United States Department of the Interior

FISH AND WILDLIFE SERVICE
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SUMMARY

BIOLOGICAL OPINION ON THE EFFECTS TO
THE MEXICAN SPOTTED OWL FROM THE APACHE PIT SPECIAL USE PROJECT,
LINCOLN NATIONAL FOREST, NEW MEXICO

Cons. # 22420-2011-F-0028

Date of the biological opinion: April 18, 2011

Action agency: Lincoln National Forest

Project: This consultation concerns the effects of the proposed Apache Pit Special Use Project on the Mexican spotted owl (Strix occidentalis lucida) (MSO). The Apache Pit Special Use Project involves expanding the existing boundary 18 acres to the east and south located at T 15S, R 13E, Section 31. The purpose and need of the proposed action is to provide the public a continued, local gravel source by authorizing an expansion of the Apache Pit while developing an Operation and Reclamation Plan to move the gravel operations towards ultimate closure. The reclamation plan would include the desired future use of the area once the Apache Pit closes.

Species affected: Mexican spotted owl

Biological Opinion: The proposed action is not likely to jeopardize the Mexican spotted owl.

Incidental take statement: We identified one protected activity center (PAC) that is adjacent to the Apache Pit. We anticipate that incidental take is not reasonably certain to occur within the Little Apache PAC when the Apache Pit expands its boundary because the Apache Pit area is currently subjected to high levels of noise from gravel mining over the last three decades; the Little Apache PAC has reproduced in seven of the last 15 years, including 2010; the nest site in 2010 was approximately 0.31 miles from the current Apache Pit boundary; and no protected habitat is anticipated to be lost.

Conservation Recommendations: Implementation of conservation recommendations is discretionary. Three conservation recommendations are provided.
Robert Trujillo, Forest Supervisor  
Lincoln National Forest  
3463 Los Palomas Road  
Alamogordo, New Mexico 88310

Dear Mr. Trujillo:

This responds to your January 24, 2011 request for formal section 7 consultation under the Endangered Species Act of 1973, as amended (Act) on the Apache Pit Special Use Project, Sacramento Ranger District, Lincoln National Forest (Forest) in Otero County, New Mexico. The USDI Fish and Wildlife Service (Service) received your request, including the biological assessment (BA) for this project, on January 26, 2011. This consultation concerns the possible effects of the proposed project on the Mexican spotted owl (Strix occidentalis lucida) (MSO). There is no MSO critical habitat within the area; therefore, none will be affected.

CONSULTATION HISTORY

This biological opinion (BO) is based on information provided in the BA; email and telephone conversations between our staffs; data in our files; data presented in the MSO Recovery Plan (Recovery Plan), (USDI Fish and Wildlife Service 1995); Forest Service MSO data; literature review; and other sources of information including the final rules to list the MSO as threatened (USDI Fish and Wildlife Service 1993; 58 FR 14248) and final rule to designate critical habitat (USDI Fish and Wildlife Service 2004; 66 FR 8530). References cited in this BO are not a complete bibliography of all literature available on the MSO. A complete administrative record of this consultation is on file at this office. We received all the information necessary to begin formal consultation on January 26, 2011, when you submitted the BA.

The current document constitutes the Service’s BO based on our review of the proposed action and its effects on the MSO in accordance with the Act.

BIOLOGICAL OPINION

I. Description of the proposed action

The BA contains a complete description of the proposed action and is herein incorporated by reference. The purpose of the proposed action is to provide the public a continued, local gravel source by authorizing an expansion of the Apache Pit. The pit would provide about 1.5 million
cubic yards of material over the next 30 years. The existing boundary would be expanded approximately 18 acres to the east and south. This area is currently mixed conifer forest that is considered MSO restricted habitat. The expansion would remove all of the 18 acres of restricted habitat and the timber would be sold. As part of the action, the Forest is also proposing to reroute the Little Apache Trail (Forest Trail 124) for safety concerns.

