United States Department of the Interic
U.S. Fish and Wildlife Service
2321 West Royal Palm Road, Suite 103
Phoenix, Arizona 85021-4951
Telephone: (602) 640-2720 FAX: (602) 640-2730

In Reply Refer To:
AESO/SE
2-21-96-F-095

December 8, 1999

Ms. Conny J. Frisch
Forest Supervisor
Kaibab National Forest
800 South 6th Street
Williams, Arizona 86046

Dear Ms. Frisch:

The U.S. Fish and Wildlife Service has reviewed the project proposal for the Williams Ski Area Expansion. Your June 11, 1999, request for formal consultation was received on June 14, 1999. This document represents the Service's biological opinion on the effects of the proposed action on the Mexican spotted owl (*Strix occidentalis lucida*) (MSO) in accordance with section 7 of the Endangered Species Act of 1973, as amended, (16 U.S.C. 1531 *et seq.*).

According to the September 10, 1998, biological assessment and evaluation (BAE), the Forest Service determined that the preferred alternative is likely to adversely affect the MSO. Because critical habitat for the MSO was revoked (63 FR 14378), no conferencing or consultation is required for critical habitat for this species.

This biological opinion is based on information provided in the September 10, 1998, BAE, an undated draft environmental impact statement (EIS), and other sources of information. Literature cited in this biological opinion does not represent a complete bibliography of literature available on the MSO or the effects of ski area expansion on the species, or other subjects that may have been considered in this opinion. A complete administrative record of this consultation is on file in the Arizona Ecological Services Field Office.

CONSULTATION HISTORY

Although the development of the proposed project has a relatively long history, the most recent informal consultation on the Williams Ski Area Expansion continued since November 1995. Informal consultation since that time consisted of several conversations and meetings between staffs of the Service and Kaibab National Forest.

The Forest Service requested formal consultation for the MSO on June 11, 1999, with a determination that the project was likely to adversely affect the MSO. On July 13, 1999, the Service issued a letter acknowledging the request for formal consultation.

In the June 11 request, the Forest Service also determined in the BAE that the proposed project "may affect, but is not likely to adversely affect" the American peregrine falcon (*Falco peregrinus anatum*). The American peregrine falcon (*Falco peregrinus anatum*) was removed from the Federal list of Endangered and Threatened Wildlife on August 26, 1999 (64 FR 46542). Federal agencies are no longer required to consult with the Service under section 7 of the Act in the event activities they authorize, fund, or carry out affect peregrine falcons. However, removal of the protection of the Act will not affect the protection afforded all peregrine falcons under the Migratory Bird Treaty Act. In addition, the Act requires monitoring of the species for at least five years after delisting. This monitoring will consist, at a minimum, of annual occupancy surveys, assessing productivity, determining contaminant concentrations, and monitoring levels of take of peregrine falcons for falconry purposes (63 Fr 45446). The Service is currently developing a monitoring plan which will be available in the near future.

Several meetings and telephone conversations were conducted to discuss the details of the project and the formal consultation. As a result of these meetings, the Forest Service provided the Service with additional information relevant to the consultation.

On November 17, 1999, the Service provided a draft biological opinion for this project to the Forest Service for review. The Service received comments on the draft biological opinion on December 2, 1999.

BIOLOGICAL OPINION

DESCRIPTION OF THE PROPOSED ACTION

Although the September 9, 1998, BAE (Ackers 1998) stated that a preferred project alternative had not yet been identified, the undated EIS stated that Alternative C (Ski Area Expansion Option 2) of that document has been identified as the preferred alternative. This biological opinion is based on the project description (Kaibab National Forest undated) of the selected Alternative C. If that alternative is subsequently modified or if another alternative is actually selected, then additional effects to listed species may result, and reconsultation may be required.

The Williams Ranger District of the Kaibab National Forest proposes to authorize Alpine Recreation Company LLL to expand the existing Williams Ski Area. The area is located on Bill Williams Mountain, approximately four miles south of Williams, Arizona. To accommodate the proposed action, the Forest Service would expand the existing special use permit area from 37 to approximately 200 acres (Kaibab National Forest undated).

