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Introduction

The United States and federally recognized American Indian Tribes have a special and unique government-to-government relationship of one sovereign nation to another. The Federal Government has a trust responsibility (duty) to each tribal government based on the U.S. Constitution, treaties and statutes. The federal trust duty imposes fiduciary standards on the conduct of executive agencies. Therefore, the Forest Service has certain legal responsibilities to American Indian Tribes. These legal responsibilities are clarified in statutes, executive orders, and case law enacted and interpreted for the protection and benefit of federally recognized American Indian Tribes. In meeting these responsibilities the Forest Service must administer their programs in a manner that does not interfere with tribal rights and resources. When American Indian Tribes ceded lands to the United States government, rights and privileges to off-reservation lands (including the lands of the Apache-Sitgreaves NFs) were reserved for their Tribal members.

Forest managers are required to consult Tribes when proposed policies or management actions may affect their interests. The following American Indian tribes and communities are known to have cultural ties with the lands of the Apache-Sitgreaves National Forests based on current and past consultation: Fort McDowell Yavapai Nation, Hopi Tribe, Navajo Nation, Pueblo of Zuni, San Carlos Apache Tribe, Tonto Apache Tribe, White Mountain Apache Tribe, Yavapai-Apache Tribe, Yavapai-Prescott Indian Tribe, and the Ramah Chapter House of the Navajo Nation. Each tribe has their own history, traditions, and relationship to the land and other groups. The ASNF shares a common boundary of 174 miles with the White Mountain Apache Tribe and San Carlos Apache Tribe. The lands and resources of the ASNF have been used and continue to be used by many of the tribes for a variety of traditional cultural and religious activities. Consultations with each tribe can identify the tribe's historic and present day traditional use areas and sacred sites.

This report evaluates and discloses the potential environmental consequences on the American Indian Rights and Interests that may result with the adoption of a revised land management plan. It examines, four different alternatives for revising the 1987 Apache-Sitgreaves NFs land management plan (1987 forest plan).

Relevant Laws, Regulations, and Policy that Apply

Important laws and their accompanying regulations and Executive Orders that affect the Forest Services' responsibilities to fulfill the government's Federal Trust Duty and manage traditionally used areas and resources by American Indians include the following:

- **National Historic Preservation Act (NHPA) of 1966 as amended, (16 U.S.C. 470)**

Sets forth the Federal government's policy to preserve and protect historical and cultural resources. This Act states that the historical and cultural foundations of the Nation should be preserved as a living part of the Nation's community life and development in order to give a sense of orientation to the American people. Directs all Federal agencies to take into account the effects of their undertakings (actions, financial support, and authorizations) on properties included in or eligible for the National Register. Establishes inventory, nomination, protection, and preservation responsibilities for federally owned historic properties. As amended extends the policy in the Historic Sites Act to State and local historical sites as well as those of national significance, expands the National Register of Historic Places, establishes the Advisory Council on Historic Preservation and the State Historic Preservation Officers, and requires agencies to designate Federal

Preservation Officers. The 1992 amendment strengthens the participation afforded to Tribes and Native Hawaiians. Specifically, the amendments identified traditional cultural properties as among those properties eligible for protection under NHPA; require agency officials to consult with Tribes concerning the effects of undertakings on historic properties of traditional and cultural importance to Tribes; and clarified Tribes' authority to assume the functions of State Historic Preservation Officers.

- **Archaeological Resources Protection Act of 1979 as amended (ARPA) (16 U.S.C. 470aa et seq).**

This act establishes a permit process for the excavation or removal of any archeological resources from on Federal lands. If a permit issued may result in harm to, disturbance to, or destruction of, any religious or cultural site, as determined by the Federal land manager, the Federal land manager shall notify any federally recognized Tribe which may consider the site as having religious or cultural importance. The Forest Service can, but is not required to, do the same in regards to unrecognized Tribes (see 36 DFR 296.7). This law also establishes criminal and civil penalties for illegally excavating, removing, damaging, or defacing any archeological resources on Federal lands. It further establishes provisions for the confidentiality of archeological resources on public lands.

- **American Indian Religious Freedom Act (AIRFA) of 1978, as amended (42 U.S.C. 1996)**

Protects and preserves for American Indians their inherent right of freedom to believe, express, and exercise the traditional religions of the American Indian, Eskimo, Aleut, and Native Hawaiians, including but not limited to access to sites, use, and possession of sacred objects and the freedom to worship through ceremonial and traditional rites.

- **Native American Graves Protection and Repatriation Act of 1990 (NAGPRA) (25 U.S.C. 3001)**

Provides a process for Federal agencies to return Native American human remains, funerary objects and sacred objects to the ancestors and appropriate Native American tribe. Includes provisions for the intentional excavation and unanticipated discovery of Native American cultural items on Federal and Tribal lands, and penalties for noncompliance and illegal trafficking. The act requires agencies to identify holdings of such remains and objects and to work with appropriate Native American groups toward their repatriation.

- **Federal Land Policy and Management Act of 1976 (FLPMA) (43 U.S.C. 1701)**

Section 202(b) provides that: *In the development and revision of land use plans, the Secretary of Agriculture shall coordinate land use plans for lands in the National Forest System with the land use planning and management programs of and for Indian tribes by, among other things, considering the policies of approved tribal land resource management programs* “ (42 U.S.C. 1712)

Section 202 (c)(9)directs the Secretary to coordinate land use planning with Tribes, to the extent the Secretary finds practical, by keeping apprised of tribal land use plans; ensuring that consideration is given to those tribal plans that are germane in the development of land use plans for public lands; assisting in resolving inconsistencies between Federal and tribal plans; and providing for meaningful involvement in the development of land use programs, land use regulations, and land use decisions for public lands.

- **National Forest Management Act of 1976 (NFMA) (16 U.S.C. 1701)**

The National Forest Management Act requires the Secretary of Agriculture to assess forest lands, develop a management program based on multiple-use, sustained-yield principles, and implement a resource management plan for each unit of the National Forest System. It is the primary statute governing the administration of National Forests. It directs the Secretary of Agriculture to coordinate National Forest System land use plans with the land use planning and management programs of and for Indian tribes by considering the policies of approved tribal integrated resource management programs..

In the 1982 planning regulations, the requirements for interacting with tribes are set out in 219.1: Purpose and Principles.

(b)(6) Protection and preservation of the inherent right of freedom of American Indians to believe, express, and exercise their traditional religions.

(b)(9) Coordination with land and resource management planning efforts of other Federal agencies, State and local governments, and Indian tribes.

- **National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321 et seq)**

Directs all Federal agencies to consider and report the potential environmental impacts of proposed Federal actions, and established the Council on Environmental Quality. It also requires Federal agencies to invite Indian tribes to participate in the scoping process for projects and activities that affect tribes requiring an environmental impact statement.