Activities associated with the current gravel operation encompass approximately 13 acres. The mining pit, structures, and equipment account for about 9 of these acres. Large hauling trucks access the pit via a road from US 82 and this will not change.

An Operation and Reclamation Plan (Operation Plan) would also be developed to include reclamation activities when the area is ultimately closed. The desired future condition under the Operation Plan would include revegetation and erosion control features. The Mineral Materials Permit would incorporate the Operation Plan.

Conservation Measures

These conservation measures represent actions proposed by the Forest that are evaluated below as part of our jeopardy analysis. They are intended to minimize impacts associated with the MSO and must be undertaken by the Forest because they are part of the proposed action. If they are not fully implemented, the Service should be contacted to determine if reinitiation of formal consultation is required (50 CFR 402.16).

- Actions would be confined to the current pit and future expansion area and would avoid the adjacent Little Apache MSO Protected Activity Center (PAC).

- Rock blasting operations would be prohibited during MSO breeding season (March 1st through August 31st) unless there is confirmation that MSOs are not reproducing in a given year.

II. Status of the species (range-wide)

Mexican spotted owl

The MSO was listed as a threatened species in 1993 (USDI 1993). The primary threats to the species were cited as even-aged timber harvest and stand-replacing wildland fire, although grazing, recreation, and other land uses were also mentioned as possible factors influencing the MSO population. The Service appointed the Mexican Spotted Owl Recovery Team in 1993, which produced the Recovery Plan for the Mexican Spotted Owl in 1995 (USDI 1995). Critical habitat was designated for the MSO in 2004 (USDI 2004).

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 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, the MSO does not occur uniformly throughout its range. Instead, it occurs in disjunct localities that correspond to isolated forested mountain systems, canyons, and in some cases steep, rocky canyon lands. Surveys have revealed that the species has an affinity for older, uneven-aged forest, and the species is known to inhabit a physically diverse landscape in the southwestern United States and Mexico.

The U.S. range of the MSO has been divided into six recovery units (RU), as discussed in the Recovery Plan. The primary administrator of lands supporting the MSO in the United States is the Forest Service. Most owls have been found within Forest Service Region 3 (which includes 11 National Forests in Arizona and New Mexico). Forest Service Regions 2 and 4 (which includes two National Forests in Colorado and three in Utah) support fewer owls. According to the Recovery Plan, 91 percent of MSO known to exist in the United States between 1990 and 1993 occurred on lands administered by the Forest Service.

Historical and current anthropogenic uses of MSO habitat include both domestic and wild ungulate grazing, recreation, fuels reduction treatments, resource extraction (e.g., timber, oil, gas), and development. These activities have the potential to reduce the quality of MSO nesting, roosting, and foraging habitat, and may cause disturbance during the breeding season. Livestock and wild ungulate grazing is prevalent throughout Region 3 National Forest lands and is thought to have a negative effect on the availability of grass cover for prey species. Recreation impacts are increasing on all forests, especially in meadow and riparian areas. There is anecdotal information and research that indicates that owls in heavily used recreation areas are much more erratic in their movement patterns and behavior. Fuels reduction treatments, though critical to reducing the risk of severe wildland fire, can have short-term adverse effects to MSO through habitat modification and disturbance. As the human population grows, especially in Arizona, small communities within and adjacent to National Forest System lands are being developed. This trend may have detrimental effects to MSO by further fragmenting habitat and increasing disturbance during the breeding season. West Nile Virus also has the potential to adversely impact the MSO. The virus has been documented in Arizona, New Mexico, and Colorado, and preliminary information suggests the MSO may be highly vulnerable to this disease (Courtney et al. 2004). Unfortunately, due to the secretive nature of the MSO and the lack of intensive monitoring of banded birds, we will most likely not know when MSOs contract the disease or the extent of its impact to MSO range-wide.

Currently, high-intensity, stand-replacing fires are influencing ponderosa pine and mixed conifer forest types in Arizona and New Mexico. Uncharacteristic, high-severity, stand-replacing wildland fire is probably the greatest threat to MSO within the action area. As throughout the West, fire severity and size have been increasing within this geographic area.

