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DEPARTMENT OF THE INTERIOR
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June 27, 1995

In Reply Refer To:
AESO/ES
2-21-90-F-299

Mr. Robert E. Hollis, Division Administrator
U.S. Department of Transportation
Federal Highway Administration
Region Nine, Arizona Division
234 N. Central Ave., Suite 330
Phoenix, AZ 85004

Dear Mr. Hollis:

The U.S. Fish and Wildlife Service (Service) has reviewed Arizona Department of Transportation's proposal submitted by the Federal Highway Administration (FHWA) to upgrade State Route (SR) 260 from Payson to Heber located in Coconino, Gila, and Navajo Counties. Your February 3, 1995, request for formal consultation and conference on proposed critical habitat was received on February 9, 1995. This document represents the Service's biological opinion on the effects of that action on the Mexican spotted owl (MSO) in accordance with section 7 of the Endangered Species Act (ESA) of 1973, as amended, (16 U.S.C. 1531 et seq.) This document also incorporates the conference report for proposed MSO critical habitat and will be adopted as the biological opinion for critical habitat when the designation of critical habitat becomes effective.

This biological opinion is based on information provided in the August 24, 1994, draft biological assessment; meetings between the Service, FHWA, Sverdrup Civil, Inc., the Tonto and Apache-Sitgreaves National Forests, and the Arizona Department of Transportation (ADOT); and other sources of information. A complete administrative record of this consultation is on file in the Arizona Ecological Services Office in Phoenix.

CONSULTATION HISTORY

Informal consultation on this project began in September 1990 with a request for a species list at which time the Service determined that there were no threatened or endangered species in the area. On August 6, 1993 the Service provided to Don Smith of Sverdrup Civil, Inc. an updated species list which now included the Mexican spotted owl as a listed threatened species. A March 15, 1994 letter requesting formal consultation was received on March 21, 1994. In a meeting on April 14, 1994 with Bill Austin (Service), Steve Thomas (FHWA) and Don Smith (Sverdrup Civil, Inc.), it was determined that the informal consultation process should continue and Mr. Thomas stated that he would submit a letter retracting the request for formal consultation. On September 30, 1994, FHWA sent the letter requesting withdrawal from formal consultation.

After including additional information on the MSO, a revised Draft Biological Assessment (August 1994) was provided to the Service and on February 9, 1995 the Service received a letter requesting formal consultation on the MSO and conferencing on proposed critical habitat for the MSO. At the time of this second request for formal consultation, critical habitat for the Mexican spotted owl had been proposed. No analysis of the effects of the project on critical habitat was provided in the Draft Biological Assessment. Additional meetings were held to discuss the MSO and other threatened and endangered species concerns. Supplementary project information was provided as a result of these March 14, 1995, April 13, 1995, and June 8, 1995 meetings. The meetings were attended by representatives from the Service, FHWA, Sverdrup Civil, Inc., the Tonto and Apache-Sitgreaves National Forests, and the Arizona Department of Transportation.

BIOLOGICAL OPINION

DESCRIPTION OF PROPOSED ACTION

The proposed action is to upgrade SR 260 from a minor arterial highway to a four-lane rural highway for a distance of approximately 50 miles, from near Payson (Star Valley)(MP 251.94) to Heber (MP 303.74). Roadway improvements may include reconstruction of road segments, minor realignments and other improvements. The majority of the project is located on undeveloped public lands of the Tonto National Forest and the Apache-Sitgreaves National Forests. Projects in Study Zones A, B, C, and F (Tonto National Forest) will probably occur in the next 5 to 10 years. Projects in Study Zones G, H, I, J, and K (Apache-Sitgreaves National Forests) are projected to occur in 10 to 20 years. This consultation is being undertaken through a "programmatic" or "conceptual" approach. The purpose is to identify specific issues to assist in project planning and to identify information gaps. Site specific consultations will be completed prior to initiation of construction of major segments of the road.