The current Williams Ski Area consists of six trails, encompassing 16.4 acres, and has a total skier/snowboarder capacity of 391 users per day. In addition, there is a one acre snow-play area

with a capacity of 60 users. Under the proposed action, the total number of skiers that could use the ski runs at one time would increase from 250 to about 1,130, and 120 snow-play area users would be accommodated. Fifteen new ski trails would be added to the existing six runs and the skiable terrain would increase by about 46.2 acres to about 62.6 acres. The ski trails would also have pull-outs incorporated at intervals along the trails, resulting in an additional clearing of approximately 1.5 acres (Kaibab National Forest undated).

There are presently two surface lifts (one rope tow and one poma lift) at the ski area. Two double chair lifts running side by side would be constructed. The length of the lift corridor would be 5,600 feet and the width would be 60 feet. The lift would have two midway stations with one each at 7,800 feet and 8,100 feet elevation. The lift would end 400 feet below the summit of the mountain, and no user activity would be allowed above the lift terminus. Three smaller handle tows would be built. Handle tow D would serve the beginner slope 8a between the two base lodges. Handle tow E would exclusively serve tubers on run 3b. A handle tow would replace the existing rope tow on the beginner slope (Kaibab National Forest undated).

Snowmaking would be undertaken to cover 9 acres of the ski trails. This coverage would extend a short way up several runs from the lodge and as far as 8,150 feet elevation on one run. Water required for snowmaking would be approximately seven to 11.5 acre-feet per year. Water for snowmaking would be drawn from three water impoundments, or ponds, which would provide a total water storage capacity of 20-24 acre-feet. Water would be distributed to the ski trails by a 2,000 foot subsurface system. Two of the ponds, both small, would be built near the new base lodge. A third and larger pond would be built approximately 350 vertical feet above the new base lodge (Kaibab National Forest undated).

The existing lodge would become the focal point for beginner and novice level skiers, special groups, and the snow-play and sledding activities. Some refurbishment and remodeling would be required to adjust space and allocation for services provided by this lodge. A new base lodge would also be constructed approximately 350 feet to the west of the existing lodge. The two lodges would be interconnected by beginner slope 8a and lift D, as well as a walkway along the edge of slope 8a. This lodge would face the mountain and ski slopes and function as the primary focal point for intermediate and advanced skiers as well as the summertime activities. It would incorporate a deck with outside seating and a grill, having approximately 4,600 square feet of inside space with 2,500 square feet of outside deck seating. A top mountain lodge, approximately 800 square feet, would be built as a warming hut. The primary function of this building would be to provide a warming and resting area, snack bar food and beverages, and toilet services. A small space for the ski patrol would also be included (Kaibab National Forest undated).

A total of 114,000 square feet of new parking area would be constructed for an additional 280 vehicles in the following areas. The existing parking lot would be expanded by 12,000 square feet to accommodate an additional 30 cars. A new lot of 30,000 square feet and providing space for 75 cars would be built along the north side of the entrance roadway and existing parking. Another new lot of approximately 72,000 square feet and providing space for 180 cars would

extend west of the existing lot and north of the new lodge. A maintenance equipment and employee parking area of 1,200 square feet would be established adjacent to the new maintenance building, north of the existing lodge, between the entrance roadway and the lodge.

A new maintenance building (approximately 2,400 square feet) located between the existing lodge and entrance roadway would house all vehicle equipment and lift maintenance functions. The new lodge would house 8,000 gallons of potable water storage (to be hauled from the city water source) and 6,000 gallons of raw water storage harvested from roof surfaces (for toilet use). These separate systems would be interconnected with their corresponding separate systems at the existing lodge. This would provide a separate potable water system with 9,500 gallon storage. The raw water system would have approximately 40,500 gallons storage. A gravity septic/leach field disposal system at the new lodge would be designed per County Health Department requirements for peak use of approximately 1,500 people per day. This system would be independent of the system at the existing lodge. Electric power would be generated on-site for all power needs including the new lifts. The generator would be propane-fueled (approximately 750 KVA, 480V30) and housed at the maintenance building. A co-generation design would also provide the heating for this building (Kaibab National Forest undated).