Global climate change may also be a threat to the MSO and synergistically result in increased effects to habitat from fire, fuels reduction treatments, and other factors discussed above. Studies have shown that since 1950, the snowmelt season in some watersheds of the western U.S. has advanced by about 10 days (Dettinger and Cayan 1995, Dettinger and Diaz 2000, Stewart et al. 2004). Such changes in the timing and amount of snowmelt are thought to be
signals of climate-related change in high elevations (Smith et al. 2000, Reiners et al. 2003). The impact of climate change is the intensification of natural drought cycles and the ensuing stress placed upon high-elevation montane habitats (IPCC 2007, Cook et al. 2004, Breshears et al. 2005, Mueller et al. 2005). The increased stress put on these habitats is likely to result in long-term changes to vegetation, invertebrate, and vertebrate populations within coniferous forests and canyon habitats that affect ecosystem function and process.

A reliable estimate of the number of MSOs throughout its entire range is not currently available (USDI 1995) and the quality and quantity of information regarding number of MSOs vary by source. USDI (1991) reported a total of 2,160 MSOs throughout the U.S. Fletcher (1990) calculated that 2,074 MSOs existed in Arizona and New Mexico. However, Ganey et al. (2000) estimates approximately 2,950 ± 1,067 (SE) MSOs in the Upper Gila Mountains RU alone. The Forest Service Region 3 most recently reported a total of approximately 1,025 PACs established on National Forest System lands in Arizona and New Mexico (B. Barrera, pers. comm. June 18, 2007). The Forest Service Region 3 data are the most current compiled information available to us; however, survey efforts in areas other than National Forest lands have resulted in additional sites being located in all Recovery Units.

Researchers studied MSO population dynamics on one study site in Arizona (n = 63 territories) and one study site in New Mexico (n = 47 territories) from 1991 through 2002. The Final Report, titled “Temporal and Spatial Variation in the Demographic Rates of Two Mexican Spotted Owl Populations” (Gutierrez et al. 2003), found that reproduction varied greatly over time, while survival varied little. The estimates of the population rate of change (\(\lambda = \text{Lambda}\)) indicated that the Arizona population was stable (mean \(\lambda\) from 1993 to 2000 = 0.995; 95 percent Confidence Interval = 0.836, 1.155) while the New Mexico population declined at an annual rate of about 6 percent (mean \(\lambda\) from 1993 to 2000 = 0.937; 95 percent Confidence Interval = 0.895, 0.979). The study concludes that MSO populations could experience great (>20 percent) fluctuations in numbers from year to year due to the high annual variation in recruitment. However, due to the high annual variation in recruitment, the MSO is then likely very vulnerable to actions that impact adult survival (e.g., habitat alteration, drought, etc.) during years of low recruitment.

Since the MSO was listed, we have completed or have in draft form a total of 223 formal consultations for the MSO. These formal consultations have identified incidences of anticipated incidental take of MSO in 440 PACs over the course of 17 years. The form of this incidental take is almost entirely harm or harassment, rather than direct mortality, and many of these actions have resulted in single or short-term disturbance to MSOs that has not resulted in long-term harassment, habitat degradation, or habitat loss. These consultations have primarily dealt with actions proposed by Forest Service Region 3. However, in addition to actions proposed by Forest Service Region 3, we have also reviewed the impacts of actions proposed by the Bureau of Indian Affairs, Department of Defense (including Air Force, Army, and Navy), Department of Energy, National Park Service, and Federal Highway Administration. These proposals have included timber sales, road construction, fire/ecosystem management projects (including prescribed natural and management ignited fires), livestock grazing, recreation activities, utility
corridors, military and sightseeing overflights, and other activities. Only two of these projects (release of site-specific owl location information and existing Forest Plans) have resulted in biological opinions that the proposed action would likely jeopardize the continued existence of the MSO. The jeopardy opinion issued for existing Forest Plans on November 25, 1997 was rendered moot as a non-jeopardy/no adverse modification BO and was issued the same day.

