Memorandum

To: Navajo Regional Director, Bureau of Indian Affairs, Navajo Regional Office, Gallup, New Mexico

From: Field Supervisor

Subject: Biological Opinion Amendment: Emergency Erosion Work along Navajo Route N-13(7&8)

This memorandum amends the March 3, 1997, biological opinion on the effects of the Navajo Route N-13 (segments 7 and 8) on the Mexican spotted owl (Strix occidentalis lucida) (MSO) and the American peregrine falcon (Falco peregrinus anatum) in accordance with section 7 of the Endangered Species Act of 1973, as amended, (16 U.S.C. 1531 et seq.). The peregrine falcon was delisted on August 25, 1999 (FR 64:46542); therefore this species will not be considered in this biological opinion amendment.

This amendment does not change the species descriptions and status, indirect, interdependent, and interrelated effects to the MSO, or cumulative effects sections of this opinion. This amendment does not change the findings made for the MSO included in the conclusion section of the March 3, 1997, biological opinion.

The following is appended to the appropriate sections of the March 3, 1997, biological opinion.

CONSULTATION HISTORY

The Bureau of Indian Affairs (BIA) requested an amendment to the March 3, 1997, biological opinion on May 1, 2000, for N-13 road segments 7 and 8, and on May 11, 2000, for road segment 7. Those requests were received at our office in Phoenix on May 3 and May 15, 2000, respectively. One amendment to the N-13 biological opinion has been prepared in response to both requests. Prior to these requests, numerous phone conversations took place between Michele James of the Service’s Flagstaff Suboffice and Gary Morrison of the BIA, John Nystedt, Navajo Fish and Wildlife Department, and Tom Morris of the Navajo Environmental Protection Agency. These discussions focused on the information available regarding the MSO within the
Wagon Wheel protected activity center (PAC), background regarding the necessity for the proposed construction, and details regarding the timing of this work.

Reconstruction of Navajo Route N-13, segment 7, was completed in 1999 with the exception of some minor safety and erosion control features. These features, such as road striping, guard rail installation, and signing need to be accomplished as soon as possible in order to prevent accidents. In addition, other features need to be completed prior to summer rains in order to prevent further erosion damage. An amendment to the March 3, 1997, biological opinion is needed to accommodate these changes to the original project description in regards to the timing of construction activities along N-13 road segments 7 and 8 which take place within 1/4 mile of “inadequately surveyed” MSO habitat. The March 3, 1997, biological opinion required the survey of all MSO habitat (4 visits) every other year during road construction work. The BIA has requested that, due to safety and erosion concerns, they would like to complete road construction prior to the conclusion of all 4 visits of MSO surveys along the segment of N-13 where surveys have not occurred since 1998. A portion of MSO habitat along N-13 was surveyed in 1999 and therefore does not require further consideration within this amendment.

Reconstruction work on N-13, segment 8 has not yet been completed. The Wagon Wheel PAC is located immediately adjacent to a portion of this road segment. The BIA has identified erosion problems along the currently unpaved road which have resulted in silting-in of roadside ditches and the formation of ruts in the road. Grading of this segment of the road within the PAC as well as other erosion control work is needed. The March 3, 1997, biological opinion required that no road reconstruction work within the Wagon Wheel PAC or within 1/4 mile of the PAC take place until non-nesting status is determined, or until such a time as the nest is located (in which case, a 1/4 mile nest buffer could be established). Tom Morris (Navajo EPA) indicates that additional erosion damage could be avoided if road work within the PAC could be completed in mid to late June, prior to completion of surveys. The March 3, 1997, biological opinion stated that if non-nesting status can be determined in a given year (this can usually be determined by mid-June), a breeding restriction/nest buffer would not be needed. Monitoring of MSO within the Wagon Wheel PAC began in April 2000 and will continue in order to determining nesting status (John Nystedt of Navajo Fish and Wildlife Department).

**DESCRIPTION OF THE PROPOSED ACTION**

Proposed emergency safety and erosion control work to take place in calendar year 2000 along the nearly completed N-13 segment 7 within 1/4 mile of inadequately surveyed MSO nest/roost habitat includes:

1. **Seeding mulching:** This involves the use of a hydro mulch truck and water truck; 2.5 weeks to complete.
2. **Tree planting:** This work to be done by hand; 2 weeks to complete.
3. **Installation of right-of-way monuments:** This work to be done by hand.
4. **Striping:** This involves the use of a striping truck and an air compressor; 2 days to complete.
5. Installing signs: This involves a post pounding machine or a truck mounted auger.

6. Guard rail installation: This involves a truck-mounted post pounding machine; 1-2 days to complete.

7. Erosion matting: This involves steep slopes and will be completed by hand.

Additional repair/maintenance work is needed to fix numerous other problems that developed during the winter. This work will primarily use hand labor, with trucks carrying materials and concrete trucks delivering concrete as needed. All work is to be accomplished during the daylight hours (7:00 a.m. to 5:30 p.m.). These work items may need the use of a front end loader or backhoe, but for short durations only. Any activities that might require major road construction equipment use will be done after the MSO breeding season.

8. One inlet repair, involving concrete work and riprap placement.
9. Two concrete drop inlet boxes to be built.
10. Concrete slopes need slope paving at four locations behind existing guard rails.
11. Existing drainage chutes need to be extended and riprap places at the outlet ends.
12. Gabions need to be placed at one location adjacent to the road.
13. Riprap is needed at various places along the road.
14. Ditch paving needs to be extended along several sections of the road.
15. Miscellaneous patching of cracks and defective pavement sections.

