan, p. 41		N/A not project specific
	7. Use signing, fencing, administrative closure, increased patrolling, investigations, interpretive programs, stabilization and data recovery, as appropriate, to protect heritage resources.		Consistent: Adaptive management would address these issues.

<b>Heritage Resources</b>			
<b>Current Plan DC (Goals)]</b>	<b>Current Plan Management Direction)</b>	<b>Draft Plan Management Direction</b>	<b>Consistent? Why or Why Not?</b>
	Kaibab NF Land Management Plan Amended 11/04 p. 41		
	GA 1: Western Wouldiams Woodland:		
	EC: The area is known to have high densities of heritage resource sites, however little is known of their significance. Stretches of the Beale Wagon Road Historic Trail and Historic Route 66, a National Register site, cross portions of this management area.		
	<p>Management Direction for Recreation Resources: Provide extensive management of recreation, visual and heritage resources. Make periodic inventories and surveys of recreation, visual, and cultural opportunities and resources.</p> <p>Provide integration and coordination for recreation, visual, and heritage resources in land and resource management planning. Provide modest level of administration, operation, and maintenance of recreation sites and facilities.</p> <p>Provide off-road vehicle area closures to maintain recreation, visual, heritage, soil, water,</p>		Consistent: Addressed in Section 106



<b>Heritage Resources</b>			
<b>Current Plan DC (Goals)]</b>	<b>Current Plan Management Direction)</b>	<b>Draft Plan Management Direction</b>	<b>Consistent? Why or Why Not?</b>
	wildlife, and other resource values.  Kaibab NF Land Management Plan Corrected 06/08 p. 49		
	GA 3 – Northern Woldiams Woodland:		
	EC: This area has high densities of heritage resource sites, however large portions of the management area have not been surveyed. Portions of the Beale Wagon Road Historic Trail cross the unit.  Corrected 06/08 Kaibab NF Land Management Plan, p. 52		Consistent: Addressed in Section 106
	Management Direction for Recreation Resources: Provide extensive management of recreation, visual, and heritage resources. Make periodic inventories and surveys of recreation, visual, and heritage resources. Provide integration of recreation, visuals, and heritage resources in project design and management planning.  Corrected 06/08 Kaibab NF Land Management Plan, p. 52		Consistent: Addressed in Section 106

<b>Heritage Resources</b>			
<b>Current Plan DC (Goals)]</b>	<b>Current Plan Management Direction)</b>	<b>Draft Plan Management Direction</b>	<b>Consistent? Why or Why Not?</b>
	<p>Provide off-road vehicle area closures and manage ORV use that occurs on other areas to maintain recreation, visual, heritage, soil, water, wildlife, and other resource values.</p> <p>Corrected 06/08 Kaibab NF Land Management Plan, p. 53</p>		
	<p>Geographic Area 8 – Southern Tusayan Woodland</p> <p>EC: The area contains sensitive travel ways such as Highway 64, and the Arizona Trail, important scenic features such as Red Butte, and recreation resources such as the historic Anita Station and Moqui Stage Station.</p> <p>Heritage resource site densities are generally high; however large portions of the unit have not been inventoried. Relatively little is known about the distribution and significance of heritage resource sites in the area, however, it is known historically as a winter use area for the Havasupai people.</p> <p>Kaibab NF Land Management Plan</p>		

<b>Heritage Resources</b>			
<b>Current Plan DC (Goals)]</b>	<b>Current Plan Management Direction)</b>	<b>Draft Plan Management Direction</b>	<b>Consistent? Why or Why Not?</b>
	Corrected 06/08, p. 55		
	<p>Management Direction for Recreation Resources: Provide extensive management of recreation, visual and heritage resources. Make periodic inventories and surveys of recreation, visual, and cultural opportunities and resources.</p> <p>Provide integration and coordination for recreation, visual, and heritage resources in land and resource management planning.</p> <p>Provide off-road vehicle area closures to maintain recreation, visual, heritage, soil, water, wildlife, and other resource values.</p> <p>Amended 11/04 Kaibab NF Land Management Plan, p. 56</p>		Consistent: Addressed in Section 106
	<p>GA 9 – Upper Basin</p> <p>EC: Heritage resource site densities are generally high, however large portions of the unit have not been inventoried. Little is known about the distribution and significance of heritage resource</p>		