In 1996, we issued a biological opinion on Forest Service Region 3 adoption of the Recovery Plan recommendations through an amendment to their Land and Resource Management Plans (LRMPs). In this non-jeopardy biological opinion, we anticipated that approximately 151 PACs would be affected by activities that would result in incidental take of MSOs. In addition, on January 17, 2003, we completed a reinitiation of the 1996 Forest Plan Amendments biological opinion, which anticipated the additional incidental take of five MSO PACs in Region 3 due to the rate of implementation of the grazing standards and guidelines, for a total of 156 PACs. Consultation on individual actions under these biological opinions anticipated incidental take in the form of harm and/or harassment of owls associated with 243 PACs on Forest Service Region 3 lands. Forest Service Region 3 reinitiated consultation on the LRMPs on April 8, 2004. On June 10, 2005, the Service issued a revised biological opinion on the amended LRMPs. We anticipated that while the Region 3 Forests continue to operate under the existing LRMPs, take is reasonably certain to occur to an additional 10 percent of the known PACs on Forest Service lands. We expect that continued operation under the plans will result in harm to 49 PACs and harassment to another 49 PACs. To date, consultation on individual actions under the amended Forest Plans, as accounted for under the June 10, 2005, biological opinion has resulted in the incidental take of MSOs associated with 42 PACs over approximately five years. However, because some of this incidental take has been in the form of short-term harassment that has occurred and is no longer on-going, we are continuing to track incidental take in 35 PACs associated with actions covered under the 2005 LRMP BO (16 harm, 19 harass). Incidental take associated with Forest Service fire suppression actions, which was not included in the LRMP proposed action, has resulted in the incidental take of MSOs associated with 27 PACs (6 harm, 21 harassment).

III. Environmental baseline

Regulations implementing the Act (50 CFR 402.02) define the environmental baseline as the past and present impacts of all Federal, State, or private actions and other human activities in the action area. Also included in the environmental baseline are anticipated impacts of all proposed Federal projects that have undergone section 7 consultation, and impacts of State and private actions that are contemporaneous with the consultation in progress.

a. Status of species within the action area

Mexican spotted owl

The Forest is within the Basin and Range - East RU. This RU is an important source population for other areas (USDI Fish and Wildlife Service 1995). MSOs here occur in isolated mountain
ranges scattered across the region, the largest portion occurring in the Sacramento Mountains. In this RU, MSOs have been reported on Forest Service lands in the Sandia, Manzano, Sacramento, and Guadalupe Mountains, and in Guadalupe National Park, Carlsbad Caverns National Park, and the Mescalero Apache Reservation. MSOs are most common in mixed-conifer forest, but have been found in ponderosa pine forest and pinon/juniper woodland (Skaggs and Raitt 1988, USDI Fish and Wildlife Service 1995).

There are 199 PACs within the Basin and Range East RU, with 148 PACs on the Lincoln National Forest. The Sacramento Ranger District has 117 PACs; the Guadalupe Ranger District has 10 PACs; and the Smokey Bear Ranger District has 22 PACs. Additional PACs are located on the Mescalero Apache Reservation (37 PACs), the Guadalupe Mountains National Park (11 PACs), and the Cibola National Forest (3 PACs).

Major threats to the MSO, in order of potential effects, include: 1) catastrophic, stand-replacement fires, 2) some forms of timber harvest, 3) fuelwood harvest, 4) grazing, 5) agriculture or development for human habitation, and 6) forest insects and disease (USDI Fish and Wildlife Service 1995). Minor threats include: 1) certain military operations, 2) other habitat alterations (e.g. power line and road construction, noxious weed control), 3) mining, and 4) recreation. Minor threats are activities not currently extensive in time or space but are potential threats to the MSO.

The dominant land uses within the RU include timber management and livestock grazing. Recreational activities such as off-road driving, skiing, hiking, camping, and hunting are locally common within the RU (USDI Fish and Wildlife Service 1995).

