

**RESOLUTION OF THE
WHITE MOUNTAIN APACHE TRIBE OF THE
FORT APACHE INDIAN RESERVATION**

- WHEREAS,** the White Mountain Apache Tribe has managed its lands in balance with the natural world since time immemorial; and
- WHEREAS,** the adoption and implementation of sound management plans is an important component of maintaining tribal sovereign authority over the Tribe's natural resources and economic development; and
- WHEREAS,** the Tribal Council adopted a Mexican Spotted Owl Conservation Plan on March 4, 1993; and
- WHEREAS,** that Plan has achieved its purpose of instituting protective measures for the owl while additional inventories were being conducted and management strategies were being developed; and
- WHEREAS,** the Tribal Game and Fish Department, in conjunction with the Tribal Forester, has developed a Mexican Spotted Owl Management Plan (Plan), a copy of which is attached hereto and incorporated by reference herein, to supersede the Conservation Plan; and
- WHEREAS,** the revised Plan offers greater flexibility and stability in managing the Mexican Spotted Owl, since it relies on a sensible, ecosystem approach of managing owl habitat, rather than individual owls, while still ensuring that those owls that live on the Reservation are not adversely affected by resources management activities; and
- WHEREAS,** this Plan provides a framework for addressing ecosystem concerns that is fully compatible with the development of integrated resource planning on a watershed basis; and
- WHEREAS,** this Plan has been prepared and extensively reviewed by expert tribal and non-tribal biologists; and
- WHEREAS,** this Plan integrates the concerns of the Tribe for maintaining a strong, growing economy, including the sustained yield of timber resources.

Resolution No. 11-94-336

BE IT RESOLVED by the Tribal Council of the White Mountain Apache Tribe that it hereby adopts the Mexican Spotted Owl Management Plan, attached hereto and incorporated by reference herein, for application on the Fort Apache Indian Reservation.

The foregoing resolution was on November 02, 1994, duly adopted by a vote of nine for and zero against by the Tribal Council of the White Mountain Apache Tribe, pursuant to authority vested in it by Article IV, Section 1 (a), (f), (g), (h), (i), (k), (s), (t) and (u) of the Constitution of the Tribe, ratified by the Tribe September 30, 1993, and approved by the Secretary of the Interior on November 12, 1993, pursuant to Section 16 of the Act of June 18, 1934 (48 Stat. 984).



