

**United States Department of the Interior  
U.S. Fish and Wildlife Service  
2321 West Royal Palm Road, Suite 103  
Phoenix, Arizona 85021  
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AESO/SE  
02-21-97-F-0110-R1

August 29, 2003

Mr. Robert Palmer  
Southwest Division, Mail Code: 5DPR.RP  
Naval Facilities Engineering Command  
1220 Pacific Highway  
San Diego, California 92132-5190

Dear Mr. Palmer:

Thank you for your request for reinitiation with the U.S. Fish and Wildlife Service pursuant to section 7 of the Endangered Species Act of 1973 (16 U.S.C. 1531-1544), as amended. Your request for reinitiation of formal consultation, dated July 17, 2002, was received by us on July 19, 2002. This constitutes a reinitiation of consultation regarding the July 23, 1998, biological opinion on the Naval Observatory Flagstaff Station (NOFS), Coconino County, Arizona. The non-jeopardy biological opinion (2-21-97-F-0110) considered the effects of proposed NOFS operations and forest management activities on the threatened Mexican spotted owl (*Strix occidentalis lucida*) (MSO). Critical habitat for this species has been designated; however, this action does not affect any areas of critical habitat. Therefore, the effects on critical habitat are not addressed further in this biological opinion.

This re-initiation of consultation is based on information provided in the July 17, 2002, letter; the August 1997 biological assessment (BA); the May 8, 2003, change to the proposed action; correspondence and meetings with your staff and the Arizona Game and Fish Department (AGFD); telephone conversations; field investigations; and other sources of information. Literature cited in this biological opinion is not a complete bibliography of all literature available on the MSO, forest management and its effects, or on other subjects considered in this opinion. A complete administrative record of this consultation is on file at this office. We have assigned log number 02-21-97-F-0110-R1 to this project. Please refer to this number in future correspondence on this consultation.

## Consultation History

Details of the consultation history are summarized in Table 1.

Table 1. Summary of Consultation History

<i>Date</i>	<i>Event</i>
August 1, 2001	We provided comments on the draft preliminary Integrated Natural Resources Management Plan (INRMP). In our comments we noted the discrepancy between the number of acres to be thinned as analyzed in the biological opinion and what was stated in the INRMP.
January 29, 2002	Fish and Wildlife Service and NOFS staff toured the thinning operation.
May 24, 2002 June 6, 2002	We discussed the discrepancy in the number of acres analyzed for treatment in the biological opinion and what is stated in the INRMP with Navy staff.
June 7, 2002	The Navy informed us that 120 acres have been treated on the NOFS and that they plan to treat a total of 225 acres. We recommended that the Navy reinitiate formal consultation.
July 17, 2002	The Navy requested reinitiation of formal consultation.
December 11, 2002	We provided the Navy with a draft reinitiation of the July 23, 1998, biological opinion.
February 18, 2003	We received the Navy's comments on the draft biological opinion.
March 3, 2003	We met with the Navy to discuss the draft opinion and their comments.
May 16, 2003	We received the Navy's comments on a second draft biological opinion. The May 8, 2003, letter contained a change to the proposed action.
June 2003	We corresponded via e-mail with the Navy regarding our recommendations for conducting pile burning in MSO habitat.
July 25, 2003	We responded to the Navy's comments on the second draft biological opinion.

August 20, 2003	The Navy called and verbally responded with comments to the third draft biological opinion. We requested the comments in writing.
August 27, 2003	We received an electronic mail detailing the Navy’s comments on the third draft biological opinion.

**BIOLOGICAL OPINION RE-INITIATION**

**DESCRIPTION OF THE PROPOSED ACTION**

*The project is as described in the July 23, 1998, biological opinion except for the following changes:*

A full description of the proposed thinning operation was included in the original consultation package provided by the Navy. However, the information provided in the August 1997 BA did not clearly state that the proposed action would treat more than 90 acres [the estimated protected activity center (PAC) acres]. Subsequently, the biological opinion incorrectly described the fuels reduction project as thinning up to 90 acres of forest with additional acreage to be thinned in the Operations Area. The actual acreage to be thinned across the entire 290 acre installation is 262.5 acres. This area includes approximately 90 acres within the Dry Lake MSO PAC and 172.5 acres of protected steep-slope and restricted pine-oak habitat. Thinning operations will not be conducted in accordance with recommendations from the Recovery Plan for the Mexican Spotted Owl (Recovery Plan) (USDI 1995). The action area for this consultation includes the entire Dry Lake PAC and all NOFS project area lands outside the PAC.