During the summer the main lift would take visitors to within 400 feet of the summit of Bill Williams Mountain. The new lodges would remain open during the summer for the "sky rides." Approximately 25,000 visitors to the sky ride would be expected. In addition, the ski area would host an American Indian "marketplace" which would be located near the new lodge and near the pathways that connect with the parking lot and existing lodge. There would be spaces for approximately 24 to 36 vendors. No hiking trails and no picnic areas would be established. No other summer activity, other than the operation of the sky ride for scenic viewing purposes, would be allowed in the expanded ski area (Kaibab National Forest undated).

The special use permit holder will be required to improve the ski area access road by widening it from 19 feet to 20 feet (Kaibab National Forest undated).

The Forest Service stated in the EIS (Kaibab National Forest undated), and confirmed on July 29, 1999, that the following mitigating measures are components of the proposed action.

> Any new trails built for use of the ski area will not connect to existing trails leading outside the ski area, nor, specifically, to the mountaintop.
>
> Restrict ski area visitor access to within permit area.
>
> No new ski area construction will be permitted within 400 feet of the summit.
>
> Monitoring for Mexican spotted owls would be conducted every spring, commencing on or near April 1 depending on weather conditions. Monitoring would include at least four surveys of the ski area by a qualified biologist. Two surveys before and two surveys after the Memorial Day weekend would be done according to current protocol. If no Mexican spotted

owls are detected during the two surveys prior to Memorial Day weekend, the sky ride would be permitted to open that weekend. If Mexican spotted owls are found prior to Memorial Day weekend, the sky ride would remain closed until July 1. Two more surveys would still be required after Memorial Day and before July 1 each year. In addition, at least one more survey would be required after the sky ride opens on July 1.

Tree removal for construction of the ski runs would be restricted between July 15 and March 1 to protect nesting birds.

Ski runs will be designed to avoid old-growth pockets to the maximum extent possible.

Noxious weed monitoring and removal will be conducted by the Williams Ski Area permit holder.

On October 8, 1999, the Forest Service confirmed that the fourth mitigation measure listed above has been modified to read as below and that this measure, as modified, is now part of the project description.

Monitoring of the Mexican spotted owl Protected Activity Center (PAC) adjacent to the project area will be conducted by a qualified biologist every spring. The area of coverage will include the PAC plus a 0.25 mile extension from the PAC boundary into the project area. The formal monitoring protocol should allow for all required monitoring visits to be completed by Memorial Day. If a spotted owl nest is found more than 0.25 miles from the sky ride, further monitoring will not be necessary and the skyride can open on schedule. If any Mexican spotted owls are found within 0.25 miles of the skyride before Memorial Day weekend, the skyride would remain closed until July 1 and the breeding status and nest location established, if possible. In addition, at least one additional survey would be required after the opening of the skyride on July 1. Consultation with the Service would also be reopened. If all of the required monitoring visits are completed by Memorial Day weekend, and no Mexican spotted owls are found within 0.25 miles of the skyride, then the skyride would be permitted to open that weekend.

Owl surveys and monitoring will be conducted by a qualified biologist in accordance with the USDA Forest Service Region 3 1995 Mexican Spotted Owl Formal Monitoring Protocol and funded by the Williams Ski Area permit holder.

STATUS OF THE SPECIES

A detailed account of the taxonomy, biology, and reproductive characteristics of the MSO is found in the Final Rule listing the MSO as a threatened species (USDI 1993) and in the Final MSO Recovery Plan (USDI 1995). The information provided in those documents is included herein by reference. Although the MSO's entire range covers a broad area of the southwestern United States and Mexico, much remains unknown about the species' distribution and ecology. This is especially true in Mexico where much of the MSO's range has not been surveyed. The MSO currently occupies a broad geographic area but does not occur uniformly throughout its

range. Instead, it occurs in disjunct localities that correspond to forested isolated mountain systems, canyons, and in some cases, steep, rocky canyon lands. The primary administrator of lands supporting MSO in the United States is the U.S. Forest Service. Most owls have been found within Forest Service Region 3 (including 11 National Forest in Arizona and New Mexico). Forest Service Regions 2 and 4 (including 2 National Forests in Colorado and 3 in Utah) support fewer owls. According to the Recovery Plan, 91% of MSO known to exist in the United States between 1990 and 1993 occurred on lands administered by the Forest Service.