Past and present Federal, State, private, and other human activities that have undergone informal consultation and conferencing and may affect the MSO and its habitat are as follows: The Hay and Scott Able timber sales, Bridge salvage sale, Walker fire salvage sale, Wildland Urban Interface projects, livestock grazing, recreational activities, recreation and scenic vista developments, road construction, maintenance activities, land exchanges, right-of-way issuances, off-road motorcycle events, power line construction, wildlife research projects, urban development, and catastrophic wildfires, their suppression and rehabilitation activities.

The likelihood of MSOs occurring within the action area is very high. Informal and formal monitoring, started in 1994, has confirmed MSO presence since 1994 and continuing each year through 2010 (except 1997) (BA Appendix D). The Little Apache PAC was established in 1995. No MSO have been found utilizing the restricted habitat in the Apache Pit expansion area during 16 years of surveys. According to the BA, this area currently contains a limited number of 18-24 inch dbh trees and snags because a timber sale removed commercial-size trees in 1992. The remaining mixed conifer habitat within the proposed expansion area is primarily even-aged, low-density trees that are pole-size (6-15 inch dbh), with an open understory. Canopy cover is also low within this area.
b. Factors affecting species environment within the action area

Mexican spotted owl

MSOs in this RU occur in isolated mountain ranges, the largest portion occurring in the Sacramento Ranger District. As noted, the Sacramento Ranger District contains the majority of designated PACs on Forest Service lands (USDA Forest Service 2002).

Fires such as the Peppin, Scott Able, and Walker have modified thousands of acres of habitat and impacted multiple MSO territories. The Peppin Fire in the Capitan Mountains Wilderness burned approximately 65,000 acres (26,315 ha). The Scott Able fire burned 16,034 acres (6,491 ha), of which 14,551 acres (5,889 ha) are administered by the Lincoln National Forest and 1,483 acres (600 ha) were on private land. Approximately 12,291 acres (4,976 ha) that burned were considered suitable MSO habitat. The Scott Able fire affected all or portions of 6 PACs and 2 PACs are adjacent to the burned area. Heavy fuel loads contributed to these large-scale fires, which likely caused relatively short-term (3 to 5 years) adverse impacts on soils and water resources from fire-induced erosion and increased sediment delivery to streams.

IV. Effects of the action

Effects of the action refer to the direct and indirect effects of an action on the species or critical habitat, together with the effects of other activities that are interrelated and interdependent with that action, which will be added to the environmental baseline. Indirect effects are those that are caused by the proposed action and are later in time, but are still reasonably certain to occur. Direct effects are the direct and immediate effects of the project on the species or its habitat. Direct effects result from the agency action including the effects of interrelated actions and interdependent actions.

Mexican Spotted Owl

The proposed action would expand and continue gravel mining operations to include the full removal of 18 acres of MSO restricted habitat. The MSO will be adversely affected from removal of restricted habitat because these actions are inconsistent with the Recovery Plan and it would no longer be managed as MSO habitat (USDI 1995). Additionally, the area would no longer be available as MSO foraging habitat.

We consider noise effects to be interrelated and interdependent with the issuance of the new special use permit and continued operations. Gravel extraction primarily uses a bulldozer and secondarily uses blasting. Rock crushers and bulldozers are typically and consistently operational during the day and will likely continue in the future. Delaney et al. (1997) reviewed literature on the response of owls and other birds to noise and concluded that raptors are more susceptible to disturbance-caused nest abandonment early in the nesting season. They also reported that the tendency to flush from a nest declines with experience or habituation to the noise, although the startle response cannot be completely eliminated. Delaney and Grubb (2004)
suggest that owls may be capable of hearing road equipment at a distance of approximately .25-
mile from the source.