In addition, the NOFS requested that we analyze the effects of removing 20 ponderosa pine trees within 100 feet of buildings within the Operations Area. The Operations Area is located within the Dry Lake PAC and removal of these trees would be in addition to any trees removed during forest thinning operations. The 1998 biological opinion analyzed the effects of utility corridor maintenance (the cyclic trimming of tree branches that interfere with the laser path between buildings) and the removal of individual trees near power and fence lines. However, maintenance tree removal within the Operations Area was not included in the original proposed action. Tree removal will not occur in the PAC during the breeding season (per Term and Condition 1.c. of the July 23, 1998, biological opinion).

The NOFS has also requested (per the May 8, 2003, letter) that we analyze the effects of increasing the number of slash piles burned from 20 to 100 per year. The Navy stated in the letter that due to the increase in acres to be thinned, the project will need to burn a much larger volume of material than was originally estimated during the planning phases for this action. Slash piles will not be placed near large oaks, large live trees, yellow pines, snags, and logs in order to avoid damage during pile burning. This is especially important in protected and

restricted MSO habitat. Slash will be hand-piled on steep slopes to minimize soil disturbance. Within the PAC, slash piling and pile burning will occur outside the breeding season for Mexican spotted owls (March 1-August 31).

## **STATUS OF THE SPECIES**

*The following section replaces pages 14-17 of the July 23, 1998, opinion:*

The Mexican spotted owl was listed as a threatened species in 1993 (USDI 1993). The primary threats to the species were cited as even-aged timber harvest and the threat of catastrophic wildfire, 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 (Recovery Plan) in 1995 (USDI 1995).

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, well-structured 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 (including 11 National Forests 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.

The Upper Gila Mountains RU, which includes NOFS, 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). Most 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 also support MSOs.

The Upper Gila Mountains RU 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 had been partially or completely harvested prior to the species' listing as threatened in 1993, however, MSO nesting habitat remains in steeper areas. 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).

A reliable estimate of the numbers of owls throughout its entire range is not currently 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. However, Ganey *et al.* (2000) estimates approximately  $2,950 \pm 1,067$  (SE) MSOs in the Upper Gila Mountains RU alone. The Forest Service Region 3 most recently reported a total of approximately 980 protected activity centers (PACs) established on National Forest lands in Arizona and New Mexico (USDA Forest Service, Southwestern Region, December 19, 2002). Based on this number of MSO sites, total numbers in the United States may range from 980 individuals, assuming each known site was occupied by a single MSO, to 1,960 individuals, assuming each known site was occupied by a pair of MSOs. The Forest Service Region 3 data are the most current compiled information available to us; however, survey efforts in areas other than National Forest System lands have likely resulted in additional sites being located in all Recovery Units. Currently, we estimate that there are likely 12 PACs in Colorado (not all currently designated) and 105 PACs in Utah.

Since the owl was listed, we have completed or have in draft form a total of 114 formal consultations for the MSO. These formal consultations have identified incidences of anticipated incidental take of MSO in 289 PACs. The form of this incidental take is almost entirely harm or harassment. These consultations have primarily dealt with actions proposed by the Forest Service, Region 3. However, in addition to actions proposed by the 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 one of these projects (release of site-specific owl location information) has resulted in a biological opinion that the proposed action would likely jeopardize the continued existence of the MSO.

## **ENVIRONMENTAL BASELINE**

*The following paragraphs are inserted at the beginning of this section (page 17) of the July 23, 1998, biological opinion:*

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 in the action area to provide a platform from which to assess the effects of the action now under consultation.

### **A. Status of the species within the action area**

Our records (based on information from the Forest Service) indicate that a pair of MSOs were observed on or near the NOFS boundary by the Arizona State Land Department (ASLD) on June 28, 1994. Nesting status was not determined and the pair has not been located on NOFS ownership since that time. However, Mexican spotted owl surveys conducted in 1994 were not well documented and the only written record of the observation was recorded by the Forest Service. The Navy questions the validity of this record and believes that only a single owl was observed on this survey visit. Regardless of whether a pair or single bird were observed that night, an abundance of suitable habitat exists, and a PAC has been designated based on multiple MSO detections within the area.

Owl surveys have rarely been complete because in most years only discrete portions (based on ownership) of the Dry Lake PAC (#040231) have been surveyed. The ASLD, NOFS contractors, and the Coconino National Forest have all conducted surveys within and adjacent to the PAC. Mexican spotted owls were last detected in July 2001, in the eastern portion of the PAC, approximately 1.0 mile from NOFS ownership. The NOFS was surveyed in 1994, 1997, 1999, and 2001. Though portions of the NOFS were also surveyed by the ASLD in 1996 and 1998, not all protected and restricted habitat within the project area was surveyed.