Surveys have revealed that the species has an affinity for older, well-structured forest, and the species is known to inhabit a physically diverse landscape in the southwestern United States and Mexico. The range of the MSO has been divided into six Recovery Units (RUs), as discussed in the MSO Recovery Plan (USDI 1995). The Recovery Plan reports an estimate of owl sites. An owl "site" is defined as a visual sighting of at least one adult owl or a minimum of two auditory detections in the same vicinity in the same year. This information was reported for 1990-1993. The greatest known concentration of known owl sites in the United States occurs in the Upper Gila Mountains RU (55.9%), followed by the Basin and Range-East RU (16.0%), Basin and Range-West RU (13.6%), Colorado Plateau RU (8.2%), Southern Rocky Mountain-New Mexico RU (4.5%), and Southern Rocky Mountain-Colorado RU (1.8%). Owl surveys conducted from 1990 through 1993 indicate that the species persists in most locations reported prior to 1989.

A reliable estimate of the absolute numbers of MSO throughout its entire range is not available (USDI 1995) and the quality and quantity of information regarding numbers of MSO vary by source. USDI (1991) reported a total of 2,160 owls throughout the United States. Fletcher (1990) calculated that 2,074 owls existed in Arizona and New Mexico.

At the end of the 1995 field season, the Forest Service reported a total of 866 management territories (MTs) established in locations where at least a single MSO had been identified (U.S. Forest Service, *in litt.* November 9, 1995). The information provided at that time also included a summary of territories and acres of suitable habitat in each RU. Subsequently, a summary of all territory and monitoring data for the 1995 field season on Forest Service lands was provided to the Service on January 22, 1996. There were minor discrepancies in the number of MTs reported in the November and January data. For the purposes of this analysis we are using the more recent information.

The Forest Service has converted some MTs into PACs following the recommendations of the Draft MSO Recovery Plan released in March 1995. The completion of these conversions has typically been driven by project-level consultations with the Service and varies by National Forest.

The Williams Ski Area Expansion project area is located in the Upper Gila Mountains RU as defined by the MSO Recovery Plan (USDI 1995). The Upper Gila Mountains RU is a relatively narrow band bounded on the north by the Colorado Plateau RU and to the south by the Basin and Range West RU. The southern boundary of this RU includes the drainages below the Mogollon Rim in central and eastern Arizona. The eastern boundary extends to the Black, Mimbres, San

Mateo, and Magdalena Mountain ranges of New Mexico. The northern and western boundaries extend to the San Francisco Peaks and Bill Williams Mountain north and west of Flagstaff, Arizona. This is a topographically complex area consisting of steep foothills and high plateaus dissected by deep forested drainages. This RU can be considered a "transition zone," because it is an interface between two major biotic regions: the Colorado Plateau and Basin and Range Provinces (Wilson 1969). Habitat within this RU is administered by the Kaibab, Coconino, Apache-Sitgreaves, Tonto, Cibola, and Gila National Forests. The north half of the Fort Apache and northeast corner of the San Carlos Indian Reservations are located in the center of this RU and contain an important habitat link between owl subpopulations at the western and eastern ends of the RU and the subpopulations directly south within the Basin and Range West RU.

This RU consists of deep forested drainages on the Mogollon Plateau. Vegetation generally consists of pinyon/juniper woodland, ponderosa pine/mixed conifer forest, some spruce/fir forest, and deciduous riparian forest in mid and lower elevation canyon habitat. Climate is characterized by cold winters and over half the precipitation falls during the growing season. Much of the mature stand component on the gentle slopes surrounding the canyons has been partially or completely harvested. Most of the forest habitat on steeper ground that may serve as MSO nesting habitat is in suitable condition. MSO are widely distributed and use a variety of habitats within this RU. Owls most commonly nest and roost in mixed-conifer forests dominated by Douglas fir and/or white fir and canyons with varying degrees of forest cover (Ganey and Balda 1989; USDI 1995). Owls also nest and roost in ponderosa pine-Gambel oak forest, where they are typically found in stands containing well-developed understories of Gambel oak (USDI 1995).