- **Food, Conservation & Energy Act of 2008 (2008 Farm Bill) (Public Law 110-246 , 122 Stat.1651) Title VIII – Forestry, Subtitle B**

Subtitle B: Cultural and Heritage Cooperation Authority. Authorizes the Secretary of Agriculture to provide forest products to Indian tribes for traditional and cultural purposes; to protect the confidentiality of certain information, including information that is culturally sensitive to Indian tribes; to utilize National Forest System land for the reburial of human remains and cultural items, including human remains and cultural items repatriated under the Native American Graves Protection and Repatriation Act; prevent the unauthorized disclosure of information regarding human remains or cultural items reburied on National Forest System land; to ensure access to National Forest System land, to the maximum extent practicable, by Indians and Indian tribes for traditional and cultural purposes; to increase the availability of Forest Service programs and resources to Indian tribes in support of the policy of the United States to promote tribal sovereignty and self-determination; and to strengthen support for the policy of the United States of protecting and preserving the traditional, cultural, and ceremonial rites and practices of Indian tribes, in accordance with the American Indian Religious Freedom Act (42 U.S.C. 1996).

- **Tribal Forest Protection Act of 2004 (Public Law 108-278).**
 Authorizes the Secretary of Agriculture and the Secretary of the Interior to enter into an agreement or contract with Indian tribes meeting certain criteria to carry out projects to protect Indian forest land.
- **Religious Freedom Restoration Act (RIFRA) (42 U.S.C. § 2000bb),**
 Government shall not substantially burden a person’s exercise of religion even if the burden results from a rule of general applicability, except when the government demonstrates that application of the burden to the person is in furtherance of a compelling governmental interest; and is the least restrictive means of furthering that compelling governmental interest.
- **Executive Memorandum (April 29,1994) Government-to-Government Relations with Native American Tribal Governments.** (59 Fed. Reg. 22951)
- Directs executive departments and agencies that undertake activities affecting Native American Tribal rights or trust resources, such activities should be implemented in a knowledgeable, sensitive manner respectful of Tribal sovereignty.
- **Executive Order 12898 Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, (1994)**
 Addresses Environmental Justice in minority and low-income populations and is designed to focus Federal attention on the environmental and human health conditions in minority communities and low-income communities with the goal of achieving environmental justice. The order is also intended to promote nondiscrimination in Federal programs substantially affecting human health and the environment, and to provide minority communities and low-income communities’ access to public information on, and an opportunity for public participation in, matters relating to human health or the environment.
- **Executive Order 13007, Indian Sacred Sites (24 May 1996)**
 Requires each executive branch agency with statutory or administrative responsibility for the management of Federal lands, to the extent practicable, permitted by law, and not clearly inconsistent with essential agency functions, to accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners and to avoid adversely affecting the physical integrity of such sacred sites. Where appropriate, agencies shall maintain the confidentiality of sacred sites.
- **Executive Order 13175, Consultation and Coordination with Indian Tribal Governments (November 2000)**
 Promotes regular and meaningful consultation and collaboration with tribal officials in the development of Federal policies that have tribal implications, strengthens the United States government-to-government relationships with Indian tribes, and reduces the imposition of unfunded mandates upon Indian tribes. Although not a legal requirement, Executive Order 13175 calls for early consultation with tribes in the development of regulatory policies that have tribal implications.

- **43 CFR 10 Native American Graves Protection and Repatriation Act Regulations**
Implements the provisions of the Native American Graves Protection and Repatriation Act of 1990.
- **36 CFR 60 National Register of Historic Places**
Sets forth the procedural requirements for listing properties on the National Register.
- **36 CFR 63 Determinations of Eligibility for Inclusion in the National Register of Historic Places**
Developed to assist agencies in identifying and evaluating the eligibility of properties for inclusion in the National Register, and to explain how to request determinations of eligibility.
- **36 CFR 296 Protection of Archaeological Resources**
Implements the provisions of the Archaeological Resources Protection Act.
- **36 CFR 800 Protection of Historic Properties**
Sets forth the provisions for the administration of the National Historic Preservation Act.

The Forest Service Manual 1500 External Relations, Chapter 1563 American Indian and Alaska Native Relations provides the basis for specific Forest Service policies, objectives and guidelines for tribal relations. Additional guidelines and procedures are found in Forest Service Handbook (FSH) 1509.13 American Indian and Alaska Native Relations Handbook. Policies and guidelines regarding timber and special forest products are found in Forest Service Timber Sale Preparation Handbook FSH 2409.18-2011-1 Chapter 80 Uses of Timber Other than Commercial Timber Sales Special Forest Products Forest Botanical Products.

Methodology and Analysis Process

The analysis includes a review of the current conditions, alternatives and an assessment of the potential impacts each alternative could have on Tribal access and use of the forests. The American Rights and Interests area of potential effect includes the lands and resources of the ASNF and the potential effect to Tribal resources and/or rights within lands adjacent to the forests. Limited information exists on TCP's and Sacred Sites on the ASNF. An ethnographic overview of the ASNF has not been conducted. The existing condition was determined by reviewing the National Register of Historic Places, a review of the forests' heritage site and inventory files, cultural resource management overviews, ethnographic inventory overviews, articles, books, and the heritage Geographic Information System (GIS) database, and prior Tribal responses from consultation. A large amount of the descriptive information about each of the Tribes was directly taken from the background research for the Ethnographic Resource Inventory for the Rodeo-Chediski burn area that was completed by SWCA for the ASNF (Senior, L 2003: personal communication; Senior 2005). A small amount of supplemental information was added for each tribe.

The American Indian Religious Freedom Act declares that the policies of the United States shall preserve and protect the American Indian's Freedom to practice their religion. This includes the

right to have access to religious sites, to use and retain sacred objects, and to conduct ceremonials and practice traditional rites on the forests. The Religious Freedom Restoration Act (RIFRA) states that the government shall not substantially burden a person's exercise of religion even if the burden results from a rule of general applicability, except when the government demonstrates that application of the burden to the person is in furtherance of a compelling governmental interest. To determine how the alternatives would affect the use and access to religious sites (1) an inventory of the known Traditional Cultural Properties (TCPs), Sacred Sites were identified through known and accessible ethnographic reports, archaeological reports, and tribal consultation responses (ASNF records n.d.; Ferguson 2007, Senior,2005); and (2) a review of the past and current accommodations to Tribes to access and use TCP's, Sacred Sites and resources for ceremonial purposes was completed .

Sacred sites are defined in E.O. 13007 as "any specific, discrete, narrowly delineated location on Federal land that is identified by an Indian tribe, or Indian individual determined to be an appropriately authoritative representative of an Indian religion, as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion; provided that the tribe or appropriately authoritative representative of an Indian religion has informed the agency of the existence of such a site. The E.O. directs the Forest Service and other federal land management agencies, to the extent practicable, permitted by law, and not clearly inconsistent with essential agency functions: to accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners; to avoid adversely affecting the physical integrity of such sacred sites; and to maintain the confidentiality of Sacred Sites where appropriate.