Chairman of the Tribal Council

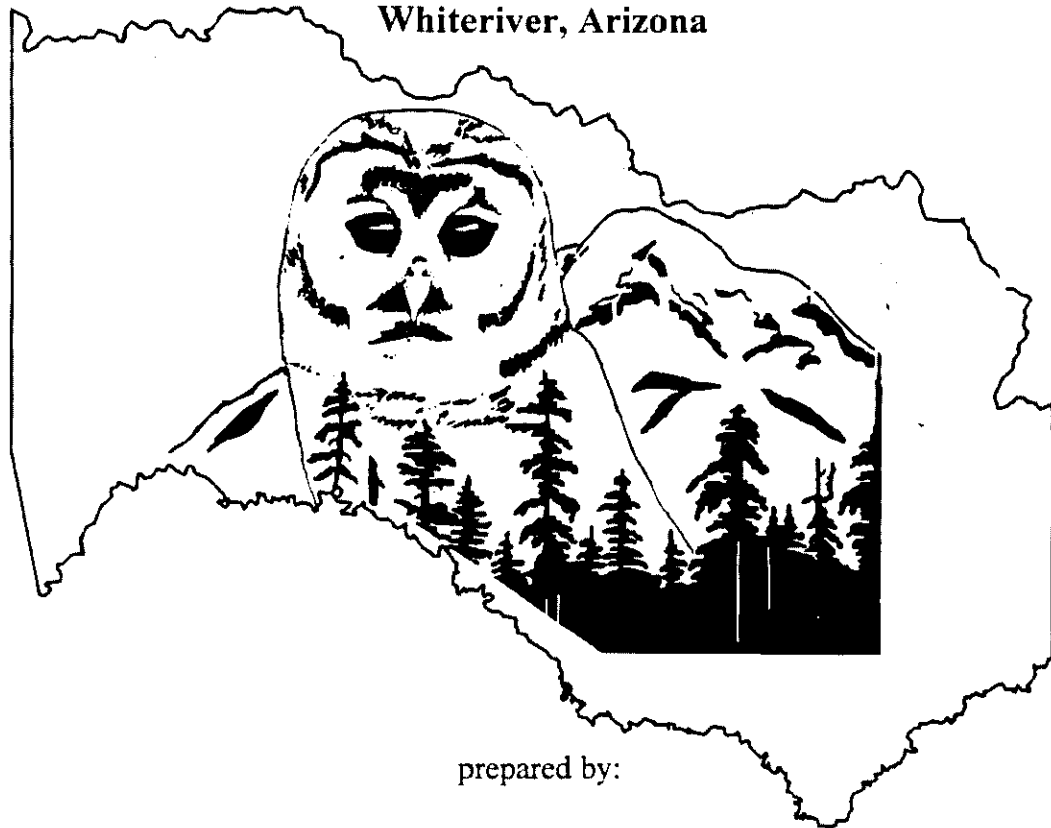


Secretary of the Tribal Council

WHITE MOUNTAIN APACHE TRIBE

MEXICAN SPOTTED OWL MANAGEMENT PLAN

**Fort Apache Indian Reservation
Whiteriver, Arizona**



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INTRODUCTION

Background: The Mexican spotted owl (*Strix occidentalis lucida*) is one of three spotted owl sub-species found in the U.S. The Mexican spotted owl ("MSO") is the widest ranging of the three spotted owl sub-species, with its range extending from the southern Rocky Mountains in Colorado and the Colorado Plateau in southern Utah, southward through Arizona and New Mexico and through the northwestern portion of Mexico. The Mexican spotted owl typically inhabits steep-sloped forested mountains and canyons containing dense, multi-layered (uneven-aged) forests having closed canopies.

Tribal MSO Management Plan

This White Mountain Apache Tribe Mexican Spotted Owl Management Plan ("Plan") supersedes the existing "White Mountain Apache Tribe Mexican Spotted Owl Conservation Plan", which was adopted by Tribal Resolution on March 4, 1993. The purpose of this Plan and primary basis for its recommendations are to provide the Tribe a more comprehensive and integrated approach in managing the Mexican Spotted Owl ("MSO") within a broad ecosystem context. The design of this Plan is compatible with the Tribe's long-term goal of integrated ecosystem management of its natural resources.

The inherent benefits to the Tribe of this approach further include:

- incorporating proactive, long-range planning and practical management of the MSO within its ecosystem, and moving away from species-specific management of individual populations across the Reservation which has proved to be inefficient and very costly to the Tribe;
- balancing MSO management with tribal goals for sustainable economic development;
- instituting management techniques for owl protection that may beneficially impact other resources, including streams, aesthetics, and some species of fish, plants, and wildlife, while ensuring long-run management flexibility and promoting diverse forest ecosystems;
- providing a framework for addressing future ecosystem concerns, including sensitive species, that fits well with the Tribe's development of watershed planning.

TRIBAL NATURAL RESOURCE MANAGEMENT PHILOSOPHY

Since time immemorial, the White Mountain Apache Tribe has managed its land according to sound practices that conserved the natural resources while meeting the needs of the Apache people. The Tribe's connection with the land has endured in the face of many changes over the centuries. The Tribe has vigorously maintained its sovereignty over the lands of the Fort Apache Indian Reservation ("Reservation") to ensure that this portion of its ancestral homeland will always be beautiful and productive. The Tribe has consistently rejected development proposals that were not compatible with its concerns for the land and future generations. The Apache

philosophy of living in balance with the natural world permeates all aspects of the Tribe's resource management, as the following examples demonstrate.