The route was divided into eleven segments, each with two to three construction alternatives. Some of the alternatives followed the existing roadway and others relocated the roadway on new alignments. Some adjustments were made to the divided highway alignments to provide

variable width medians that better fit the landform with separations of less than 90 meters (less than 300 feet). Other adjustments were made to avoid sensitive habitat for the Mexican spotted owl and northern goshawk. Although the roadbed area can be reused along a majority of the highway, the existing roadway surface is not being reused because the vertical alignment does not meet current design criteria and/or guidelines relative to stopping sight distances. Descriptions for the preferred alternative by segment along the SR 260 corridor are as follows:

Alternative A1-2 is located between MP 256.2 and MP 259.3, and starts at the easterly end of Star Valley as a five-lane undivided roadway. This five-lane section extends 0.6 miles to MP 256.8, where the roadway transitions into a four-lane divided roadway with a 108 foot separation between roadway centerlines on the south side of the existing roadway. At MP 258.4, the improvement shifts from the south side of SR 260 to the north side of the existing roadway to avoid private property at Lion Spring Draw. The divided highway section continues to MP 259.3.

Alternative B1-1a (MP 259.3 to MP 260.5) is a continuation of the four-lane divided roadway from A1-2, with the new travel lanes located 200 to 300 feet north of the existing roadway. Near MP 260.2, the improvements transition to the south side of the existing SR 260 where the separation between travel lanes varies between 300 and 400 feet.

Alternative B5-1a (MP 260.5 to MP 263.1) is a four-lane divided highway realignment of SR 260 in the Preacher Canyon area. Initially, the westbound alignment follows the existing roadway to MP 261.3, where it departs the existing alignment and proceeds easterly on the south side of SR 260. The eastbound alignment is 200 to 450 feet south of the existing roadway and westbound lanes. After crossing Preacher Canyon on new bridges, the separation between travel lane centerlines is reduced to 70 feet in order to pass through a narrow saddle area. The separation then varies between 70 and 500 feet east of the saddle, but transitions into a 70-foot separation prior to entering Little Green Valley and continues as such to MP 263.1.

Alternative B1-3a (MP 263.1 to 265.1) is a four-lane divided roadway that begins with a 70-foot separation between the travel lanes. East of the Cowboy Camp Dance Hall, a 70-foot separation between travel lanes is maintained, except for a short segment of 70-foot separation in the vicinity of the Ponderosa Granite Borrow Pit. Beyond the borrow pit, the travel lanes transition back to a 200-foot separation with the new lanes located north of the existing roadway.

Alternative C1-1a (MP 265.1 to MP 266.6) is a four-lane divided roadway with the separation between the travel lanes varying from 200 to 300 feet to retain native vegetation in the median. The additional lanes are located north of the existing roadway for most of its length. However, the improvements transition to the south side of SR 260 as the travel lanes approach Thompson Draw.

Alternative C3-1a (MP 266.6 to MP 267.6) is a continuation of the C1-1a four-lane divided roadway section, with a 200-foot separation providing the opportunity to retain native vegetation in the median. As the roadway passes Control Road, the alignments converge to 108-foot separation to minimize cuts through mountainous terrain and return to the existing alignment at MP 267.6.

Alternative C3-3a (MP 267.6 to MP 269.8) is a four-lane divided roadway which bypasses Indian Gardens and Kohls Ranch on the north side of the existing roadway. The separation between the travel lanes varies from 108 to 300 feet. After passing Forest Road 289, the roadway returns to the existing roadway corridor with a 108-foot separation between westbound lanes located on the existing roadway and the eastbound lanes located south of the existing roadway.

Alternative C1-4a (MP 269.8 to MP 270.9) was developed as a four-lane divided roadway generally following the existing alignment, with a roadway separation varying between 70 and 200 feet, as necessary, to best fit the terrain. The widening occurs on the north side of SR 260 until it passes the Gila County Transfer Station, where it shifts to the south side of the existing roadway with a 300-foot roadway separation.

Alternative F1-1a (MP 270.9 to 272.3) is a four-lane divided roadway that generally follows the existing roadway alignment with a variable 200- to 800-foot separation between the travel lanes. This separation is reduced to 108 feet through the curve immediately west of Christopher Creek Campground. The widening initially occurs immediately west of the Christopher Creek Campground. The widening initially occurs south of the existing roadway, but it shifts to the north side just west of the R-C Scout Ranch (MP 271.6).