Traditional Cultural Properties (TCP) are defined in National Register Bulletin 38 as properties associated "with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community": TCPs can range from structures, mountains and other landforms to plant gathering locations to communities. These areas are considered historic properties that may be eligible to the National Register of Historic Places. Section 106 of NHPA requires that federal agencies take into consideration the effects of their undertakings on historic properties, which are defined in 36 CFR 800.16(1) as any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register of Historic Places (NRHP). The "Section 106 review process," entails five steps: 1) determining whether the proposed action is an undertaking that has the potential to affect historic properties; 2) identifying historic properties; 3) evaluating the significance of historic properties; 4) assessing effects; and 5) consulting with interested parties (including Native People), the State Historic Preservation Officer (SHPO), and the Advisory Council on Historic Preservation (ACHP). Section 110 (Federal Agencies' Responsibility to Preserve and Use Historic Properties) of the NHPA provides direction to federal agencies to establish programs and activities to identify and nominate historic properties to the NRHP and to consult with tribes. The Southwestern Region has a programmatic agreement with the ACHP and SHPOs that stipulates the Forest Service's responsibilities for complying with NHPA.

Under Section 106 regulations an adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National

Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative. Specific examples of adverse effects cited in statute include (36 CFR 800.5):

- Physical destruction of or damage to all or part of the property.
- Removal of the property from its historic location.
- Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance.
- Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features.

A review of known existing tribal rights (water, hunting, gathering rights) was conducted to determine how the alternatives would potentially affect tribal rights. There are no known reserved hunting and gathering rights stated in treaties that involve lands of the ASNF. Therefore, potential impacts to hunting and gathering rights were not analyzed. Affects to tribal water rights were analyzed by determining if the alternatives have the potential to affect surface and ground water resources that are associated with tribal water rights.

Consultation letters were sent to the nine Tribal Governments regarding the plan revision: Fort McDowell Yavapai Nation, Hopi Tribe, Navajo Nation, Pueblo of Zuni, San Carlos Apache Tribe, Tonto Apache Tribe, White Mountain Apache Tribe, Yavapai-Apache Tribe, Yavapai-Prescott Indian Tribe, and the Ramah Chapter House of the Navajo Nation. Consultation meetings were held with the San Carlos Apache Tribe (August and November 2006) White Mountain Apache Tribal Historic Preservation Office (August 2006, March 2007, April 2010), Pueblo of Zuni Tribal Historic Preservation Office and Cultural Resource Advisory Team (August 2006, September 2008, July 2011), Hopi Tribe Cultural Preservation Office and Cultural Resource Advisory Team (August 2006, November 2009), and Navajo Nation Traditional Cultural Preservation Office (August 2006, September 2008, December 2009). Prior to 2012, a copy of the working draft forest plan was provided to the San Carlos Apache Tribe's Cultural Preservation Office, White Mountain Apache Tribe, Pueblo of Zuni and Hopi Tribe for review and comment. In May of 2012, nine tribal governments were provided copies of the current working draft forest plan and the working draft environmental impact statement for review and comment.

Assumptions

In the analysis for this resource, the following assumptions have been made:

- The land management plan provides a programmatic framework for future site-specific actions.
- The plan decisions (desired conditions, objectives, standards, guidelines, special areas, suitability, monitoring) will be followed when planning or implementing site-specific projects and activities.
- Analysis and impacts to American Indian Rights and Interests from site-specific actions will be addressed at the time site-specific decisions are made.
- Members of American Indian Tribes would continue to access, use, and/or conduct religious pilgrimages and ceremonies at known TCPs and sacred sites; and collect forest and botanical resources.
- The lands and resources of the ASNF used by American Indian Tribes for traditional cultural purposes and traditional use are not used for commercial use.
- Law, policy, and regulations will be followed when planning or implementing site-specific projects and activities.

- The agency has the capacity (e.g. funding, personnel, other resources) to accomplish the minimum planned objectives.
- Burning could occur across all NFS lands.
- Unplanned ignitions are analyzed at the time of the start and documented in the Wildland Fire Decision Support System (WFDSS). Management response to a wildfire is based on objectives appropriate to conditions of the fire, fuels, weather, and topography to accomplish specific objectives for the area where the fire is burning. Affects to cultural resources are considered when determining the objectives and management response to a wildfire
- The kinds of resource management activities allowed under the prescriptions are reasonably foreseeable future actions to achieve the goals and objectives of the forest plan. The specific location, design and the extent of such activities are generally not known. The effects analysis is intended to be useful for comparing and evaluating alternatives on a forest-wide basis. It is not intended to be applied directly to specific locations on the forests.
- Prior to making a project-level decision that is subject to National Historic Preservation Act (NHPA), the forests will consult tribes to identify TCPs and sacred sites, evaluate TCPs for the National Register of Historic Places (NRHP), and analyze the effects of the proposed use or activity in compliance with the *First Amended Programmatic Agreement Regarding Historic Property Protection and Responsibilities among New Mexico Historic Preservation Officer and Arizona State Historic Preservation Officer and Texas State Historic Preservation Officer and Oklahoma State Historic Preservation Officer, and the Advisory Council on Historic Preservation and United States Department of Agriculture Forest Service Region 3* (R3 programmatic agreement) (Forest Service, 2003), and/or memorandum of understandings with tribes. Following the identification and recording of TCPs, mitigation measures appropriate to the proposed undertaking will be implemented. Measures will be determined through consultation. Most likely they will include avoidance by redesigning the project boundaries and/or changing the time/season of when the project is implemented. In cases where specific activities would constitute an adverse effect and avoidance cannot be accomplished, the adverse effects will be resolved in accordance with 36 CFR 800.

Revision Topics Addressed in this Analysis

American Indian Rights and Interests may be affected by the issues addressed in the revision topics: maintenance and improvement of ecosystems and community forest interaction. This analysis will address two issues identified by the Tribes that are related to AIRFA, RIFRA, E.O 13007 and the federal trust responsibility

The Tribes in Arizona identified two main issues regarding forest land management in a study conducted for the Forest Service (USDA Southwest Region 2006):

- (1) the affects of management practices on resources used in traditional activities; and

Indicator: Qualitative discussion of potential effects to TCP's, Sacred Sites, and tribal rights from ecosystem restoration treatments, recreation, and special uses.

(2) the accommodation of traditional use activities such as visiting offering places, medicinal plant gathering, visitation of sites identified in oral histories, pilgrimages, and other such cultural activities.

Indicator: Qualitative assessment of the potential effects on the access and use of those resources for traditional and religious purposes.

Summary of Alternatives

A summary of alternatives, including the key differences among alternatives, is outlined in the Draft Environmental Impact Statement.