- Resolution No. 89-149 asserted that "the natural resources owned by the White Mountain Apache Tribe are the single most important possession of the people to be passed on to future generations," designated streams and riparian zones as sensitive areas, and authorized programs to ensure that riparian zones are productive for fish and wildlife.
- A large portion of the Reservation, including most of the unique and sensitive high-elevation areas of the White Mountains, has been closed to recreational use.
- Motorized three-and-four wheel vehicles and dirt bikes are prohibited from being operated on the Reservation.
- All recreational activity that is allowed on the Reservation is strictly regulated through a permitting system.
- Resolution No. 87-192 closed the Bull Cienega timber sale area to all public access and timber operations, and recognized the sacred significance and wildlife value of the area.
- Resolution No. 70-193 established the Mount Baldy Primitive Area to protect the sacred area from detrimental effects to wildlife and water resources.
- Resolutions No. 81-223 and No. 89-148 withdrew the Hurricane Logging Unit from timber harvest and designated it as a wildlife area due to concerns about the potential for detrimental effects to the land, streams, and wildlife.
- Resolution No. 88-273 established the Lofer Reserve, an area which the Council considers pristine and which has sacred value to the Tribe, thereby excluding it from logging.
- The Tribe has reduced the annual allowable cut far below the levels formerly recommended by the Bureau of Indian Affairs, to ensure the sustained yield of its forest resources.

Ecosystem Management

The Tribe's long history of carefully managing sensitive ecosystems reflects a cultural mandate to protect the plants and wildlife of the Reservation. While pressures on native species and their habitats have steadily increased elsewhere in Arizona and the United States, the Tribe has maintained this cultural mandate by asserting its sovereignty over its lands, natural resources, and the development of its economy. The Tribe has institutionalized an endangered species program as part of a continuing effort to maintain, to promote, and, in cases such as the Apache Trout, to recover the biological diversity of the Fort Apache Indian Reservation.

The Tribe has initiated a watershed planning process to guide resource protection and development on the Reservation. Geographic Information Systems ("GIS") are utilized by the Tribe and the Fort Apache Agency to plan and coordinate resource management on the Reservation. Information on sensitive species, including MSO, is included in this GIS database.

Continuing to expand the tribal government's capacity to manage its ecosystems will help the Tribe achieve its goals of developing a self-sustaining tribal economy, conserving important natural resources, and fostering the people's ancient connection with the land.

TRIBAL FOREST MANAGEMENT

Current and past forest management within the Reservation stresses uneven-aged silvicultural techniques, specifically individual and group selection system harvesting. Consequently, the vast majority of the Reservation remains unfragmented and intact. Uneven-aged management results in multi-layered canopies throughout the stands, with variable-diameter trees and a rich diversity of overstory and understory species. The White Mountain Apache Tribe prefers this style of management over the even-aged system, and it is anticipated the uneven-aged silvicultural practices will continue to be the management of choice long into the future.

Selective timber harvest techniques are employed to maintain an uneven-aged mosaic that promotes multi-dimensional and multi-layered stands that favor biological diversity. All snags that are not hazards to human life are retained. Generally, slash is lopped, but not burned within a described area. Scattered concentrations of down woody fuel promote fauna and enhance micro-habitats conducive to small mammal populations which Mexican spotted owls prey upon.

Special Management Areas

Riparian: Riparian areas have an importance to wildlife (and outdoor recreation) that is greatly disproportionate to their limited acreage. Their importance relates to the presence of water, and abundant and diverse vegetation which forms valuable habitat within the forest for cover, nesting, and forage. Riparian communities have distinct plant and animal components not found elsewhere. Riparian communities can be easily damaged by logging activities.

Buffers. Buffer strips are left along major arterial roads, around most cienegas, and along riparian areas to provide wildlife cover. Cutting in these areas is for the enhancement of cover.

Buffer strips are necessary along riparian areas to protect the integrity of the bank and associated vegetation. The size of the buffer corresponds to the relative importance and characteristics of the riparian area and water channel.

Salvaging high risk and/or high value timber within the riparian buffer does not occur unless the timber can be removed without damaging the bank and associated vegetation. Equipment is not operated within the buffers unless absolutely necessary. Skid trails are placed only at designated locations, employ culverts, and cross at right (90 degree) angles to stream flow.

Roads are kept out of riparian buffers. Fallers utilize directional felling to avoid dropping trees in streams and to utilize skid trails as efficiently as possible.