Mining operations over the next 30 years may increase noise levels within the adjacent Little Apache MSO PAC on Forest Service lands. This PAC has been occupied for 15 years while the existing pit has been operating. MSOs have reproduced successfully for seven of those years, including 2010. Although the blasting of rocks will not occur when MSOs are reproducing, continued gravel mining in the existing and expanded pit could result in additional noise (i.e., from heavy machinery and hauling trucks) during the MSO breeding season (March 1 – August 31). This may result in avoidance of the project area and its immediate vicinity or potentially some localized temporary displacement of young or adults. Nevertheless, we do not anticipate that reproducing MSOs will be adversely affected within the Little Apache PAC because steep topography will shield the nest area from noise and behavioral disruptions. Moreover, the known nest location is approximately 0.31 miles from the areas where timber harvesting and gravel operations will occur. When gravel operations cease in the future (up to 30 years), the area encompassing the current nest location will be approximately 0.25 mile from the expansion boundary. Based on this information, we find that although noise from current and future gravel operations have the potential to affect the Little Apache PAC, it is not likely to cause behavioral disruptions (i.e., feeding, breeding, or sheltering). Therefore, we anticipate that MSOs would likely continue to occupy and nest within the adjacent PAC.

A connected action would be to reroute Little Apache Trail (Forest Trail 124) for safety concerns. The new trail location is an old logging road along a 0.3 mile distance just north and east of the current trail location. This trail currently has light use by hikers in the summer but most use occurs in the winter with cross-country skiing. The rerouting of the current trail is not expected to increase public use. Rehabilitation of the new trail will include clearing the old logging road of vegetation and smoothing of the trail for use by the public. No MSO habitat will be impacted or removed from this new trail rehabilitation. Any noise from the minimal trail activities will be minimal and will not cause disturbance to MSO in the adjacent PAC because the current MSO nest site is greater than 0.25 mile.

Cumulative Effects

Cumulative effects include the effects of future State, tribal, local, or private actions that are reasonably certain to occur in the action area considered in this BO. Future Federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the Act. In past BOs, it has been stated that, “Because of 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.
Future actions on non-Federal lands adjacent to the Forest within or adjacent to the project area that are reasonably expected to occur include livestock grazing, urban development, road construction, logging, fuelwood gathering, vegetation management (e.g., mowing or herbicide treatments), fuels management, fire suppression activities, wildland urban interface vegetative treatments, trail construction, campground activities and other associated recreation. These activities reduce the quality and quantity of MSO nesting, roosting, and foraging habitat, cause disturbance to MSOs and will contribute as cumulative effects to the proposed action. The major concern in assessing cumulative impacts is the further loss of currently occupied and unoccupied habitat that contributes to a functioning MSO population, including those areas necessary to provide connectivity between populations. We believe that the continuing rate of habitat loss has the potential to disrupt the population dynamics of this species.

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 and based on the best commercial and scientific data available, it is our biological opinion that the Apache Pit proposed expansion and continued gravel mining operations is not likely to jeopardize the continued existence of the MSO. We make this finding for the following reasons:

1) The Apache Pit area is currently subjected to high levels of noise from gravel mining over the last three decades;

2) The Little Apache PAC MSOs has reproduced in seven of the last 15 years, including 2010;

3) The nest site in 2010 was approximately 0.31 miles from the current Apache Pit boundary; and

4) No protected habitat is anticipated to be lost and 18 acres of less than optimal restricted habitat are expected to be removed by the proposed action.

Although the implementation of the proposed action will permanently remove 18 acres of restricted habitat and render the area unsuitable for foraging of MSOs, these impacts will not preclude survival and recovery for the MSO because of the currently, disturbed nature of the project area. Therefore, the implementation of the proposed action is not be expected to impede the MSOs ability to nest, roost, forage, or disperse within the Basin and Range-East RU.

INCIDENTAL TAKE STATEMENT

Section 9 of the Act and Federal regulation pursuant to section 4(d) of the Act prohibit take of endangered and threatened species without special exemption. Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harm means an act that actually kills or injures listed species. Such acts may include
significant habitat modification or degradation that result in death or injury to listed species by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Harass means an intentional or negligent act or omission that creates the likelihood of injury to a listed species by annoying it to such an extent as to significantly disrupt normal behavior that includes, but is not limited to, breeding, feeding or sheltering. Incidental take is incidental to, and not the purpose of, carrying out an otherwise lawful activity. In section 7(b)(4)(iv) and section 7(o)(2) of the Act, incidental take not intended as part of agency action is not considered prohibited taking if such taking meets the terms and conditions of an Incidental Take Statement.