This RU contains the largest known concentration of MSO, with approximately 55% of the known MSO territories (USDI 1995). This RU is located near the center of the MSO's range within the United States and is contiguous to four of the other five RUs within the United States. Because of its central location and its large and relatively continuous spotted owl population, the MSO Recovery Team believes that the population in this RU could be uniquely important to the overall stability and persistence of the MSO population in the United States. Specifically, this population could serve as the source population, providing immigrants to smaller, more isolated populations in other RUs. Although the Recovery Team has no data on dispersal patterns or movements between RUs, the Recovery Team believes that this population should be maintained at current levels and with at least the current level of connectivity within the RU (USDI 1995). Significant discontinuities that develop in the MSO's distribution within this RU, and the loss of habitat to support the local sub-populations, may compromise the recovery of the species.

ENVIRONMENTAL BASELINE

The environmental baseline includes past and present impacts of all Federal, State, or private actions in the action area, the anticipated impacts of all proposed Federal actions in the action area that have undergone formal or early section 7 consultation, and the impact of State and private actions which are contemporaneous with the consultation process. The environmental

baseline defines the current status of the species and its habitat to provide a platform to assess the effects of the action now under consultation.

Thirteen forest stands were identified within the proposed ski expansion area (Kaibab National Forest undated). Seven of the 13 stands were classified as mature mixed-conifer, consisting of ponderosa pine, Douglas fir, and/or white fir trees with diameters greater than 18 inches dbf. Those seven stands cover a total of 201 acres with 105 acres of that total within the 200 acre expansion area. The portions of these stands that are in the project area contain a total of approximately seven snags, 1,194 trees between 18 and 24 inches dbh, and 312 trees that are greater than 24 inches dbh (Ackers 1998). The six remaining stands (not presently classified by the Forest Service) consist primarily of aspen and conifers with diameters less than 18 inches. Those six stands cover a total of 144 acres with approximately 88 acres of that total within the proposed 200 acre expansion area. Forest stands classified as old-growth do not occur within the proposed expansion area. Thus, up to 193 acres of mixed conifer cover type is within the project area. The mixed conifer cover type is classified as restricted MSO habitat (USDI 1995). Additional protected habitat on steep slopes greater than 40% with mixed conifer occurs as small stringers elsewhere on Bill Williams Mountain.

Surveys for Mexican spotted owls have been conducted on Bill Williams Mountain each breeding season since 1978. During past surveys, Mexican spotted owls were detected on Bill Williams Mountain in 1978, 1979, 1983, 1984, 1991, and 1993. U.S. Forest Service Region 3 Mexican spotted owl inventory protocol was followed during the 1998 survey effort. No aural responses or visual detection of Mexican spotted owls occurred during the 1998 inventory. No Mexican spotted owls have been detected on Bill Williams Mountain since 1993. A protected activity center (PAC) was established in 1995 on Bill Williams Mountain west of and adjacent to the proposed ski expansion area (Kaibab National Forest undated). The PAC was recently expanded during consultation regarding another project. The total PAC acreage is now 1,015 acres in size. There are no known nest sites for the PAC.

A total of 216 projects have been formally consulted on in Arizona and New Mexico since August 1993. Those projects included 78 where incidental take of MSO was anticipated. Those projects have resulted in the anticipated incidental take of more than 176 MSO. The Forest Service has formally consulted on 206 of those projects. Sixty-five of those projects have resulted in anticipated incidental take of over 157 MSO.

EFFECTS OF THE ACTION

Implementation of project Alternative C would result in the expansion of the special use permit area from 37 to 200 acres. The current 16.4 acres of ski runs, pullouts, and lift corridors would be increased to 65.9 acres and would directly impact 49.5 acres of restricted MSO habitat during the clearing process (Kaibab National Forest undated). Approximately 4 to 13 aspen and 48 to 101 fir trees (white and Douglas) larger than 18 inches in diameter at breast height (dbh) would be removed from the 49.5 acres. No aspen trees greater than 24 inches dbh would be removed. However, 2 to 16 fir trees greater than 24 inches dbh would be removed from the same area (Ackers 1998). An unknown number of smaller trees would also be removed from restricted MSO habitat during the clearing of the proposed ski runs. On July 29, 1999, the Forest Service indicated (and confirmed on August 9, 1999) that the area to be cleared should be considered to exhibit threshold conditions of Table III.B.1 of the MSO Recovery Plan and that the clearing of the ski runs will reduce the area below threshold conditions. No other analysis regarding the threshold conditions was provided by the Forest Service.