Wilderness: The Mt. Baldy Wilderness contains 9,180 acres of commercial timberland. Major vegetative types are spruce-fir and aspen. Small quantities of mixed conifer are present. Although the area is biologically productive, it is open only to tribal religious and cultural uses. **No timber harvesting or silvicultural treatment is permitted within the wilderness.**

Reserves: All or portions of the Hurricane, Bull Cienega, Sunrise and Lofer Cienega Units have been withdrawn by Tribal Council resolutions from commercial timber harvest of silvicultural treatment because of tribal desires, particularly environmental considerations. Mixed conifer types predominate, but elevations range from spruce-fir down to ponderosa pine.

Virgin Areas: A large portions of the commercial forest area remains virgin due to steep ground, low value and lack of access. Approximately half of the 114,545 acres in this category may eventually be accessed for timber harvest.

Total Acreage of Special Management Areas: 185,249 acres or 25 percent of the forest land are already given protected status from normal timber harvest activity. They fall into the following categories:

Wilderness Areas	9,180 acres
Reserve Areas	12,884
Virgin Areas	114,545
Riparian and other Buffer Areas	<u>39,640</u>
	185,249 acres

The wilderness area, reserve areas, half of the virgin areas, and stream buffer areas may also be maintained as Mexican Spotted Owl Habitat.

MSO POPULATION STATUS - Fort Apache Indian Reservation

Based on Mexican Spotted Owl inventories that have been completed through the 1994 field season, the Fort Apache Indian Reservation presently supports a well-distributed and viable population of Mexican Spotted Owls. The MSOs that have been detected thus far are closely associated with the steep and heavily forested terrain typically found along the Mogollon Rim and interior canyon and ridge features within major drainage systems.

1994 marks the third year in which the White Mountain Apache Tribe Game and Fish Department has conducted Mexican Spotted Owl inventories on the Reservation. Over this three year period, a total of 16 tribal timber sale units have been surveyed. As shown in Exhibit 1, 11 of the total 16 timber sales have undergone 2 years of inventories, with the remaining 5 timber sale units requiring one more year of inventories to be fully completed (see "Current Management - Inventories"). These 16 timber sale areas represent 266,120 acres, or roughly 16% of the Reservation's 1.68 million acre total land area. This same 266,120 acres surveyed further represents roughly 30% of the Reservation's potential Mexican Spotted Owl habitat, as derived from GIS mapping by timber-type, slope and canopy closures.

At the completion of the 1994 field season, a total of 57 Mexican Spotted Owl territories have been identified and designated throughout the noted survey area. Exhibit 2 provides information relating to these territories, including: territory number and name, original owl detection dates,

core area sizes (1992 and 1993 detections only), prior and current year owl occupancies, legal description and any related comments/notes.

The following are highlights from Exhibit 2 regarding the identified spotted owl territories/populations on the Reservation:

- 34 of 57 (60%) of the identified territories hold verified MSO pairs.
- Territory occupancy from the prior year to the current year is consistent, with 16 of the total 19 territories occupied in 1994 (84%) having the same status as that from the prior year. The other three territories changed from single to pair occupancy.

MSO DISTRIBUTION

Much of the information relating to the distribution of the Mexican Spotted Owl on the Fort Apache Indian Reservation is based on inventories conducted from 1992 - 1994. They presently occur throughout many of the major and minor drainages associated with the North and East forks of the White River, the Bonito Creek watershed and the Black River. Spotted owls are also distributed along the Mogollon Rim, which is a major geographic feature situated along much of the northern boundary of the Reservation. The southward extension of the rim which forms the McKays and the Horse Mesa rim likewise provide owl habitat. In the central and western portion of the Reservation spotted owls are known to occur in the Big Canyon, Carrizo Creek and the upper Canyon Creek drainages.

Mexican Spotted Owls have been found at elevations ranging from 5400 feet to 9100 feet. The average elevation at which MSO territories reside is approximately 7800 feet.

Based on the 16 timber sales inventoried to date, Mexican spotted owls are found to be widely distributed throughout the Reservation, as shown on the Exhibit 3 map. Although current distribution review is limited to the timber sale areas that have been inventoried, Exhibit 3 reflects a fairly wide (east to west) and broad (north to south) segment of potential habitat areas within the Reservation having been surveyed and represented.