Affected Environment (Existing Condition)

Five American Indian tribes represented by nine separate tribal governments have cultural ties to lands within the ASNF. Forest Service consultations with appropriate members of each tribe can identify the Tribe's historic and present day traditional uses and sacred sites of the area. The lands, resources, and the archaeological sites within the Forests are considered traditionally significant to all affiliated tribes and in some cases certain resources or areas are considered sacred to one or more. These traditional cultural properties may be eligible to the National Register of Historic Places because of their association with cultural practices and beliefs rooted in history and their importance in maintaining the cultural identity of ongoing American Indian communities. Consultations about these uses and sites are governed and/or mandated by the NHPA, as amended in 1992, (U.S.C. 470 et seq.), the American Indian Religious Freedom Act 1978 (42 U.S.C. 1996), the Native American Graves Protection and Repatriation Act of 1990 (25 U.S.C. 3001 et seq.), Executive Order 13007 Executive Order 13175, Consultation and Coordination with Indian Tribal Governments. The following five American Indian tribes are known to have ties to the Forests:

- Hopi
- Navajo
- Western Apache (San Carlos, Tonto, and White Mountain)
- Yavapai
- Zuni

Each group has their own history, traditions, and relationship to the land and to the other groups. Traditional use of forest lands and its resources by the tribes dates back several generations, and for some groups many centuries. The tribes are discussed in alphabetical order.

HOPHI

The Hopi are a northern Uto-Aztecan-speaking people that reside in 12 villages on three mesas along the southern border of the larger Black Mesa in northeastern Arizona. The traditional Hopi land (*Tutsqwa*) covers an area far greater than the current reservation. It extends west to the Middle Verde River Valley, to the Bill Williams Mountains, and to the Grand Canyon (L. Senior 2005). Traditional Hopi migration histories extend well beyond this heartland, however, and the Hopi used resources, trails, and maintained trading relationships well beyond the boundaries of

Tutsqwa (Ferguson and Dongoske 1994:33). Origin stories suggest that the current Hopi are a combination of peoples (clans) who arrived at the current Hopi villages from many directions. According to Hopi traditions, migration paths from their emergence ranged west to California, south to Mexico and east to the Rio Grande Valley. There was also a series of migrations from the San Juan region to the Black Mesa area of Arizona. Eventually these migrations took the Hopi ancestors across the Southwest until they arrived at their place on the Hopi Mesas (Courlander 1971:10-11). Through previous project consultations the Hopi have identified thirteen clans as being associated with Apache-Sitgreaves NFs: Badger, Sand, Corn, Tobacco, Water, Sun, Parrot, Katisina, Crow, Lizard, Butterfly, Bear, and Eagle.

Hopi traditions of preservation and protection of sacred sites and subsistence -gathering areas are important and vital to the Hopi way of life. Many archaeological sites affiliated with the Ancestral Puebloan (Cibola Anasazi and Mogollon) archaeological cultures are located on the forests. The Hopi claim affiliation to these cultural groups. Preservation of archaeological sites is a key religious value to the Hopi. Each of the places that the Hopi ancestors stopped during their migration are considered TCPs by the contemporary Hopi and are remembered in their songs and stories. Because Hopi religion has its foundation in the emergence and migration stories, and because archaeological sites are interpreted by the Hopi as a part of this foundation, archaeological materials throughout Arizona are very important to the Hopi (Senior 2003). The Hopi homeland and traditional use area encompasses the west half of the Black Mesa Ranger District. The Hopi homeland includes shrines, sacred natural features, eagle trapping locations and regions where salt is collected (Ellis 1974a:8). The Apache-Sitgreaves NFs were also part of the Hopi hunting and plant collection area. The Hopi have traditionally gathered spruce boughs, snakes, eagles, tobacco (*Nicotiana attenuata*, *Nicotiana trigonophylla*), Indian tea (*Theleperma megapotamicum*), grasses and other natural resources within the Apache-Sitgreaves NFs. The Hopi have noted that they shared lands with the Zuni in historic and pre-contact times (Senior 2005). At present, the Hopi have identified Chevelon Butte, Chevelon Cliffs as sacred sites and archaeological sites as TCPs.

NAVAJO (*Din'e*)

The boundary of the traditional Navajo homeland is symbolized by their four sacred mountains, although the aboriginal use area extends beyond these markers. The sacred mountains are Blanca Peak (*Sis Naajinii*) near Alamosa, Colorado; Mount Taylor (*Tsoo Dzil*) near Grants, New Mexico; the San Francisco Peaks (*Dook'o'ooliid*) near Flagstaff, Arizona; and the La Plata Mountains (*Dibe Ntasaa*), near Durango, Colorado.(USDI 1995). The Navajo are one of the Apachean tribes who are linguistically tied to the Southern Athapaskans who migrated from the north into the American Southwest between AD 1000 and 1500. They were a nomadic hunting and gathering people who lived in small, scattered bands. They raided and traded with the Spanish and Pueblo peoples (Grahame, J and T. Sisk 2002). Historical accounts support that the Navajo were established in Northeastern Arizona in the 1600s. By the mid 1800s they were practicing a lifestyle of farming and grazing livestock, in addition to their nomadic methods of subsistence. Very little physical evidence of the Navajo presence has been recorded on the forests. Historically the Navajo are known to have traded with the Yavapai, traditional routes may be present on the forests. During the Fort Sumner period the Navajo were living (hiding out) in Chevelon Canyon, in the vicinity of Potato Wash and Escudilla Mountain (Senior 2005:63) The earliest physical evidence of Navajo use of the area dates from the 1920s and 30s when Navajos were employed in the timber industry. The Navajo have identified Escudilla Mountain,

Chevelon Butte, and the Little Colorado River as sacred places (Vannette and Fearey 1981; Senior 2005). The Navajo also consider any remaining sweat lodges on the forests to be TCPs. All springs and natural water sources are significant places and especially valued by the Navajo (Senior 2005).

WESTERN APACHE (Indé)

The Western Apache are comprised of the Cibeqe, the San Carlos, the Tonto, (*Dil zhéé*), and the White Mountain Apache tribes. The Western Apache territory is bounded on the east by the Pinaleno Mountains, on the south by the Salt River, along the north by the upper Verde Valley and Flagstaff, and along the west by the Mazatzal Mountains. Linguistically, the Western Apache (*Indé*) are tied to Southern Athapaskan speakers who migrated from the north and arrive in the American Southwest between A.D. 1000 and 1500 (as summarized by Basso 1983:463-465 and Perry 1991:136-158). Traditional creation beliefs of the *Indé*, however, are firmly rooted in the mountains of the Southwest (Sine 1988, as quoted in Hilpert 1996a:64-65). Important *Indé* ceremonial beings, who figured prominently in their creation stories, the *Gán* (also *Gaan*), are associated with Southwestern mountains, peaks and especially caves where they gain access to the spirit world under the mountains. The Western Apache identify the essence of *Indé* culture and virtue with mountains and their traditional lands, and this is most often associated with morals of stories tied to specific named places (Basso 1987,1996, 1997; Hilpert 1996a:79-86).