<b>Heritage Resources</b>			
<b>Current Plan DC (Goals)]</b>	<b>Current Plan Management Direction)</b>	<b>Draft Plan Management Direction</b>	<b>Consistent? Why or Why Not?</b>
	<p>sites in the management area.</p> <p>Kaibab NF Land Management Plan Corrected 06/08 , p. 59</p>		
	<p>Management Direction for Recreation Resources: Provide extensive management of recreation, visual, and heritage resources. Make periodic inventories and surveys of recreation, visual, and heritage resources. Provide for nomination of eligible properties to the National Register of Historic Places. Provide integration of recreation, visuals, and heritage resources in project design and management planning.</p> <p>Provide other off-road vehicle area closures and manage ORV use that occurs on other areas to maintain recreation, visual, heritage, soil, water, wildlife, and other resource value.</p> <p>Kaibab NF Land Management Plan Corrected 06/08 , p. 59</p>		Consistent: Addressed in Section 106
	<p>Work Activity Standards and Guidelines for MA 1, 3, 8,9, 12, 16 -</p>		

<b>Heritage Resources</b>			
<b>Current Plan DC (Goals)]</b>	<b>Current Plan Management Direction)</b>	<b>Draft Plan Management Direction</b>	<b>Consistent? Why or Why Not?</b>
	They do not apply to GAs in the suitable timber base, wilderness, special areas, or developed recreation areas;		
	<p>Recreation Planning:</p> <p>3. Manage the Beale Wagon Road Historic Trail, Overland Road Historic Trail and Moqui Stage segment of the Arizona Trail corridors on National Forest System lands and associated historic sites and side trails for their historic significance. Use of motorized vehicles on any portion of the routes not already designated for general vehicle travel is prohibited. Emphasize foot and horse travel recreation activities on intact portions of the routes.</p> <p>Kaibab NF Land Management Plan Corrected 06/08, pp. 69-70</p>		N/A not part of proposed action
	<p>Heritage Resources:</p> <p>1. Comply with various legal mandates related to the management of heritage resources, including the Programmatic Agreement</p>		Consistent

<b>Heritage Resources</b>			
<b>Current Plan DC (Goals)]</b>	<b>Current Plan Management Direction)</b>	<b>Draft Plan Management Direction</b>	<b>Consistent? Why or Why Not?</b>
	<p>Regarding Cultural Property Protection and Responsibilities.</p> <p>2. Coordinate all phases of heritage resource management with planning activities of the State Historic Preservation Officer (SHPO) and State Archeologist, and with other State and Federal agencies. Coordinating activities include: consultation and meetings; sharing of data, plans, reports, interpretations and other documents; coordination on National Register nominations, and; participation in the State heritage resources planning process.</p> <p>3. Consult with Indian tribes to obtain tribal advice and input in the development and implementation of projects proposed in areas of known socio-cultural or religious significance.</p> <p>Amended 11/04 Kaibab NF Land Management Plan, p. 70</p>		
	Inventory		For all below. This is program wide direction and not project specific.

<b>Heritage Resources</b>			
<b>Current Plan DC (Goals)]</b>	<b>Current Plan Management Direction)</b>	<b>Draft Plan Management Direction</b>	<b>Consistent? Why or Why Not?</b>
	<p>Heritage Resources:</p> <ol style="list-style-type: none"> <li>1. Heritage Resource overviews have been completed for the Forest. Review and update overviews as new information becomes available or to meet specific management or planning needs.</li>   <li>2. Conduct surveys and evaluate impacts of specific undertakings in project-level analyses in accordance with 36 CFR 800 and the Programmatic Agreement. In consultation with the SHPO and the Advisory Council on Historic Preservation, manage heritage resource sites during the conduct of undertakings to achieve a "No Effect" or "No Adverse Effect" finding when possible. When sites would be affected, consult on appropriate treatment measures. Provide for heritage resource survey and related site inventory, preliminary evaluation and marking in advance of undertakings, with preference given to site avoidance over other methods of site protection. Design inventory standards according to parameters</li> </ol>		<p>Most is required by law/regulation/policy.</p>