Alternative F3-1a (MP 272.3 to MP 275.2) is a four-lane divided roadway bypass of the Christopher Creek community. The proposed improvements depart the existing roadway at MP 272.7, and proceed across Christopher Creek to the south of SR 260. The roadway, with a 200-foot separation between travel lane centerlines, proceeds through a ravine up to the mesa south of the community. Beyond the mesa, the roadway separation varies between 200 and 400 feet as it returns to the existing corridor east of the Christopher Creek community. At this point, the westbound alignment merges with the existing roadway, and the eastbound alignment is located south of the existing roadway.

Alternative F1-3a (MP 275.2 to 277.2) is a four-lane divided roadway which locates the eastbound lanes south of the existing roadway, with reconstruction of the existing roadway as the westbound lanes. Initially, the roadway separation varies between 200 and 300 feet, but it widens to nearly 600 feet prior to reaching Sharp Creek. The divided roadway transitions into the existing four-lane undivided roadway near Colcord Road (MP 277.2).

Alternative G1-2a (MP 281.9 to MP 288.0) begins near the Mogollon Rim in the Sitgreaves National Forest as an extension of the four-lane undivided roadway, and proceeds past Lake One. After Lake One, the alignment immediately departs the existing corridor and proceeds southerly, transitioning into a four-lane divided roadway. The new alignment then proceeds easterly, generally paralleling 350 to 500 feet south of the existing SR 260 with a 200-foot separation between roadway centerlines. Between Lake Two and Canyon Creek, the westbound alignment generally follows the existing roadway while the eastbound lanes are 200 to 250 feet south. The roadway transitions to the north side of SR 260 between Jacob Lake and Jacob Well, where the roadway separation is reduced to 70 feet to avoid encroaching into Jacob Lake. After the lake, the roadway separation widens to 200 feet until just west of Forest Lakes Estates where the roadway transitions to a five-lane undivided section.

Alternative H1-1 (MP 288.0 to MP 290.2) is a five-lane undivided roadway that passes through the Forest Lakes Estates area. The existing three-lane roadway will be widened symmetrically to avoid significant encroachments into private property on both sides of the highway.

Alternative I1-2a (MP 290.2 to MP 293.3) begins as an extension of the five-lane undivided roadway section through Forest Lakes Estates, and immediately transitions into a four-lane divided roadway with a 70-foot separation between roadway centerlines that is maintained for its full length. The widening occurs to the south side of the existing roadway.

Alternative J1-2a (MP 293.3 to MP 295.4) is a continuation of Alternative I1-2a, i.e., a four-lane divided roadway with a 70-foot roadway separation, and the widening occurring south of the existing roadway.

Alternative K1-2a (MP 295.4 to MP 302.0) begins as a four-lane divided roadway with the 70-foot separation between roadway centerlines, and the widening occurring to the south side of SR 260. The roadway separation transitions to a 200-foot separation by MP 296.0. Between the North Fork of Black Canyon and MP 301.4, the roadway separation varies between 200 and 400 feet to best fit the landform. At MP 301.4, the roadway transitions into the four-lane undivided roadway concept for ADOT's Heber-Overgaard project.

According to FHWA and ADOT guidelines, environmental documents without a major Federal action are valid for three years prior to initiation of the project actions, at which point projects are reevaluated to see if any significant changes have occurred that would require a reanalysis of the proposed project.

STATUS OF THE MEXICAN SPOTTED OWL (rangewide)