Originally the Western Apache practiced a nomadic hunting and gathering way of life. By the 1600s they had also adopted farming in the spring and summer and a seasonal cycle of food gathering (Grahame, J and T. Sisk 2002). After the introduction and contact with Spanish livestock and horses, the Apaches adapted their way of life to include raiding the Spanish and the other tribes for livestock and food. The traditional nomadic way of life of the Western Apache was exterminated when the current reservations were established in 1874 after the Western Indian wars with the US government. Only the White Mountain Apache were located in a portion of their traditional homeland and were near the sacred mountains which are the deepest sources of Apache identity and culture (Grahame, J and T. Sisk 2002). Since many of the Apachean artifacts were made of perishable materials they are rare and most date to historic times. Apachean sites have been recorded on the forests. The forests are encompassed within the traditional subsistence use area of the Western Apache. Plants and trees traditionally used by the Apache include but are not limited to: mesquite agave (*Agave parryi*), yucca, piñon nuts, acorns (emory oak), bear grass, aspen, reeds, and cattails. Mt. Baldy and Escudilla Mountain have been identified as specific Apache sacred places on the ASNF.

YAVAPAI

Yavapai have stated that their people have been here in Arizona since time immemorial, and that they were the first true Arizonans. Previously, Yavapai territory spanned most of Arizona from the Colorado River east past Tucson and northeast to the Little Colorado River (Marquez and Vaughn, personal communication 2002). The Yavapai primarily practiced a seasonal hunting and gathering lifestyle and some agriculture (Kera, S and P. Mariella, P 1983:45). Historically they are known to have traded with the Apache, Navajo and Hopi. Traditional trading routes may be located within the forests. The Yavapai had a closer relationship with the Western Apache and some intermarriage took place. Plants and animals that were traditionally hunted and gathered by

the Yavapai are found within the ASNF. Presently the Yavapai have not specifically identified areas or places of traditional and/or of religious significance on the ASNF. (Senior 2005:115-127)

ZUNI

The Zuni reservation is in west-central New Mexico and eastern Arizona, with the population and cultural center at Zuni Pueblo in New Mexico. The Zuni traditional homeland encompasses an area stretching from the Grand Canyon and San Francisco Peaks in Arizona, to the Abajo Mountains in Utah and Colorado, to the Sandia Mountains near Albuquerque, in New Mexico, and the Mogollon , Gallo and Tularosa mountains in New Mexico (NAU and SWCA 1996).

Zuni origin stories relate how the Zuni people were created in the Fourth World and emerged into the fifth world (this world) from a location in a side canyon along the Colorado River in Grand Canyon. From there, the people began their migrations, stopping at numerous places along the way (NAU and SWCA 1996: 165). During this time the people split into four groups. One group headed north to Chaco Canyon, a second group went northeast up the Zuni River, a third southeast toward the White Mountains and the fourth group went south, never to be heard from again. The first three groups rejoined at *Halona:Iti-wana*, the Middle Place, today known as Zuni Pueblo (Ferguson 2007).

During their migrations through most of Arizona and New Mexico, the Zuni established many homes, camps, trails, shrines and burial grounds. The Zuni claim cultural affiliations with the archaeological sites that are identified with the Ancestral Puebloan (Cibola Anasazi and Mogollon) archaeological cultures that are located on the forests. To the Zuni, these migration-related sites are imbued with life and spiritual forces that continue to be important to the Zuni people through their religion.

The Zuni consider their traditional homeland to be all the places that their ancestors traveled to and visited. Each of the places that the Zuni ancestors stopped during their migration are considered sacred by the contemporary Zuni and are remembered in their prayers and still visited by the Zuni people. Shrines are actively maintained by a select group of Zuni. As of 1846 the Zuni had placed war god shrines along the mogollon rim to protect the Zuni area. A Zuni watch tower on the rim was located in the late 1800's near the town of Springerville (Senior 2005:111). The Mogollon Rim was a natural boundary between the Zuni and the Apache. Trails used by the Zunis also hold religious importance and are cared for through blessings and prayers. The forests are encompassed within the Zuni traditional mineral, hunting, and religious use areas and are within the Zuni traditional homeland. The Zuni are known to have collected spruce pollen and aspen wood for religious purposes and numerous other plants for subsistence and medicinal use. Numerous Zuni TCPs and Sacred Sites are located on the forests; including Escudilla Mountain, Mt Baldy, and springs (Zuni Cultural Advisory Team 2011: personal communication; Ferguson 2007, 1981, 1980; Senior 2005)

Traditional Cultural Properties and Sacred Sites

As discussed above there are known TCPs and sacred sites located within the forests. A TCP and a sacred site are not necessarily mutually exclusive of each other. A TCP must meet the definition and criteria for the National Register of Historic Places (NRHP), where as a sacred site is identified by the tribe as defined in Executive Order 13007 and does not need to meet the

definition and criteria for the NRHP. American Indian tribes do not make a distinction between the two. Laws and executive orders define the two separately which results in differences in how land management agencies are required to consider their effects and resolve those effects from management actions. TCPs and sacred sites include but are not limited to spruce forests, mountains, cinder cones, springs, caves, trails and shrines. These places are used for activities that include, but are not limited to collection of plants, boughs, aspen trees, teepee poles, pigments, feathers, pollen, hunting, religious pilgrimages, accessing springs, and making special offerings. These places are ethnographically important to tribal values and are inseparable from their cultures. Table 1 is a list of TCP's and/or sacred sites. Additional areas may be identified through project and permit specific tribal consultation. Therefore, the inventory of known TCPs and/or sacred sites used for traditional purposes is subject to change; the list provided in table 1 is not comprehensive.

Multiple areas are used for collection of resources or religious ceremonies on or within the vicinity of the topographic feature. Many other areas located on the forests are used for traditional cultural purposes but have not been specifically identified. Many of the shrine locations have been adversely impacted by management actions or vandalism (looting) that occurred prior to passing the Antiquities Act of 1906 and the National Historic Preservation Act of 1966. For example, Greens Peak shrine was destroyed by the construction of a fire lookout tower. Rose Peak shrine was severely impacted by a fire lookout complex. Harris Cave and Bear Cave were looted at the turn of the century. Bead Spring shrine was looted by vandals and damaged by forest management activities. Escudilla Mountain has been impacted by construction of a road and a fire lookout tower. Big Springs has been damaged from recreational development. Coon Spring was capped and developed for a city water source.

Many of the shrines have been disturbed or severely damaged which has reduced their potential to yield significant scientific data. Although aspects of their physical integrity have been altered or no longer exist, these locations may still be eligible for the NRHP and have been identified by the Tribes as still important in maintaining the traditions and beliefs of their community.

Table 1. Known Traditional Cultural Properties on the Apache-Sitgreaves National Forests.