The distribution of Mexican spotted owl territories identified through 1994 are as follows for each surveyed timber sale:

<u>SURVEY AREA/ TIMBER SALE</u>	<u>NUMBER MSO TERRITORIES</u>
Beaver	8
Elk Canyon No.	8
Odart	7
Elk Canyon So.	6
McKays	6
South CBQ Ridge	5
Black River	5
Coyote West	4
Bull Flat	3
Paradise	2
Ord Creek	1
Willow	1
Wildhorse*	1

*Location reported by Apache-Sitgreaves Forest; sale not yet inventoried by WMAT

Mexican spotted owl territories identified to date have largely been located in canyon or steep slope (>40%) areas within the Reservation that hold the following forest cover types (in order of frequency):

- * Mixed-conifer: typically dominated by Douglas-fir and/or white fir (also Englemann spruce and/or blue spruce at higher elevations), with varying amounts of ponderosa pine, southwestern white pine, rocky mountain/bigtooth maple, boxelder, Gambel oak and aspen also present.

Stands of this cover type are generally found at elevations ranging between 6,500 and 9,200 feet on the Reservation.
- * Pine/Oak: generally consist of ponderosa pine overstory and Gambel oak understory making up roughly 10-20% of the stand basal area. Areas with this cover type that hold MSO territories on the Reservation, are also typically associated with steep terrain (>40-50%) and adjoining cliff structure. Stands of this cover type are generally found at elevations ranging between 6,000 and 8,500 feet on the Reservation.
- * Ponderosa Pine: mixed species stands dominated by ponderosa pine, which generally makes up at least 60% of stand basal area (Ganey and Balda 1989a, Fletcher 1990). Other conifers, and/or hardwood species make up the rest of the stand structure. These stands are usually associated with southerly aspects and ridgetop/rim areas within an elevation range of 6,000 to 8,500 feet on the

Reservation. Fewer than 5% of MSO territories on the Reservation have been located in this forest type.

Within each of these forest cover types (especially so with mixed-conifer), survey and monitoring activities have also revealed the following structural characteristics that are generally found in known MSO territories:

1. Multi-layered canopy structure: stands hold multiple canopy layers, typically 2 or 3 levels of vegetation.
2. Significant dead/down material: forest floor is typically littered with dead and down woody debris (density varies), with standing snags also occurring to a lesser extent.
3. High canopy closure: preliminary data reveal overhead canopy closure within monitored MSO territories being greater than 80% in mixed conifer, and greater than 70% in pine/oak stands.

As inventories are completed on the Reservation, the overall distribution patterns will be refined. It is currently anticipated that any information gaps relating to owl distribution will be addressed over the next 3 years. Accordingly those data will be incorporated into the management scheme for the Mexican Spotted Owl on the Reservation.

CURRENT MSO MANAGEMENT

MSO Inventories:

The White Mountain Apache Tribe Game and Fish Department has generally adopted the Inventory Protocol of the U.S. Forest Service ("USFS") in conducting MSO inventories on the Reservation. The protocol is attached in Exhibit 4.

The Tribe has instituted several modifications to the USFS protocol, primarily as a result of budget and personnel constraints. The primary exceptions or modifications the Tribe has made to USFS protocol are outlined in the following table:

SURVEY CATEGORY	USFS PROTOCOL	WMAT PROTOCOL	REASON FOR CHANGE
No. annual surveys/area	4/area for 2 consecutive years (8 tot.)	4/area 1st yr, 3/area 2nd yr. (7 tot.)	limited funds and personnel
Calling time	15 min. at each call pt.	10 min. at each call pt.	Maximize coverage based on above

As noted, Reservation survey areas have been defined based on timber sale areas, with only the suitable habitat areas within each timber sale being targeted for survey. All MSO surveys are conducted at night, with daytime follow-ups occurring within a 48-hour period on all nighttime MSO detections. The specifics of other inventory methods and design used by the Tribe are outlined in the attached Inventory Protocol exhibit.

MSO Monitoring:

As with inventories, Tribal MSO monitoring is based on and generally conforms with protocol established by the USFS. All MSO territories identified through prior-year inventories are monitored in the current year. During 1994, a total of 35 established MSO territories were monitored, representing the cumulative number of territories identified in the 1992 and 1993 field seasons.