On November 4, 1991, a proposed rule to list the Mexican spotted owl as threatened without critical habitat was published in the Federal Register (FR). After a review of all comments received in response to the proposed rule, the Service published a final rule to list the Mexican spotted owl as a threatened species on March 16, 1993 (58 FR 14248). At the time of listing, the Service found that, although considerable knowledge of Mexican spotted owl habitat needs had been gathered in recent years, habitat maps in sufficient detail to accurately delineate these areas were not available. On February 14, 1994, a lawsuit was filed in Federal District Court in Arizona against the Department of the Interior for failure to designate critical habitat for the Mexican spotted owl (Dr. Robin Silver, et al. v. Bruce Babbitt, et al., CIV-94-0337-PHX-CAM). On October 6, 1994, the Court ordered the Service to ... "publish a proposed designation of critical habitat, including economic exclusion pursuant to 16 U.S.C. Sec. 1533(b)(2), no later than December 1, 1994, ***[and] publish its final designation of critical habitat, following the procedure required by statute and Federal regulations for notice and comment," by submitting the final rule to the Federal Register no later than May 30, 1995. Pursuant to an extension granted by the court, the Service issued the proposal rule to designate critical habitat on December 7, 1994 (59 FR 63162). The final rule to designate critical habitat was issued on June 6, 1995 (60 FR 29914) and will become effective July 6, 1995.

A summary of the status of the Mexican spotted owl can be found in the Draft Mexican Spotted Owl Recovery Plan (Part II: Biological and Ecological Background) which represents the current state of knowledge on the Mexican spotted owl (U.S. Department of the Interior, 1995). Although the Forest Service has not officially adopted the draft recovery plan, they are attempting to implement some of the recommendations from the draft recovery plan. If the finalized recovery plan is adopted as in draft, 600 acre protected activity centers (PACs) will be established for all Mexican spotted owl sites known since 1989, including new sites as they are located. All existing Forest Service management territories will be converted to PACs.

Table 1 summarizes the number of management territories/PACs and incidental take assessed through previous consultation on management activities within National Forests in Arizona and New Mexico. The criteria to assess incidental take has recently been modified to incorporate new information and to conform with the draft recovery plan. In addition to the incidental take listed for the National Forests, an estimated incidental take of four owls was permitted on the Navajo Nation.

Table 1. Distribution of established management territories (MTs) by forest and estimated incidental take as assessed through consultations on past management activities.		
Forest	1994 ¹ Management Territories	Estimated Incidental Take
Apache-Sitgreaves	117	5
Carson	3	
Cibola	41	
Coconino	149	13
Coronado	105	4
Gila	192	5
Kaibab	6	2
Lincoln	123	
Prescott	10	
Santa Fe	35	1
Tonto	63	6
Total	844	36

¹ 1994 information provided by Forest Service Regional Office (pers. comm., H. Hollis, June 1995).

ENVIRONMENTAL BASELINE

The environmental baseline is an analysis of the effects of past ongoing human and natural factors leading to the current status of the species or its habitat and ecosystem.

Status of the Mexican Spotted Owl

The proposed project falls within the Upper Gila Mountain Recovery Unit (RU) of the Draft Mexican Spotted Owl Recovery Plan. The Upper Gila Mountain RU contains the largest known concentration of Mexican spotted owls. The primary threats to the Mexican spotted owl and their habitat in this RU are timber harvest and catastrophic fire. The population of owls within this RU is believed to be uniquely important because of its central geographic location and its large and relatively continuous spotted owl population. Based on a thorough survey of the suitable habitat, the Forest Service has established 14 management territories for the Mexican spotted owl within 3.2 km (2 miles) of the existing SR 260 corridor. Nine of the management territories are on the Tonto National Forest and five are on the Apache-Sitgreaves National

Forests. The proposed project does not bisect any of the management territories as currently delineated. Mexican spotted owls have been observed flying over the existing SR 260 corridor but no vehicular collisions with Mexican spotted owls have been reported on this highway to date.

The proposed project bisects two critical habitat units, AZ-TONF-1 and AZ-ASNF-6. Areas of designated critical habitat include both "suitable" and "unsuitable" forest and canyon habitat. Critical habitat designation is not limited only to habitat that meets "suitable" definitions, but also includes habitat which provides any of the primary constituent elements as described in the final rule. Critical habitat includes but is not limited to, those habitat components providing or with the potential to provide for nesting, roosting, or foraging. Mexican spotted owls nest, roost, forage, and disperse within a diverse assemblage of biotic communities. Habitat use patterns vary throughout the range of the owl and may be attributable to differences in regional patterns of habitat, topography, and possibly prey availability. The draft recovery plan and the final rule to designate critical habitat attempt to define/clarify habitat categories for the owl. The habitat has been divided into nesting and roosting habitat, and foraging habitat. Nesting and roosting habitat typically includes mature or old-growth stands with a complex structure (uneven-aged, multi-storied, high canopy closure). Foraging areas may include a wide array of habitat attributes including fairly open and non-contiguous forest, small openings, woodland, and rocky slopes.