Currently, of the 262.5 acres of MSO habitat to be treated on the NOFS, approximately 100 acres have been treated. This includes acreage within and outside of the Dry Lake PAC (approximately 124 acres of the NOFS are located within the Dry Lake PAC). The AGFD toured the current thinning treatments with your staff in June 2002, and observed the following impacts to MSO habitat: selective removal of large ponderosa pine trees (some in excess of 24 inches diameter at breast height); retention of small diameter ladder fuels; damage to many large standing oaks; and, soil disturbance (see AGFD letter dated August 5, 2002). The AGFD also

noted that not all treated areas were cut to the prescription of 20-24 feet on center analyzed in the 1998 biological opinion. The AGFD believed that larger trees were selectively removed from much of the area, leaving a forest stand structure of smaller trees that remains vulnerable to wildfires and may no longer support MSO.

In the first set of comments on the draft biological opinion (February 10, 2003), the Navy stated that they disagree with the AGFD statements and believe that larger trees have not been selectively removed by the contractor and that issues regarding soil disturbance will be dealt with following project completion. In addition, the Navy stated that if there are more than 100 large ponderosa pine trees per acre, then some of those trees will be harvested (R. Palmer, pers. comm., March 3, 2003). The Navy concluded that this is what AGFD observed during the June 2002 field trip and further questioned the AGFD observation that many large standing oaks were damaged. However, when we toured the project area in January 2002, we also noted several damaged, large oaks and were told by NOFS staff that they intended to map the damaged oaks in an attempt to enforce the contract provisions. The Navy told the contractor, both verbally and in writing, that further damage to oaks would not be tolerated (R. Palmer, pers. comm. 2003).

#### **B. Factors affecting species' environment within the action area**

As stated earlier, the action area includes the entire Dry Lake PAC and all NOFS project area lands outside the PAC. Land ownership within and adjacent to the Dry Lake PAC includes the Forest Service, ASLD, and private property. Actions included in this analysis that may affect the MSO include astronomical and forestry research, recreation, and fuels reduction treatments. Proposed and on-going activities have the potential to reduce the quality of MSO nesting, roosting, and foraging habitat, and may cause disturbance during the breeding season. To achieve long-term research and educational goals and to provide a sustainable source of revenue, Northern Arizona University plans to construct a Centennial Forest Field Campus in the east ½ of the east ½ of Section 34, T21N, R6E. The field campus will be within and adjacent to the Dry Lake PAC and will include a forestry research station, small business development program, education camp and retreat center, and overnight guest lodging. The area is already a favorite recreation destination due to its proximity to Flagstaff, the Arboretum at Flagstaff, and the NOFS. Currently, the ASLD has conducted thinning projects adjacent to the PAC, and is planning future fuels reduction treatments within the PAC. Due to the area's proximity to urban development, treatments most likely will not comply with the Recovery Plan. In addition, the Forest Service will also be treating areas surrounding and including portions of the Dry Lake PAC as part of the Woody Ridge Wildland Urban Interface Project. The project site, the Operations Area, is an area of intensive use by Naval Observatory personnel. Vehicles and observatory staff operate in this area both day and night. In addition, the telescope dome is commonly opened and rotated at night.

## EFFECTS OF THE ACTION

*Insert the following paragraph at the beginning of this section (page 20) of the July 23, 1998, biological opinion:*

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, that will be added to the environmental baseline. Interrelated actions are those that are part of a larger action and depend on the larger action for their justification. Interdependent actions are those that have no independent utility apart from the action under consideration. Indirect effects are those that are caused by the proposed action and are later in time, but are still reasonably certain to occur.

*Insert the following paragraphs between the third and fourth paragraphs (page 20) of the July 23, 1998, biological opinion:*

The effect of the change in the action will be the modification of approximately 262.5 acres of MSO protected and restricted habitat versus the 90 acres that was analyzed in the July 23, 1998, biological opinion. In the August 1997, biological assessment the Navy stated that no snags, large trees, downed logs, or oak stands would be affected by the proposed action. However, the Navy indicated during our March 3, 2003, meeting that large trees would be harvested if there were greater than 100 large trees per acre (although the General Silvicultural Treatment Criteria in the BA states that the silvicultural goal is 100 live ponderosa pine trees per acre total).