A copy of the "Informal Monitoring: MSO/Fort Apache Indian Reservation" is attached in Exhibit 5. This tribal protocol is based on USFS methods, with the primary monitoring objective being two-fold:

1. determine spotted owl presence - single or pair,
2. determine reproductive status of pair once occupancy has been verified.

Data on MSO habitat of nest/roost sites is also collected on those monitoring visits in which owls have been detected. Apart from general descriptions of topography, forest type/layering, aspect and slope position/substrate of nest/roost site, specific data collected at each nest/roost site includes:

1. Percent canopy closure
2. Slope (%)
3. DBH of nest/roost tree
4. Basal area around nest/roost tree

Core Use Areas:

The Tribe establishes minimum core-use areas for each roost or nest site in which MSOs have been detected through inventory/monitoring activities. The current MSO Conservation Plan for the Reservation (see "Management Territories" below) provides for the designation of a minimum 40-acre core area, which is deferred from all forest management activities, except forest protection, within the current 20-year cutting cycle.

Using the MSO detection site as the guide, core areas are designated based largely on topography and vegetative structure. Generally, areas having steep terrain (slope >40%) and northerly aspects that meet the 40 acre minimum are included within the core-area designation. Habitat consisting of dense, multi-layered vegetative structures are also normally considered and incorporated into the core area designation.

As outlined in Exhibit 2, a total of 32 separate core areas have been designated on the Reservation. These core area designations correspond to verified MSO detections made through

the 1993 field season. A total of 2,260 acres have been designated throughout, with the average core-area per MSO territory being 71 acres.

Management Territories:

The White Mountain Apache Tribe adopted its current "Mexican Spotted Owl Conservation Plan" through tribal resolution on March 4, 1993. Interim MSO management guidelines delineated within the preceding Conservation Plan provide the following for the management of designated territories:

- I. No timber harvest IS allowed within 1/2 mile of an active nest site or occupied roost site from February 01 to July 31, inclusive.
- II. No less than 100 acres surrounding an active nest is maintained as suitable or capable habitat for MSO habitat.
- III. No less than 40 acres of habitat surrounding an active MSO nest is deferred from all forest management activities, except forest protection, within the current 20-year cutting cycle.

REVISED MSO MANAGEMENT PLAN

Designated Management Areas

Three categories of MSO Designated Management Areas will be established on the Fort Apache Indian Reservation. They are:

- A. Category I Management Areas
- B. Category II Management Areas
- C. Category III Management Areas

As a means of stratifying primary versus marginal MSO habitat on the Reservation, MSO activity areas will be designated based on the density of owl occupancy (derived from inventories), and overall habitat quality based on topography, nesting and roosting habitat, foraging areas and vegetative components and structure. The size of the Designated Management Areas will vary and will be based on the distribution pattern within a canyon complex, drainage system or other significant physiographic features. Finally, Designated Management Areas will be managed from an ecosystem or habitat approach over the long-run, as opposed to managing individual MSO populations.

Interdisciplinary Team: An interdisciplinary team consisting of a wildlife biologist, silviculturist and other appropriate specialists will develop forest management prescriptions for all Designated Management Areas which will balance MSO management concerns with other

resource management goals. The team will also be responsible for monitoring the overall implementation and effectiveness of the Plan. This team will likely consist of the following:

Tribal Wildlife Biologist
Tribal Endangered Species Coordinator
Tribal Forester
BIA Forestry representative(s)

A. Category I Management Areas

Category I areas will be MSO management areas which exhibit relatively high owl densities and will be managed with MSOs as the primary resource concern under a multiple-use approach. Category I areas will be designated based on inventoried MSO detection "clusters", with the minimum number of MSO territories within a designated area being four (4). The overall size of designated Category Is will vary. The maximum may be as large as 10,250 acres and the minimum will be at least 5,760 acres, with this range of acreage being derived from contiguous 1 square mile sections.