Expansion of the Williams Ski Area would result in fragmentation of existing MSO habitat found on Bill Williams Mountain. Calculated edge to area ratios and fractal dimension figures show an increase in habitat fragmentation. Edge to area ratios for forest habitat within the proposed expansion area were calculated to be 25,399 feet:193 acres prior to expansion and 85,815 feet:148 acres after the proposed expansion. An increase of approximately 30 percent in fractal dimension would occur. Fractal dimension (D) ranges from 1.0 (a circular stand having no fragmentation) to 2.0 (a highly convoluted stand composed entirely of edge habitat). Values for fractal dimension calculated during the stand analysis were D=1.217 before the expansion and D=1.538 after the expansion (Kaibab National Forest undated).

The fragmentation of mixed conifer restricted MSO habitat within and surrounding the proposed expansion may impact foraging and/or nesting habitat for the MSO. In addition, the expansion may provide more suitable foraging habitat for MSO predators such as great horned owls.

Disturbance to the MSO may also be caused by human activities in the expansion area and adjacent to the existing PAC. Disturbance may be caused by construction, maintenance, and operations activities associated with the proposed facility. In addition, the increased human recreational activity may result in increased disturbance of MSO in the area.

On July 29, 1999, the Forest Service confirmed that tree removal for construction of ski runs would occur between July 15 and March 1 which partially overlaps the MSO breeding season. The tree removal will occur within 0.25 miles of a MSO PAC where nest location(s) remain unknown. Thus, it is quite possible that MSO of that PAC could be nesting within 0.25 miles of the disturbing activity. In addition, the operation of the sky ride in the summer months will occur during the breeding season within 0.25 miles of the same PAC. Thus, these components of the project are likely to affect the integrity of the PAC.

Results of MSO surveys in the project area indicate that adequate coverage of that area was obtained in 1998 only (Anonymous 1997; Ackers 1998; George Sheppard personal communication 1999). Current MSO survey protocol requires two years of survey with complete coverage of owl habitat within proposed projects. Thus, the proposed project area has not been adequately surveyed for Mexican spotted owls.

CUMULATIVE EFFECTS

Cumulative effects include the effects of future State, local or private actions that are reasonably certain to occur in the action area considered in the foreseeable future. Future Federal actions are subject to the consultation requirements established under sections 7, and, therefore, are not considered cumulative in the proposed action. In past Biological Opinions, it has been stated that, "Because of the predominant occurrences of the MSO on Federal lands, and because of the role of the respective Federal agencies in administering the habitat of the MSO, actions to be implemented in the future by non-Federal entities on non-Federal lands are considered of minor impact." However, there has been a recent increase of harvest activities on non-Federal lands within the range of the MSO. In addition, future actions within or adjacent to the project area that are reasonably expected to occur include urban development, road building, mineral development, logging, fuelwood gathering, trail construction, and other associated actions. These activities reduce the quality and quantity of MSO nesting, roosting, and foraging habitat, cause disturbance to breeding MSO and would contribute as cumulative effects to the proposed action. The Kaibab National Forest has no record of proposed projects within the vicinity of Bill Williams Mountain except for a prescribed burn on the south side and south of the mountain and two areas that are slated for vegetation treatment analysis and possible treatment action (thinning, prescribed burn) (Kaibab National Forest undated).

SUMMARY OF EFFECTS AND CONCLUSION

After reviewing the current status of the MSO, the environmental baseline for the action area, the effects of the proposed action, and the cumulative effects, it is the Service's biological opinion that the Williams Ski Area Expansion, as proposed, is not likely to jeopardize the continued existence of the MSO.

INCIDENTAL TAKE STATEMENT

Sections 4(d) and 9 of ESA, as amended, prohibit taking (harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or attempt to engage in any such conduct) of listed species of fish or wildlife without a special exemption. Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering (50 CFR 17.3). Harass is defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding, or sheltering. Incidental take is any take of listed animal species that results from, but is not the purpose of, carrying out an otherwise lawful activity conducted by the Federal agency or

the applicant. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered a prohibited taking provided that such taking is in compliance with the terms and conditions of this incidental take statement.

The measures described below are non-discretionary, and must be implemented by the agency so that they become binding conditions of any grant or permit issued to the applicant, as appropriate, in order for the exemption in section 7(o)(2) to apply. The Forest Service has a continuing responsibility to regulate the activity covered by this incidental take statement. If the Forest Service (1) fails to require the applicant to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document, and/or (2) fails to retain oversight to ensure compliance with these terms and conditions, the protective coverage of section 7(o)(2) may lapse.