Place name/Location	Place Name/Location
Escudilla Mt*	Coon Spring
Mt. Baldy	Quarter Spring
Greens Peak*	Buckshot Spring
Rose Peak*	Little Valley Spring
Red Mt	Carnero Spring
Gobbler Peak*	West Fork Spring
St. Peters Dome	Point of Mt Spring
Burro Mt	Escudilla Spring
Antelope Mt	Bead Springs
Pole Knoll	Big Springs
Flume Mt	Point of Mt Spring
SU Knoll	Eagle Cave
Chevelon Butte*	Harris Cave
Head of Chevelon Canyon	Caves along San Francisco River
Areas near Aspen Lake	Caves along the Blue River
Little Colorado River	Bear Cave

ⁱⁱ * Currently used and managed as a communication site and/or a location of a fire lookout tower.

No additional adverse impacts to TCP's and Sacred sites have occurred from ground disturbance activity within the Mount Baldy, Bear Wallow, and Escudilla Mountain Wilderness areas since these areas were designated.

Tribal Rights

The supreme court has recognized that when Indian reservations were established the federal government reserved enough water necessary to make the reservations livable. Reservations for tribes culturally affiliated with the forests were created by executive orders. Several water resources are located on and across the forests that are connected to tribal water rights. The San Carlos Apache Nation has existing senior water rights to the Salt River Basin that includes the Salt, Gila, and Black Rivers. The Pueblo of Zuni has existing surface and underground water rights to the Little Colorado River. The Navajo Nation and Hopi Tribe claim water rights to the Little Colorado River. Their water rights will be determined by the Little Colorado River Adjudication negotiation settlement. The Little Colorado River Adjudication involves the Lower and Upper Little Colorado River and Silver Creek. The San Carlos Apache Tribe and Tonto Apache Tribe claim water rights to the Gila River tributaries which have not been resolved.

The current trend of use of surface water by the forests is static. The forests' consumptive use is expected to remain static into the future, as surface water in Arizona is considered to be fully appropriated. Special use permits for irrigation ditches and stock tanks have been permitted on the forests. According to Arizona Department of Water Rights (ADWR) Statement of Claim (SOC) filings for water rights, there are 2,240 stock tank claims located on the forests (Nelson 2011). The forests have a total of 3,547 forest-owned claims and certificates. These claims include several watershed-level reserved water right claims allowing use of water for fire fighting and road watering for maintenance (Nelson 2011). These improvements have an effect on the collection of surface water. Water quality and rights are under the legal jurisdiction of the state of Arizona. Forest management has not impacted tribal water rights.

Environmental Consequences

The land management plan provides a programmatic framework that guides site-specific actions but does not authorize, fund, or carry out any project or activity. Because the land management plan does not authorize or mandate any site-specific projects or activities (including ground-disturbing actions) there can be no direct effects. However, there may be implications, or longer term environmental consequences, of managing the forests under this programmatic framework.

Under the provisions of the National Historic Preservation Act (NHPA 1966, as amended; 16 U.S.C. §470), adverse effects to cultural resources include a variety of criteria affecting the potential eligibility of cultural resources for inclusion on the National Register of Historic Places (36 CFR §800.9b). Specifically, effects may be deemed adverse according to the following (36 CFR §800.5[1]):

An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location,

design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative.

Tribal consultation for specific actions would be conducted prior to approving site-specific projects in compliance with Federal law and Forest Service policy. Prior to the forests making a decision on a site-specific action that is subject to NHPA, the forests would consult the Tribes to identify TCPs and sacred sites evaluate TCPs for the NRHP and analyze the affects of the proposed use or activity in compliance with the programmatic agreement and/or the Memorandum of Understanding with the Tribe/s. Following the identification and recording of TCPs, mitigation measures appropriate to the proposed undertaking would be implemented. Measures would be determined through consultation. Most likely they would include avoidance by redesigning the project boundaries, changing the time/season of when the project is implemented. In cases where specific activities would constitute an adverse effect and avoidance could not be accomplished, the adverse effects would be resolved in accordance with 36 CFR 800.

Some sacred sites may not meet the definition and criteria for a TCP and would not be subject to the NHPA. Executive Order 13007 states that the federal government should avoid adversely affecting the physical integrity of sacred sites. Tribal consultation for specific actions would be conducted prior to approving site specific projects. Consultation with the appropriate Tribe/s could determine if the proposed action would affect the physical integrity of the Sacred Site. The physical integrity of a Sacred Site can be adversely affected by non-ground disturbing activities, such as but not limited to using treated sewage water on the Sacred Site for making snow or irrigation; using the location for touch and go landings of aircraft; pumping ground water from a different location that affects the flow and water quality of sacred springs; mining or drilling underneath the Sacred Site; building facilities and/or permitting land use activities that change the visual, vegetative, and sound qualities of an area which are attributes of the Sacred Site. Generally, the only mitigation measure to not adversely affect a Sacred Site is avoidance. Other measures may be identified through consultation with the affected Tribe/s.

AIFRA provides for the protection and preservation of the inherent rights of American Indians freedom to believe, express, and exercise the traditional religions of the American Indian, Eskimo, Aleut, and Native Hawaiians, including but not limited to access to sites, and use, and the freedom to worship through ceremonials and traditional rites. Some actions may not affect the access but may temporarily and/or permanently alter or destroy the use of a site or religious ceremony by impacting the physical integrity of the location, setting or resources, and/or defiling the primary attributes that make the location a holy place. Certain resources or ceremonies may only be collected and/or conducted on a specific location by specific individuals at a specific time. Activities that are approved that limit or change the use and access of traditionally used resources or TCP/Sacred Sites may have permanent adverse affects by altering or removing a specific traditionally used resource or impacts the process and/or continuation of the ceremonial rite.

The federal trust duty requires the forest service to administer their programs in a manner that does not interfere with tribal rights and resources. There are no specific treaty rights that apply to the lands of the ASNF. Actions that may affect tribal rights and resources include but are not limited to special use permits that allow pumping or diverting water resources, vegetation management treatments that could potentially reduce the risk of wildfires crossing jurisdictions or improve the quality of wildlife habitat along reservation boundaries, grazing and range improvements that prevent trespass issues, and transportation management that provides necessary access and discourages illegal access to reservation lands.

Effects Common to All Alternatives

The ASNFs consults with nine different tribal governments and one chapter of the Navajo Nation that have a cultural affiliation to the area. At present, Tribes have not identified concerns or issues that the proposed plan and alternatives would result in adverse impacts to known and unidentified TCPs and Sacred Sites or the use of those locations. The Tribes have expressed interest on the affects to wildlife (eagles), the effects of land adjustments and mining, and the need to prevent additional adverse impacts from activities to TCPs and Sacred Sites. It should be noted that some Tribe/s may not reveal specific locations of traditional use or Sacred Sites to non-practitioners because of cultural restrictions and/or religious beliefs unless that location is at risk of being adversely impacted by project activities. Government to government consultation would continue between the ASNFs and the Tribes. If tribal consultation results in identification of additional, currently unknown, traditional uses and traditional cultural properties, impacts to those areas would be considered during project-specific environmental assessments.