AMOUNT OR EXTENT OF TAKE

We do not anticipate that the proposed project will result in incidental take of MSOs. Although the permanent removal of 18 acres of restricted habitat may adversely affect MSOs, noise-related effects from blasting of rock will occur when MSOs are not reproducing and the most vulnerable. These actions, in addition to disturbance from continued pit operations, will not disrupt breeding, feeding, or sheltering activities. We do not anticipate that any direct mortality of individual birds, nor do we anticipate that the alteration of restricted habitat will affect the behavior (i.e., breeding or foraging) of the birds to such a degree that the birds are considered lost as viable members of the population and are thus “taken.” Therefore, no reasonable and prudent measures are provided. However, if during the course of the action, incidental take occurs, such incidental take would represent new information requiring review of the project’s effects. The Forest Service must immediately provide an explanation of the causes of the taking and review with us the need for possible addition of reasonable and prudent measures.

CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Act directs Federal agencies to use their authorities to further the purposes of the Act 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 recommendations provided here relate only to the proposed action and do not represent complete fulfillment of the agency’s section 7(a)(1) responsibility for this species. We recommend the following conservation recommendations be implemented:

1. We recommend that the Forest Service continue monitoring the MSO PAC to determine occupancy and reproduction;

2. In order for the Service to be kept informed of actions minimizing or avoiding adverse effects or benefitting listed species or their habitats, the Service requests notification of the implementation of any conservation recommendations; and

3. Following the Recovery Plan, conduct an ecosystem assessment to document that a surplus of threshold habitat exists at the Forest and District Level (i.e., a larger landscape
level). Manage this habitat toward target conditions following Table III.B.1. The Forest had previously committed to completing the assessment by Spring 2009, but still has yet to complete the task. If a deficit of threshold habitat is found, additional forest stands should be identified that:

a. have the site potential to reach target conditions; and

b. whose current conditions most closely approach target conditions.

**Disposition of dead or injured listed animals**

Upon finding dead, injured, or sick individual endangered or threatened species, initial notification must be made to the nearest Service Law Enforcement Office. In New Mexico, contact (505-346-7828) or the New Mexico Ecological Services Field Office (505-346-2525). Written notification must be made within 5 calendar days and include date, time, and location, photograph, and any other pertinent information. Care must be taken in handling sick or injured animals to ensure effective treatment and care, and in handling dead specimens to preserve biological material in the best possible condition. If feasible, remains of intact specimens of listed species will be submitted to educational or research institutions holding appropriate State and Federal permits. If such institutions are not available, information noted above will be obtained and the carcass left in place.

Arrangements regarding proper disposition of potential museum specimens will be made with the institution before carrying out of the action. A qualified biologist should transport injured animals to a qualified veterinarian. Should any listed species survive treatment, we should be contacted regarding final disposition of the animal.

**REINITIATION - CLOSING STATEMENT**

This concludes formal consultation on the Apache Pit Special Use Project. As provided in 50 CFR 402.16, re-initiation 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 proposed 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 listed species or critical habitat that was not considered in this opinion; or (4) a new species or critical habitat is designated that may be affected by the proposed action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take shall cease pending reinitiation.
In future communications regarding this project, please refer to consultation #22420-2011-F-0028. If you have any questions or would like to discuss any part of this BO, please contact Lynn Gemlo of my staff at (505) 761-4726.

Sincerely,

[Signature]

Wally Murphy
Field Supervisor

cc:
District Ranger, Sacramento Ranger District, Lincoln National Forest, Cloudcroft, New Mexico
Director, New Mexico Department of Game and Fish, Santa Fe, New Mexico
Director, New Mexico Energy, Minerals, and Natural Resources Department, Forestry Division, Santa Fe, New Mexico
LITERATURE CITED