For the purposes of consideration of incidental take of MSO from the proposed action under consultation, incidental take can be anticipated as either the direct mortality of individual birds, or the alteration of habitat that affects the behavior (e.g., breeding or foraging) of birds to such a degree that the birds are considered lost as viable members of the population and thus "taken." They may fail to breed, fail to successfully rear young, raise less fit young, or desert the area because of disturbance or because habitat no longer meets the owl's needs.

In past Biological Opinions, the management territory was used to quantify incidental take thresholds for the MSO (see Biological Opinions provided by the Service to the Forest Service from August 23, 1993 through 1995). The current section 7 consultation policy provides for incidental take if an activity compromises the integrity of a PAC. Actions outside PACs will generally not be considered incidental take.

Using available information as presented within this document, the Service has identified conditions of probable take for the MSO associated with PACs and inadequately surveyed habitat. Based on the best available information concerning the MSO, habitat needs of this species, the project description, and information furnished by the Forest Service, take is anticipated for the MSO as a result of the following:

a) Clearing of ski runs and operation of the skyride within 0.25 miles of a PAC, where no MSO nesting location is known, are proposed to occur during the MSO breeding season (March 1 - August 31).

b) The project is proposed to occur in MSO habitat that has not been adequately surveyed according to current MSO survey protocol.

AMOUNT OR EXTENT OF TAKE

The Service anticipates that the proposed Williams Ski Area Expansion may result in incidental take of two MSO associated with the Bill Williams PAC in the form of harm and harassment due to habitat modification and disruption of normal foraging and reproductive behavior. This harm

and harassment is in the form of disturbance caused by construction of ski runs and skyride and operation of the skyride during the MSO breeding season within 0.25 miles of a PAC where no nest site is known, and conducting the above in owl habitat that has not been adequately surveyed.

EFFECT OF THE TAKE

In the accompanying biological opinion, the Service determined that this level of anticipated take is not likely to result in jeopardy to the MSO.

REASONABLE AND PRUDENT MEASURES

The Service believes the following reasonable and prudent measures are necessary and appropriate to minimize take.

1) The Forest will implement the proposed actions in a manner that minimizes adverse effects to MSO.

2) Personnel education/information programs and well-defined operational procedures shall be implemented.

3) The Forest shall monitor the PAC and report any incidental take to the Service.

TERMS AND CONDITIONS

In order to be exempt from the prohibitions of section 9 of ESA, the Forest Service must comply with the following terms and conditions, which implement the reasonable and prudent measures described above. These terms and conditions are nondiscretionary. Although several of these measures were included in the project description in a particular form, the Service believes that inclusion of those measures as terms and conditions facilitates clarity and tracking.

1.1 Where feasible, and to the greatest extent possible, clearing and construction activities will be conducted outside of the MSO breeding season.

2.1 All field personnel who implement any portion of the proposed action shall be informed of regulations and protective measures as described herein for the MSO. They will be required to report any MSO detected within the proposed project area to the Forest Service.

3.1 Monitoring of the MSO PAC and the adjacent project area will be conducted as described in the discussion of the October 8, 1999, mitigation measure contained in the Description of the Proposed Action section of this document. That mitigation measure, which is part of the project description, is as follows. Monitoring of the Mexican spotted owl Protected Activity Center (PAC) adjacent to the project area will be conducted by a qualified biologist every spring. The area of coverage will include the PAC plus a 0.25 mile

extension from the PAC boundary into the project area. The formal monitoring protocol should allow for all required monitoring visits to be completed by Memorial Day. If a spotted owl nest is found more than 0.25 miles from the sky ride, further monitoring will not be necessary and the skyride can open on schedule. If any Mexican spotted owls are found within 0.25 miles of the skyride before Memorial Day weekend, the skyride would remain closed until July 1 and the breeding status and nest location established, if possible. In addition, at least one additional survey would be required after the opening of the skyride on July 1. Consultation with the Service would also be reopened. If all of the required monitoring visits are completed by Memorial Day weekend, and no Mexican spotted owls are found within 0.25 miles of the skyride, then the skyride would be permitted to open that weekend. Owl surveys and monitoring will be conducted by a qualified biologist in accordance with the USDA Forest Service Region 3 1995 Mexican Spotted Owl Formal Monitoring Protocol and funded by the Williams Ski Area permit holder.