Effects of the Action

The Service believes that the proposed project may result in incidental take of MSO through an increase of potential collisions of owls with vehicles along the improved highway. With an expected increase in vehicle speed and traffic volume on the improved highway, the probability of owl fatalities also increases. However, all of the expected increase in traffic volume cannot be attributed to the proposed project. Although no owl collisions with vehicles have been documented in this area, collisions have been documented in other areas. Known spotted owl deaths attributed to collisions with vehicles that the Service is aware of include one on the Coronado National Forest, one near Deming (New Mexico), one on the Sequoia-Kings Canyon National Park (California), and five or six cases in the Pacific Northwest (pers. comm., Gary Miller, USFWS State Office, Portland, Oregon).

The widening of SR 260 will incrementally contribute to the increased fragmentation of occupied Mexican spotted owl habitat. How the widening will affect the behavior of foraging owls, seasonal movements, and natal dispersal cannot be determined based on current information. The movement patterns for owls in this area are poorly known. Owls occupying territories closer to the highway may be more affected than owls further from the highway. Though no owl nests are currently known within the proposed construction area, owls may move into the area subsequent to this consultation but prior to the unspecified construction date. The effects to the MSO of constructing the existing highway through this area cannot be determined.

Assessing potential impacts to the MSO due to the proposed widening and re-alignment of SR 260 and the associated changes in traffic (vehicle numbers, speed, vehicle type) is difficult to determine and quantify. Impacts may result from actual construction activities, including the noise from heavy machinery, which may affect the behavior of the owl. Bright lights associated with nighttime construction may also affect owl foraging activities and the dispersal of young.

Under the preferred alternatives for the proposed project, approximately 1,000 acres of forested habitat will be removed and an additional 519 acres of forested habitat will be effectively lost (secondarily affected). Of the 1,000 acres of forested habitat removed, 194.3 acres are in critical habitat for the Mexican spotted owl. Of the 519 acres of forested habitat effectively lost, 122.3 acres are in critical habitat for the Mexican spotted owl. Within Critical Habitat Unit AZ-TONF-1, 52.8 acres will be directly impacted and 20.8 acres will be effectively lost as a result of Alternative F1-3a. Within Critical Habitat Unit AZ-ASNF-6, 141.5 acres will be directly affected and 101.5 acres will be effectively lost as a result of Alternative J1-2a, and portions of Alternatives G1-2a, I1-2a, and K1-2a. Only 0.1% of the total acres of Critical Habitat Unit AZ-TONF-1 are being affected and 0.6% of the total acres of Critical Habitat Unit AZ-ASNF-6 are being affected.

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 this biological opinion. 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 ESA.

Past fire suppression activities have resulted in increased fuel loads and increased the potential for wildfires. Recreational use of the surrounding forest is expected to increase and subsequently the potential for human-induced wildfires may also increase. Catastrophic wildfires have been identified as one of the primary threats to owls and their habitat in the Upper Gila Mountain Recovery Unit. Unpermitted fuelwood cutting may also remove habitat components important to the owl including large oaks, snags, and dead and down materials.

Another factor potentially affecting the Mexican spotted owl is ADOT's road repair work and shoulder widening projects along the existing highway. These projects are part of ADOT's interim safety improvement program that focus on high accident areas.

CONCLUSION

After reviewing the current status of the Mexican spotted owl, the environmental baseline for the action area, the effects of the proposed highway construction project, and the cumulative effects, it is the Service's biological opinion that the upgrade of State Route 260 from Payson to Heber, as proposed, is not likely to jeopardize the continued existence of the Mexican spotted owl. Though limited information was provided on the effects of this action to critical habitat,

the Service has determined that this project will not result in adverse modification of designated critical habitat since only a small fraction of owl habitat within the critical habitat unit is being affected.