Category Is will contain high value MSO habitat and be intermixed with areas of younger forests that provide foraging and possibly future nesting/roosting MSO habitat. Forest management within Category Is will emphasize forest structure that promotes preferred MSO habitat, including nesting, roosting and foraging areas. Accordingly, the following guidelines will be followed to accomplish MSO habitat management goals and objectives:

1. *MSO Habitat Management:* Within each Category I, all habitat which maintains MSO preferred habitat components will be managed as such. Components will typically include north-west, north and north-east aspects, slopes 40 percent or greater, large diameter trees and multi-storied structure. Category I areas will be managed for MSO habitat, regardless of whether owls are present or not. The Interdisciplinary Team will develop specific Category I forest management prescriptions based on the following considerations:

- a. Stands utilized as nesting or roosting habitat will be maintained as such and should not be treated unless such treatments are necessary to accomplish risk-reduction objectives.
- b. Prescriptions within Category Is will promote stand structures and associated components which provide MSO habitat. Those components include large diameter trees, multi-storied canopies and snags.
- c. Salvage of trees within nest/roost sites or core activity centers may be necessary when circumstances could result in negative effects on MSO habitat. Such circumstances may include fire, blowdown, insect infestation, or disease. In some cases salvage operations can facilitate the development of suitable MSO

habitat. Where salvage operations are an appropriate management option, habitat assessments will be conducted by the Interdisciplinary Team in order to ensure that such operations will not diminish overall habitat qualities for the owl. Existing suitable MSO habitat which may not be currently occupied will also be considered for similar treatments.

2. *Roads*: Within each Category I, the transportation system will be evaluated by the Interdisciplinary Team in order to establish a system that will promote effective vehicular movements while ensuring MSO habitat integrity. No new road construction will be permitted within active territory buffers, as described below. In situations where primary roads may exist within buffer areas, their use will be regulated by seasonal restrictions, as described. Roads not classified as primary (main haul), will be withdrawn from the active road system and allowed to undergo natural vegetational succession. Exceptions to this guideline include, but are not necessarily restricted to, fire control, salvage operations or emergency situations.

3. *Restrictions*: The following restrictions will apply within Category I and II Management Areas (unless otherwise noted):

- a. Seasonal restrictions will run from February 1 through July 31.
- b. Seasonal no-activity buffers will be designated around each known MSO territory. Buffers will generally provide no less than a 500-acre protection area (on average), with known roost or nest sites serving as the center. Buffers will be established based on topography and physiographic features.
- c. Restriction exceptions may be made by the Interdisciplinary Team where activities are necessary to protect forest resources from potential large scale risk or destruction, such as wildfires.
- d. Regardless of classification, roads occurring within the 500 acre no-activity buffer can be utilized, but will be regulated by the established seasonal restrictions. New roads which lie outside of a designated territory but which occur within a Category I, will be located, designed and constructed to minimize disturbance to MSOs and thier habitat. New road construction will not occur within suitable MSO nest/roost habitat within a Category I, unless no other feasible alternatives exist.
- e. Other activities not specifically addressed in this plan will comply with MSO habitat management guidelines. Accordingly, the Interdisciplinary Team will review other activities and develop suitable strategies which will promote the management and protection of the MSO within the Reservation.

B. Category II Management Areas

Category IIs are MSO management areas in which MSO management presents a secondary consideration to other primary natural resource objectives. Category IIs support active owl territories, but occupy a wider, less concentrated distribution of MSOs over a greater land area. The number of active territories contained in a Category II will range from one (1) to three (3).

Areas designated as Category IIs, will contain MSO habitat that is suitable, but which may not be considered as prime, contiguous MSO habitat. Category IIs support known territories and "pockets" of MSO nesting/roosting habitat. From a land management standpoint, MSO habitat outside of inventoried territories will be treated as a secondary management consideration. Management guidelines include:

1. *Core Activity Centers (CACs)*: CACs will be designated within each occupied/existing MSO territory occurring in Category IIs. CACs will consist of a minimum of 75 acres of suitable habitat surrounding known nest/roost site, in which no management activities will occur.
2. *MSO Habitat Management*: Management territories consisting of the CAC and its corresponding 500 acre no-activity buffer (as defined in the preceding section) will be managed to provide suitable nest/roost and foraging habitat for all known and active MSO territories within Category IIs. Prescriptions will be developed for management territories and/or CACs if it is determined that harvest strategies will improve or protect MSO habitat integrity. Prescriptions will be coordinated by the Interdisciplinary Team.
3. *Restrictions*: Outside the CAC, timber management activities will be allowed in accordance with established seasonal restrictions outlined in the preceding section. Buffers surrounding established CACs will be based on topography and physiographic features.
4. *Adjacent Area Management*: Throughout any designated Category II, attempts will be made to maintain suitable residual/unoccupied MSO habitat. Many areas of the Reservation holding Category IIs will provide suitable habitat due to the remote and rugged nature of these areas (i.e. Mogollon Rim and interior canyon systems) in which access for any other resource management purpose is simply not viable.
5. *Abandoned Territories/CACs*: Category II CACs may become abandoned as a result of various factors, including death, disturbance or perhaps changes in certain habitat characteristics unsuitable to the current occupants. Under this Plan, abandoned or vacant territories will be managed as suitable MSO habitat for a three (3) year period. Under active management, such areas will exhibit habitat characteristics which provide the acceptable habitat features for MSOs. If after 3 years, MSOs are not detected within the territory, the active Management territory designation will be withdrawn and the

territory will revert to normal timber management activities. If practical, a designated Management territory or CAC may continue to be managed as such. If within the 3-year period abandoned territories are found to be occupied, MSO management guidelines will be activated, based on Category II parameters.

C. Category III Management Areas

Category III areas include all regions of the Reservation in which spotted owls have not been detected through inventories. Furthermore, Category IIIs do not support potential owl habitat of significant nor manageable amounts. Within these areas, MSO management objectives are subordinate to all other resource management and economic considerations. Consequently:

1. No MSO management territories/CACs are established, nor do any specific MSO management prescriptions (i.e. restrictions) hold priority over other respective resource management objectives or prescriptions.
2. Depending on physiographic features and acknowledging the Tribe's inherent conservation-minded approach to all natural resource management, it is recognized that these areas may hold potential for MSO wintering and/or dispersal habitats.
3. MSO inventories are conducted on a maximum 5-year cycle to verify non-occupancy status.

Change In Designated Management Area Status

Any proposed change of Category II or III Management Area to a higher MSO management status will be subject to an economic impact review and approval by the Tribal Council.

MSO Inventories

To adequately and accurately address the ultimate designation of Management Areas, all areas of potential habitat that are subject to management (non-wilderness) within the Reservation will be inventoried for MSOs. Because the focus of MSO management will be directed at habitat management rather than on individual populations throughout the Reservation, additional MSO inventories or surveys will not be required. Exceptions to this general rule include:

1. Category IIIs, which will be inventoried/surveyed every five (5) years to confirm management status;
2. Any Designated Management Area in which a potential change in management status is reasonably suspected based on monitoring results or other reliable reporting measures.

MSO Monitoring

The primary objective of monitoring will be to assist in determining overall changes in MSO populations on the Reservation as well as changes in MSO distribution and owl occupancy in the various Designated Management Areas. To maximize efficiency and cost-effectiveness, the focus of monitoring efforts will be toward determining population trends within Category Is and Category IIs, rather than determining total population figures. Monitoring will consist of designating stratified survey units within Designated Management Areas, from which accurate population models can be based.

In order to detect changes in owl numbers and perhaps, more importantly, assess forest management guidelines and their impacts on owls, monitoring of MSOs will be necessary on a continuing basis. Data including territory occupancy, age and sex structures, nesting success and productivity will be compiled. Although the overall implementation and intensity of monitoring will depend on the availability of resources, any monitoring strategy which is used on the Reservation will be consistent with generally recommended protocol, with necessary modifications to fit the needs of tribal managers and resources.

Objectives:

1. Compile demographic data for selected MSO subpopulations or primary MSO management areas, focusing on population trends rather than absolute population figures.
2. Determine changes in MSO occupancy of known owl territories within various Designated Management Areas using fixed annual cycles:
 - a. Category Is monitored every year;
 - b. Category IIs monitored once every three (3) years;
 - c. Category IIIs monitored once every three (3) years should MSO occupancy be detected through inventories (see exception #1 under "Inventories")

MSO Research

The Tribal Game and Fish Department will pursue funding for additional research into MSO behavior on the Reservation, including foraging, nesting, and response to management activities. Information obtained from this research would aid in developing management recommendations.