Traditional Cultural Properties and Sacred Sites

All alternatives have the same potential to impact TCPs and Sacred Sites from land adjustments. Land adjustments have the potential to adversely affect the use and characteristics of TCPs and Sacred Sites. Conveying TCPs that are eligible or listed on the National Register out of federal ownership is an adverse effect. The resources would no longer be protected and managed under Federal laws, regulations, and Forest Service policy. Exchanges of federal lands may affect and/or prevent the access and use of TCPs by American Indian Tribes. Once the lands are transferred out of federal ownership the Tribes would not be guaranteed the same rights of access and use of the TCP or area for traditional proposes. Federal laws, executive orders, regulations, and Forest Service policy regarding American Indian rights and interests would no longer apply.

Land adjustments may also potentially have a positive effect on TCPs and Sacred Sites. TCPs and Sacred Sites located on acquired private lands would come under protection of federal laws and management. Acquired private lands that include TCPs that were previously inaccessible to Tribes would be accessible for traditional proposes. No specific areas for acquisition or exchange are proposed in the alternatives. Site-specific analysis would be completed at the time a proposal is under consideration.

The 1987 forest plan (Alternative A) has not been amended to reflect the 1992 requirements and amendments to the NHPA. The 1992 amendment Section 101 (d)(6) states that properties of traditional religious and cultural importance to an Indian tribe or native Hawaiian organization may be determined eligible for inclusion on the National Register. It also states a Federal agency shall consult with any Indian tribe that attaches religious and cultural significance to these properties. The forest plan also does not address the requirements of the Native American Graves Repatriation Act of 1990 (NAGPRA), Executive Order 13007 Indian Sacred Sites and Executive

Order 13175 Consultation and Coordination with Indian Tribal governments. The focus of management and guidelines for forest resources within the 1987 plan were developed prior to the passage or issuance of these statutes which lead to more impacts to TCPs. Emphasis was on use of timber and multiple use activities that incorporate the location of TCPs and Sacred Sites that may not be compatible with those uses. In the action alternatives the proposed plan would incorporate the passage of these statutes and issuance of executive orders providing for increased consideration and management to avoid or minimize the impacts to TCPs and Sacred Sites to allow access and preserve their cultural value and use.

Alternative A only specifies that the ASNFs will comply with NHPA. NHPA requires that adverse impacts to eligible or listed cultural resources be resolved, which usually results in the excavation and recovery of the significant and scientific information. Sacred sites inherently do not process physical scientific information that can be resolved or recovered prior to being adversely impacted. Since Alternative A does not provide suitability standards and guidelines that address TCPs and Sacred Sites, more TCPs and Sacred Sites have been adversely impacted over the life of the plan. Activities that are approved that limit or change the use and access of traditionally used resources or TCP/Sacred Sites have adverse effects by altering or removing a specific traditionally used resource or impacts the process and/or continuation of the ceremonial rite.

Actions that have or may alter or damage the physical integrity of a location, setting or resource for traditional purposes include but are not limited to: recreational improvements installed adjacent to a “shrine” resulting in changing the setting and increasing public visitation and vandalism (e.g. collecting artifact offerings, moving stones, constructed improvements); communication and lookout facilities constructed within the TCP and/or Sacred Site that alters, damages or destroys the physically constructed features, creating visual and physical intrusions (e.g. communication tower,) that alters, damages or destroys the attributes of the place that are necessary for the traditional religious use or cultural purposes; recreation special use permits to allow uses of TCPs or Sacred Places that may conflict with the traditional use (e.g. Tribal members go to conduct a ceremony at the same time a permitted group of people and motorized vehicles are parked and using the TCP or Sacred Site, thus changing the setting and privacy necessary to conduct the ceremony); constructing, rerouting or decommissioning trails (motorized and non-motorized), roads and highways that alters, damages, or destroys the traditional access and use of TCPs/Sacred Sites.

Motorized cross-country travel would still be allowed across the forests except for areas where it is not authorized. This may result in adverse effects to TCPs and Sacred Sites in areas not restricted from motorized cross-country use. Sound and physical disturbance that may alter, damage or destroy the use of a TCPs/Sacred Site would still occur. Unrestricted motorized access to remote TCPs/Sacred Sites increases the potential for vandalism, including illegal excavation (looting), damage or destruction to standing architecture (shrines) or rock art, and collection of surface artifacts (offerings: beads, turquoise, pottery). Motorized use may remove vegetation that protects and covers the cultural materials. When cultural materials are exposed, the more decorative artifacts and collectable historic objects may disappear through illegal collecting. Non-motorized trails that are constructed or converted from roads that are located on or adjacent to TCPs/Sacred Sites have the same potential to physically affect the use of TCPs/Sacred Sites by increasing the potential for vandalism and collecting offerings.

The action alternatives would result in less potential of adverse effects to access and use of TCPs and Sacred Sites. Standards and guidelines in the proposed plan provide direction for areas with TCPs and Sacred Sites not suitable for new infrastructure (permanent roads, communications sites and powerlines), and recreational activities (non-motorized, mechanized, motorized travel). Activities that These alternatives would eliminate motorized cross-country travel. The potential to disturb TCPs and Sacred Sites would be reduced because fewer lands would be open to motor vehicle use, resulting in a beneficial effect to TCPs/Sacred Sites. The adverse effects to remote TCPs/Sacred Sites from motorized cross-country travel would be reduced and, in some areas, stopped.

This would increase the potential of the forests meeting the desired conditions for American Indian Rights and Interests by reducing the type of proposed actions that may adversely affect those resources in those locations and reduce the potential of causing additional impacts to TCPs and Sacred Sites. It should be noted that the management directions stated in the action alternatives for suitable and unsuitable actions in areas with TCPs and Sacred Sites do not completely eliminate the potential to have an effect to TCPs and Sacred Sites. If a future proposed project specific action was located in an unsuitable area or is an unsuitable activity, the forest plan could be amended at the time of the analysis and a decision to authorize that project action could occur.

Alternative D recommends the most acres for wilderness. This alternative provides the most potential to benefit TCPs and Sacred Sites. Protection of wilderness values indirectly protects use of TCPs and Sacred Sites by eliminating certain management activities that have the potential to adversely affect TCPs and Sacred Sites (e.g. mechanized treatments and uses, construction of roads and facilities). Mt Baldy and Escudilla Mountain are both in designated wildernesses. Alternatives B and C would have the next highest potential to benefit TCPs and Sacred Sites. Areas recommended for wilderness in both of these alternatives contain TCPs that could also be Sacred Sites. . Managing these areas for wilderness values would have the highest potential to protect these resources and keep them generally free from adverse effects. Alternative A does not recommend additional wilderness

Tribal Rights

The forests proposed treatments in all of the alternatives provide for sustainability and improvement of wildlife habitat. The alternatives are not expected to reduce or limit the long term availability and use of traditionally used wildlife. The tribes have not identified any concerns that the proposed treatments would affect their access and use of traditionally used forest products and minerals. The alternatives do not propose treatments that would reduce surface waters or pumping of ground water. Special use permits that would affect surface waters and pumping of ground water that could affect tribal water rights would be analyzed on a project specific basis at the time of the decision.