INCIDENTAL TAKE STATEMENT

Section 4(d) and 9 of the 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. 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 actions 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 permit issued to the applicant, as appropriate, in order for the exemption in section 7(o)(2) to apply. The Federal Highway Administration has a continuing duty to regulate the activity covered by this incidental take statement. If the Federal Highway Administration (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.

AMOUNT OR EXTENT OF TAKE

The Service anticipates that incidental take of Mexican spotted owls could result through the implementation of the proposed action. Incidental take will be assigned when the individual segments of the proposed project are consulted on. The incidental take is expected to be in the form of increased disturbance to MSOs as well as owl deaths resulting from collisions with vehicles. The Service anticipates incidental take of the Mexican spotted owl will be difficult to detect and quantify for the following reasons: limited information is available on movement patterns; other factors such as timber harvest and recreation may also be affecting the behavior of owls in the area; finding a dead or impaired owl is unlikely and will be difficult to directly relate to the highway expansion; and injured owls may fly off and die elsewhere from injuries and remain undetected.

EFFECT OF THE TAKE

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

REASONABLE AND PRUDENT MEASURES (RPMs)

The Service believes the following reasonable and prudent measures are necessary and appropriate to minimize take of the Mexican spotted owl:

1. Continue gathering information on habitat use and movements of Mexican spotted owls in the area surrounding the proposed project.
2. Minimize disturbance to the Mexican spotted owl during construction activities.

TERMS AND CONDITIONS

In order to be exempt from the prohibitions of section 9 of ESA, the Federal Highway Administration must comply with the following terms and conditions, which implement the reasonable and prudent measures described above. These terms and conditions are nondiscretionary.

In order to implement RPM number 1, a study is to be defined and implemented which addresses movement patterns of the MSO within the project area. The intent of the study is to assess those aspects of MSO foraging, dispersal, and seasonal movements, so that possible modifications of the proposed project may be implemented to reduce incidental take of MSO related to 1) road construction activities, 2) modification and loss of MSO habitat and 3) the MSO/vehicle collisions. Understanding the behavior pattern of MSOs in the project area may provide various methods of altering the proposed project design to minimize incidental take. Special attention should be given to evaluating roadway design to minimize potential owl/vehicle collisions since this will be a persistent threat to the owl long after construction activities have been completed. The study should be initiated 3-5 years prior to commencement of construction in an area with MSOs, critical habitat, or MSO habitat.

Additional Mexican spotted owl surveys will be conducted in all potential habitat according to the current standardized Forest Service protocol for the two years prior to commencement of construction of each road segment. Additional surveys will not be necessary in the areas where the behavior study is being conducted.

In order to implement RPM number 2, measures will be taken to minimize noise disturbance caused by heavy machinery or, when possible, construction will be conducted during the nonbreeding season. Nighttime construction activities requiring the use of lights will be avoided.

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. While the incidental take statement provided in this consultation satisfies the requirements of the ESA, as amended, it does not constitute an exemption from the prohibitions of take of listed migratory birds under the more restrictive provisions of the Migratory Bird Treaty Act.

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 is providing the following conservation recommendations:

- 1) Proposed activities affecting critical habitat and its primary constituent elements be examined or evaluated to determine if any additional measures could be taken to minimize adverse effects to Mexican spotted owl critical habitat.
- 2) Minimize the median width whenever possible (accommodating safety issues) to minimize the area of MSO habitat affected by the project.
- 3) Upon completion of site specific plans, complete an analysis on the effect to owl protected areas, restricted areas, and unrestricted areas as defined in the draft recovery plan. The analysis should be submitted to the Service for continuing compilation of altered habitat.

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.

REINITIATION

This concludes formal consultation on the action outlined in the request. 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 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 and 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

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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 continuing efforts to conserve and recover threatened and endangered species. If we can be of further assistance, please contact Britta Muiznieks or Bruce Palmer.

Sincerely,



Sam F. Spiller
State Supervisor

cc: Forest Supervisor, Apache-Sitgreaves National Forests, Springerville, AZ
 Forest Supervisor, Tonto National Forest, Phoenix, AZ
 Director, Wildlife and Fisheries Management, U.S. Forest Service, Region 3,
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LITERATURE CITED

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