The reasonable and prudent measures, with their implementing terms and conditions, are designed to minimize incidental take that might otherwise result from the proposed action. If, during the course of the action, this level of incidental take is exceeded, such incidental take would represent new information requiring review of the reasonable and prudent measures provided. The Federal agency must immediately provide an explanation of the causes of the taking and review with the Service the need for possible modification of the reasonable and prudent measures.

The Fish and Wildlife Service will not refer the incidental take of any migratory bird or bald eagle for prosecution under the Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. Sections 703-712), or the Bald and Golden Eagle Protection Act of 1940, as amended (16 U.S.C. Sections 668-668d), if such take is in compliance with the terms and conditions (including amount and/or number) specified herein.

DISPOSITION OF DEAD, INJURED, OR SICK MSO

Upon locating a dead, injured, or sick MSO, initial notification must be made to the Service's Law Enforcement Office, Federal Building, Room 8, 26 North McDonald, Mesa, Arizona (telephone: 602/835-8289) within three working days of its finding. Written notification must be made within five calendar days and include the date, time, and location of the animal, a photograph if possible, and any other pertinent information. The notification shall be sent to the Law Enforcement Office with a copy to this office. Care must be taken in handling sick or injured animals to ensure effective treatment and care, and in handling dead specimens to preserve the biological material in the best possible state. If possible, the remains of intact owl(s) shall be provided to this office. If the remains of owl(s) are not intact or are not collected, the information noted above shall be obtained and the carcass left in place. Injured animals should be transported to a qualified veterinarian by an authorized biologist. Should treated owls survive, the Service should be contacted regarding the final disposition of the animal.

CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of ESA directs Federal agencies to utilize their authorities to further the purposes of ESA by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information.

The Service recommends that an additional year of MSO surveys providing complete coverage of the project area be conducted prior to implementation of the proposed project.

REINITIATION - CLOSING STATEMENT

This concludes formal consultation on the action outlined in the draft biological evaluation and draft environmental assessment. As provided in 50 CFR §402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been maintained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation.

Thank you for your consideration of threatened and endangered species. For further information please contact Bill Austin (520-527-0849) or Bruce Palmer (x237). Please refer to the consultation number 2-21-96-F-095, in future correspondence concerning this project.

Sincerely,

David L. Harlow
Field Supervisor

cc: Regional Director, Fish and Wildlife Service, Albuquerque, NM (PARD-ES; GARD-AZ/NM)

Director, Arizona Game and Fish Department, Phoenix, AZ

Literature Cited

Ackers, S. 1998. Biological assessment and evaluation of recreation site development plan Williams Ski Area proposed expansion . Kaibab National Forest, Williams, Arizona. 28 pp.

Anonymous. 1997. Monitoring for Mexican spotted owls on Bill Williams Mountain. 9pp.

Fletcher, K. 1990. Habitat used, abundance, and distribution of the Mexican spotted owl, *Strix occidentalis lucida*, on National Forest System Lands. U.S. Forest Service, Southwestern Region, Albuquerque, New Mexico. 78 pp.

Ganey, J.L. and R.P Balda. 1989. Distribution of habitat use of Mexican spotted owls in Arizona. Condor 91: 355-361.

Kaibab National Forest. Undated. Draft environmental impact statement regarding the expansion of Williams Ski Area. Kaibab National Forest, Williams, Arizona. 81 pp.

U.S. Department of the Interior, Fish and Wildlife Service. 1991. Mexican spotted owl status review. Endangered species report 20. Albuquerque, New Mexico.

U.S. Department of the Interior, Fish and Wildlife Service. 1993. Endangered and Threatened Wildlife and Plants; final rule to list the Mexican spotted owl as threatened. Federal Register. 58:14248-14271.

U.S. Department of the Interior, Fish and Wildlife Service. 1995. Mexican Spotted Owl Recovery Plan. Albuquerque, New Mexico.

Wilson, E.D. 1969. A Resume of the Geology of Arizona. Univ. of Arizona Press, Tucson, AZ. 140 pp.