Surveys have detected MSO over the years within the Dry Lake PAC, although no nest or roost sites have been located. The known owl locations and available habitat suggest that the portion of the PAC on the NOFS could support MSO nesting, roosting, and foraging. However, the proposed thinning prescription for protected and restricted habitat at the NOFS will not promote MSO habitat now or in the near future and will have adverse impacts to the habitat that now exists. The Recovery Plan recommends implementing appropriate fuels reduction treatments within PACs, steep slope protected habitat (outside of PACs), and within restricted habitat to abate fire risk and promote future nesting and roosting habitat. Within PACs and steep slope protected habitat, the Recovery Plan recommends no harvest of trees greater than nine inches diameter at breast height (dbh). According to the description of thinning prescriptions in the August 1997 BA, there is no nine-inch dbh limit on tree removal, and we assume that loss of large diameter pines and damage to large oaks that have occurred on the 100 acres already treated will continue to occur on the additional 162.5 acres of MSO habitat yet to be treated.

The implementation of the proposed action will likely adversely affect the MSO, ranging from short- to long-term effects. Thinning of trees greater than nine inches dbh within the Dry Lake PAC will adversely affect approximately 90 acres (as analyzed in the July 23, 1998 biological opinion). Although this action was proposed in part to reduce the risk of catastrophic wildfire, it will adversely affect the MSO by modifying the forest structure and understory plant diversity.

The proposed project is expected to change the overall stand structure within the PAC because large-diameter trees will be removed. Because there is no 100-acre core activity center identified for the Dry Lake PAC (i.e., no known nest/roost site), impacts to a nesting or roosting core area could occur and the integrity of the PAC could be compromised.

The proposed thinning will likely result in a reduction in canopy closure, a change in the forest stand structure from a wide range of uneven-age tree sizes to a more even-age structure (even spacing), and damage or disturbance of downed logs, snags, large oaks, and low-growing limbs, which may affect the prey base of the MSO.

Thinning treatments within steep-slope protected habitat and restricted habitat are also expected to have adverse effects to the MSO since these actions are not in accordance with the Recovery Plan recommendations. Trees greater than nine inches dbh will be removed from protected steep slope habitat and restricted pine-oak habitat. The removal of large trees will likely reduce the restricted habitat below the target-threshold levels recommended in the Recovery Plan..

We appreciate the Navy's willingness to minimize impacts from the increase in pile burning. Since slash piles will not be placed near large oaks, large live trees, yellow pines, snags, and logs; will be hand-piled on steep slopes to minimize soil disturbances; and within the PAC, slash piling and pile burning will occur outside the breeding season for Mexican spotted owls (March 1-August 31), we believe the navy has adequately minimized effects resulting from the aspect of the program.

The proposed removal of 20 ponderosa pine trees from the Operations Area should have a minimal impact on habitat within the PAC. As a result of the intensive human presence and use in this area, MSO most likely would not nest within the Operations Area. Though the Recovery Plan recommends that trees greater than nine inches dbh not be removed in PACs, this area consists of buildings and paved surfaces. Removal of trees adjacent to these buildings will not violate the intent of the Recovery Plan.

## **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 to be considered in this biological opinion. Future Federal actions are subject to the consultation requirements established under section 7, and therefore, are not considered cumulative in the proposed action. Future actions within the action area that are reasonably certain to occur include urban growth and development, recreation, road construction, fuels-reduction treatments, research, livestock grazing, and other associated actions. These actions have the potential to reduce the quality of MSO nesting, roosting, and foraging habitat, cause disturbance to breeding MSO, and would contribute as cumulative effects to the proposed action.

## CONCLUSION

The conclusions of this amendment to the July 23, 1998, biological opinion are based on full implementation of the project as described in the Description of the Proposed Action section of this document and the July 23, 1998, biological opinion, including any Conservation Measures that were incorporated into the project design.

After reviewing the current status of the Mexican spotted owl, the environmental baseline for the action area, the effects of the proposed NOFS activities and the cumulative effects, it is our biological opinion that the NOFS forest management activities, as proposed, are not likely to jeopardize the continued existence of the Mexican spotted owl because we anticipated that no more than one MSO PAC may be affected, which is essentially the same as what was anticipated in the original July 23, 1998, biological opinion.

## INCIDENTAL TAKE STATEMENT

The July 23, 1998, biological opinion anticipated the incidental take of one Mexican spotted owl. The incidental take was expected to be in the form of harm due to disturbance and loss of habitat. We anticipated that the incidental take would be difficult to detect due to the wide-ranging nature of the species; its small body size; finding a dead or impaired specimen is unlikely; losses may be masked by seasonal fluctuations in numbers or other causes; and, the species occurs in habitat that makes detection difficult. Therefore, determination of incidental take would be tied to the prescription of the proposed action. The July 23, 1998, biological opinion stated that if the thinning prescription was not followed or exceeded in any manner, then the anticipated incidental take would be considered to be exceeded. Based on the information analyzed in this opinion, we believe that habitat alteration within the PAC was, and will continue to be, greater than anticipated in the original biological opinion due to the increased acreage to be harvested, removal of large diameter ponderosa pine, and increased pile burning.