<b>Heritage Resources</b>			
<b>Current Plan DC (Goals)]</b>	<b>Current Plan Management Direction)</b>	<b>Draft Plan Management Direction</b>	<b>Consistent? Why or Why Not?</b>
	<p>specified in the Programmatic Agreement and Forest Service Handbook.</p> <p>3. Consider rejection, denial, redesign or relocation of proposed resource uses or projects to allow in-place preservation of heritage resources in the following circumstances:</p> <p>(a) Present methods of investigation and data recovery cannot realize the current research potential of the sites.</p> <p>(b) Sites are likely to have greater importance for addressing future research questions than current ones.</p> <p>(c) Cultural values derive primarily from qualities other than research potential, and those values are fully realized only when the cultural remains exist undisturbed in their original context (e. g. , association with significant historical persons or events, special ethnic or religious values, or unique interpretive values).</p> <p>(d) Heritage Resources are important</p>		



<b>Heritage Resources</b>			
<b>Current Plan DC (Goals)]</b>	<b>Current Plan Management Direction)</b>	<b>Draft Plan Management Direction</b>	<b>Consistent? Why or Why Not?</b>
	<p>primarily for the quality of their architecture and the integrity of their setting.</p> <p>(e) Preservation in-place is necessary to accomplish the objectives of the State Historic Preservation Plan.</p> <p>(f) Site densities make data recovery economically infeasible, or require unattainable operating conditions.</p> <p>Initiate a program of heritage resource survey of areas not scheduled for ground disturbing activities. Preference shall be given to areas with known or inferred high site densities, those expected to yield important information regarding the historic or prehistoric occupations of the Forest and areas of high risk for vandalism or natural destruction of heritage resource properties. At a minimum, survey of such areas shall be conducted in conjunction with annual update training for para-professional archeologists.</p> <p>5. Participate in the development and implementation of a Cultural Resources</p>		

<b>Heritage Resources</b>			
<b>Current Plan DC (Goals)]</b>	<b>Current Plan Management Direction)</b>	<b>Draft Plan Management Direction</b>	<b>Consistent? Why or Why Not?</b>
	Allocation Plan. Amended 11/04 Kaibab NF Land Management Plan, pp. 71-72		
	<p>Heritage Resource Evaluation and Assessments</p> <p>Evaluate and nominate sites to the National Register of Historic Places based on the criteria, frequency, schedule and priorities established in the Forest overview documents.</p> <p>Heritage Resource Protection and Enhancement</p> <p>Include site protection and liability clauses in Forest contracts, permits and leases that have the potential to affect heritage resources. Monitor sites within undertakings to determine the effectiveness of protection measures and the need for site stabilization, damage assessment and liability. At a minimum, inspect and document the findings of at least one site, and not less than 20 percent of the sites, designated for protection within each undertaking. Inspect all sites listed in, nominated to or formally determined eligible for the National Register within each</p>		

<b>Heritage Resources</b>			
<b>Current Plan DC (Goals)]</b>	<b>Current Plan Management Direction)</b>	<b>Draft Plan Management Direction</b>	<b>Consistent? Why or Why Not?</b>
	<p>undertaking. Follow damage assessment procedures specified in the Programmatic Agreement and Forest Service Handbook.</p> <p>Outside the area of undertakings, inspect sites to assess the impact of vandalism, natural destruction, and determine the need for site stabilization. The frequency and priority for site inspection and monitoring shall be based on its relative susceptibility to rapid deterioration or human disturbance. All sites listed in or nominated to the National Register shall be inspected biannually. Inspect eligible sites periodically. Include a priority listing of sites requiring stabilization in the Cultural Resource Assessment Plan based on criteria established in the Programmatic Agreement.</p> <p>Use signing, fencing, administrative closure, increased patrolling, investigations, interpretive programs, stabilization and data recovery, as appropriate, for site protective</p>		

<b>Heritage Resources</b>			
<b>Current Plan DC (Goals)]</b>	<b>Current Plan Management Direction)</b>	<b>Draft Plan Management Direction</b>	<b>Consistent? Why or Why Not?</b>
	<p>measures. Consult with Indian tribes to obtain tribal advice and input in the development and implementation of heritage resource site data recovery programs.</p> <p>Amended 11/04 Kaibab NF Land Management Plan, pp. 72-73</p>		
	<p>Land Use Zone 21 – Existing Developed Recreation Sites: Inventory</p> <p>Conduct heritage resource site surveys and evaluate impacts of specific undertakings in project-level analyses in accordance with 36 CFR 800 and the Programmatic Agreement</p> <p>Corrected 06/08 Kaibab NF Land Management Plan, p. 108</p>		
	<p>Land Use Zone 22 – Proposed developed Recreation Sites: N/A</p>		

**Appendix B. 4FRI Heritage Survey Strategy**

**Appendix C. R3 Programmatic Agreement**