Relationship of Short-Term Uses and Long-Term Productivity

Traditional cultural areas used for collecting wildlife, forest and mineral resources could be affected by the temporary closure of areas from wildland fires and treatments. Many of the traditionally used plants respond to fire by increasing productivity. Alternatives D and B that propose the most acres treated by fire would potentially increase the long term productivity of

traditionally used forest resources and availability of those resources across the landscape. Access to visiting TCPs and Sacred Sites could be affected in the short term during implementation of prescribe burn treatments or during management of wild fires. Conducting prescribed burns have the potential to restore the natural and cultural landscape, and the natural fire regime, reducing the potential for permanent adverse effects from high intensity, high severity fires. Mechanized treatments have the similar benefits to TCPs by reducing the potential for permanent adverse effects from fire, but these treatments have the highest potential for long term indirect effects from erosion caused from intensive ground disturbance near sites. Also, slash from mechanized treatments is often piled burned resulting more locations with hydrophobic soils, increasing erosion to sites if the piles were located near TCPs.

Cumulative Environmental Consequences

American Indian Rights and Interests may be affected by the issues addressed in the revision topics: maintenance and improvement of ecosystems and community forest interaction. Current and previous Forest Service management activities, public resource procurement and recreational use and natural processes have impacted TCPs and Sacred Sites. The analysis area consists of lands that include American Indian TCPs and Sacred Sites within the state of Arizona associated with Tribes culturally affiliated with the lands of the ASNFs. Tribes view sacred sites and TCP's that are part of their traditions as interconnected places/features of the religious and traditional landscape. Effects to these places or features may directly or indirectly affect the access and use by the tribes to conduct ceremonial and/or traditional practices of other sacred sites or TCPs that are part of their traditions. At present there are several known activities, projects or planned projects and/or plans located on lands that have or would adversely affecting TCPs and Sacred Sites.

Some of the past impacts to TCPs and or sacred sites on lands within Arizona include the following. In 1990, two Hopi shrines on Woodruff Butte near Holbrook, Arizona, were destroyed during the mining of a private gravel pit. Although the gravel pit was private property, the gravel was sold and used in the construction of federally funded highways. Other Hopi shrines located on the Navajo Indian Reservation have been subjected to vandalism. For instance, the famous Hopi clan marks at Tutuveni near Tuba City, Arizona, have been desecrated by graffiti and spray paint (Ferguson, Jenkins and Dongoske 1995). Ski areas were established on the San Francisco Peaks and Bill Williams Mountain, both sacred to multiple tribes within the Arizona. A complex of telescopes were constructed on Mount Graham a sacred site to the San Carlos and White Mountain Apache. Numerous communication sites have been established on mountain peaks and cinder cones within the Apache-Sitgreaves and lands within Arizona that have impacted TCPs and/or sacred sites (e.g. Chevelon Butte, Greens Peak). Federal and State highway projects that resulted in data recovery of archaeological sites and altered or destroyed traditional cultural areas have affected TCPs of tribes associated with Apache-Sitgreaves NFs. Positive actions have also occurred. In 1985, the U.S. Government transferred the Zuni Salt Lake and the lands surrounding to the Pueblo of Zuni. The lake is a sacred site for the Zuni and is used by other pueblos, including the Hopi, Acoma, and Laguna for collecting salt for their ceremonies. Apache and Navajo also claim use. Some Forests within Arizona have actively facilitated tribal use of forest products and resources for traditional cultural purposes.

Recently, the Coconino National Forest has approved snow making and the expansion of the infrastructure of the existing Snowbowl Ski Area. This action has been determined to have a significant adverse effect to the San Francisco Peaks as a TCP and a sacred site. Congress is considering a land exchange proposal to transfer lands on the Tonto National Forest that include Oak Flat, Gaan Canyon, and Apache Leap to Resolution Copper Company. The Tonto National Forest has also recently approved exploratory mining in these areas. Oak Flat, Gaan Canyon, and Apache Leap are sacred sites of the Western Apache. A land exchange would have an adverse effect to these sacred sites. The San Carlos Apache are opposed to the exploratory drilling. The Apache have stated that mining in these locations would have an adverse effect to these places. The Apache-Sitgreaves NFs is considering a proposed action to sell a tract of land that includes a TCP associated with the Zuni and Hopi. The specific location has been recently identified by the White Mountain Apache as a sacred place. Existing permitted activities or facilities that are located on TCPs and or sacred sites on the national forests within Arizona are expected to continue.

The Hopi Tribe, the San Carlos Apache Tribe, and the Pueblo of Zuni have verbally stated to the ASNF during consultation meetings and through letters to the Secretary of Agriculture that the forest service is incrementally damaging or destroying TCPs and Sacred Sites that are important and vital to maintain the physical and spiritual survival of the Tribes. Sacred Sites are interconnected and are part of the spiritual and traditional landscape. Although, Alternative A and the action alternatives are not expected to have a cumulative adverse impact to American Rights and Interests, potential mining activities, congressional acts and ASNF authorized land adjustments that could occur have the potential to contribute to cumulative adverse affects.

Unavoidable Adverse Impacts

The land management plan provides a programmatic framework that guides site-specific actions but does not authorize, fund, or carryout any project or activity. Before any ground-disturbing actions take place, they must be authorized in a subsequent site-specific environmental analysis. Therefore none of the alternatives cause unavoidable adverse impacts. Mechanisms are in place to monitor and use adaptive management principles in order to help alleviate any unanticipated impacts that need to be addressed singularly or cumulatively.

Irreversible and Irretrievable Commitment of Resources

The land management plan provides a programmatic framework that guides site-specific actions but does not authorize, fund, or carryout any project or activity. Because the land management plan does not authorize or mandate any site-specific project or activity (including ground-disturbing actions), none of the alternatives cause an irreversible or irretrievable commitment of resources.

Adaptive Management

All alternatives assume the use of adaptive management principles. Forest Service decisions are made as part of an on-going process, including planning, implementing projects, and monitoring and evaluation. The land management plan identifies a monitoring program. Monitoring the results of actions will provide a flow of information that may indicate the need to change a course

of action or the land management plan. Scientific findings and the needs of society may also indicate the need to adapt resource management to new information.

Consistency with Law, Regulation, and Policy

All alternatives are designed to guide Apache-Sitgreaves National Forests' management activities in meeting federal law, regulations, and policy.

Other Planning Efforts

There are no conflicts between the alternatives and the adjacent Tribal land use plans.

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