## AMOUNT OR EXTENT OF TAKE

*The following sentences replace the first sentence beginning on page 22 of the July 23, 1998, biological opinion:*

We anticipate that two MSO (one pair) and/or associated eggs/juveniles associated with the Dry Lake PAC (#040231) may be taken following full implementation of the thinning prescription. The incidental take will be in the form of harm or harassment due to long-term habitat alteration.

## EFFECT OF THE TAKE

In this biological opinion, we determine that this level of anticipated take is not likely to result in jeopardy to the species.

## **REASONABLE AND PRUDENT MEASURES/TERMS AND CONDITIONS**

*All reasonable and prudent measures (RPM) and their implementing terms and conditions shall remain as stated in the July 23, 1998, biological opinion, except for the following changes to the term and condition for RPM 3:*

### **3. Term and condition for reasonable and prudent measure 3:**

Monitoring of the project area shall be completed to ascertain harm or harassment to the species. This microhabitat monitoring will be accomplished using one of the following methods: a procedure developed by the Navy and acceptable to the Fish and Wildlife Service, or a procedure already developed as a result of consultation regarding similar projects and adopted by the Navy. The Navy shall provide the results of the monitoring to us within one year of the completion of the thinning project and any prescribed burning projects that are conducted.

## **Disposition of Dead or Injured Listed Species**

*This section of the July 23, 1998, biological opinion is amended as follows:*

Upon locating a dead, injured, or sick listed species initial notification must be made to our Law Enforcement Office, Federal Building, 2450 West Broadway Suite 113, Mesa, Arizona 85202 (telephone: (480) 967-7900) 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.

## **CONSERVATION RECOMMENDATIONS**

*This section of the July 23, 1998, biological opinion is amended as follows:*

Section 7(a)(1) of the Act directs Federal agencies to utilize 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.

1. We recommend that the NOFS work with us, the AGFD, and Coconino County to acquire lands within the Dry Lake area to permanently preserve and promote MSO habitat in and adjacent to the Dry Lake PAC. There is a provision within the Sikes

Act and the Defense Authorization conference report (HR 772) for the military to work with private conservation groups or state organizations to spend money off-base for protection of threatened and endangered species. Coconino County is currently attempting to purchase land from the Arizona State Land Department within the Dry Lake area to preserve as open space. This may be a good opportunity for the Navy to partner with the County to achieve multiple conservation goals.

2. We recommend that the NOFS work with us and the AGFD to minimize impacts from the proposed thinning prescription on the 162.5 acres yet to be completed. Staff from both agencies are willing to work with Naval staff and/or the contractor to promote the preservation of large pines and oaks, snags, and coarse woody debris.

In order that we be kept informed of actions minimizing or avoiding adverse effects or benefitting listed species or their habitats, we request notification of the implementation of any conservation recommendations.

#### **REINITIATION NOTICE**

This concludes formal consultation on the reinitiated 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 retained (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 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.

We look forward to continuing to work with the Navy and NOFS to maintain MSO habitat within and adjacent to the Dry Lake PAC. For further information please contact Shaula Hedwall at (928) 226-0614, ext. 103, or Brenda Smith at (928) 226-0614, ext. 101, of our Flagstaff Suboffice. Please refer to the consultation number, 02-21-97-F-0110-R1, in future correspondence concerning this project.

Sincerely,

/s/ Steven L. Spangle  
Field Supervisor

Mr. Robert Palmer

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cc: Regional Director, Fish and Wildlife Service, Albuquerque, NM (ARD-ES)  
Field Supervisor, Fish and Wildlife Service, Albuquerque, NM  
Michael DiVittorio, U.S. Naval Observatory Flagstaff Station, Flagstaff, AZ  
Forest Supervisor, Coconino National Forest, Flagstaff, AZ (Attn: Jim Golden)  
Forest Biologist, Coconino National Forest, Flagstaff, AZ (Attn: Cecelia Overby)  
District Ranger, Coconino National Forest, Peaks Ranger District, Flagstaff, AZ  
District Ranger, Coconino National Forest, Mormon Lake Ranger District, Flagstaff, AZ

Commissioner, Arizona State Land Department, Phoenix, AZ  
Keith Pajkos, Arizona State Land Department, Flagstaff, AZ  
John Kennedy, Habitat Branch, Arizona Game and Fish Department, Phoenix, AZ

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