Proposed emergency safety and erosion control work to take place in calendar year 2000 along N-13 segment 8 within the Wagon Wheel PAC and within 1/4 mile of the PAC boundary includes:

1. Station 355+20: A culvert has been plugged and needs to be re-opened. This work will require use of a backhoe for a maximum of three hours and a water truck. This area is within 1/4 mile of the PAC boundary.
2. Station 395+14: Replacement of straw bales and cleaning out of a large area of silt sediment. This work will require use of a backhoe for a maximum of four hours, plus an additional two hours of hand labor. This area is within 1/4 mile of the PAC boundary.
3. Station 310+00 to 400+00: Road grading to repair ruts in the road and clean out roadside ditches which have silted in. A grader will be used for eight hours to blade the road and repair the ditches. Some hand work will follow. This area is entirely within the Wagon Wheel PAC or within 1/4 mile of the boundary.
4. Additional manual labor is needed at some sites along Lukachukai Creek where silt fences have filled in. The silt will be cleaned out.

The above work on segment 8 (items 1 - 4) within the Wagon Wheel PAC and within 1/4 mile of the PAC boundary is estimated to take two work days and will utilize one backhoe and one grader. The remainder of the preventative erosion work will be done by hand during those two work days and possibly one additional work day after blading is completed.
ENVIRONMENTAL BASELINE

A total of 223 projects have undergone formal consultation for the MSO. Of that aggregate, 83 projects have resulted in a total anticipated incidental take of at least 185 owls. These consultations have primarily dealt with actions proposed by the Forest Service, Region 3, but have also addressed 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 overflights, and other construction activities.

EFFECTS OF THE ACTION

Direct Effects - Mexican Spotted Owl

The following addresses the additional effects of implementing the safety and erosion control measures detailed in the amended project description above.

The BIA Branch of Roads established fourteen survey points along N-13 segments 7 and 8 in order to adequately survey all potential MSO nest/roost habitat located within 1/4 mile of N-13. Periodic surveys at these points have taken place since 1994. Follow-up surveys of potential MSO habitat took place in 1999 at eight of the fourteen calling points established along Navajo N-13 (7 and 8) (pers. comm. Gary Morrison, BIA). Calling points 1-5 adequately surveyed habitat along segment 7, while calling points 6, 7, and 9 covered a portion of segment 8 (calling point does not exist). Calling points 10-15 were last surveyed in 1998.

The Service believes that no more than one breeding season should elapse between follow-up surveys when actions are proposed within and adjacent to potential MSO nesting/roosting habitat. Therefore, as calling points 1-7 and 9 were surveyed in 1999, construction work along segment 7 and a portion of segment 8 are “cleared” for construction work in calendar year 2000 (to ½ mile east of calling point 9 located at station 630+00), with the exception of the portion of N-13 located within the Wagon Wheel PAC and within 1/4 mile of the PAC boundary. All work conducted on N-13, segment 8 to the east of calling point 9 is not “cleared” for work in calendar year 2000 until 4 MSO surveys have been conducted according to Forest Service Region 3 Survey Protocol. Service policy states that if more than one breeding season elapses since the last survey, such habitat is considered “inadequately surveyed” and therefore, potentially occupied by MSO (see March 3, 1997, biological opinion for further information on this subject).

The Wagon Wheel PAC (#664410) is located immediately adjacent to N-13 (segment 8) and a portion of the road passes through the PAC in two places. The MSO roost site based on
monitoring conducted in 1994, 1995, and 1996 was a shallow drainage located 328 feet from the N-13 roadway. In 1998, the Navajo Fish and Wildlife Department reported that many of the trees in this roost site had died (pers. comm. John Nystedt). On April 27, 2000, John Nystedt, Navajo Fish and Wildlife located a single MSO roosting in a drainage to the east of the former roost area. This roost area, located within a dry tributary to Lukachukai Creek is within 1/4 mile of approximately 0.5 miles of N-13. John Nystedt reported that a pair of MSO were located in this same drainage on April 29. On May 24, Nystedt reported that monitoring of the PAC on May 23 resulted in no response from the owl pair. Monitoring will continue in early and mid-June with the purpose of determining the nesting status of this pair of MSO.

The March 3, 1997, biological opinion term and condition 2.1 states that a breeding season restriction (March 1 - August 31) must be in place for all work conducted within the PAC and within 1/4 mile of the PAC boundary until such a time as a nest site is located (in which case a 1/4 mile buffer on the nest site would be in place) or the owls are determined to be non-nesting in a given year.

Conversations with Gary Morrison, BIA Roads, indicates that the safety work and some of the erosion control work needs to be accomplished in June and July 2000. Mr. Morrison suggested that the Service discuss the specifics of proposed erosion control with Tom Morris, Navajo EPA. Mr. Morris indicated that some of the erosion control work can be done after the MSO breeding season. In particular, the following work items can be completed outside the MSO breeding season (i.e., after August 31): tree planting, installation of right-of-way monuments, and miscellaneous patching of cracks and defective pavement sections. Grading of the unpaved road in segment 8 needs to be completed during the MSO breeding season but can be done after June 15 when there will be a better understanding of the nesting status of the MSO in the Wagon Wheel PAC.

INCIDENTAL TAKE STATEMENT

There is no change to the incidental take statement, the amount or extent of take, the effect of take, or the reasonable and prudent measures. Replacement terms and conditions are added to reasonable and prudent measure 2. There are no changes to any of the other existing terms and conditions, or the review requirements of the biological opinion made by this amendment.

REASONABLE AND PRUDENT MEASURES

No changes are made to this section of the biological opinion.

TERMS AND CONDITIONS

The following details replace term and conditions 2.1 and 2.2 for calendar year 2000 only, to allow the work detailed in the project description above to take place. In subsequent years of construction activity, the terms and conditions of the March 3, 1997, biological opinion remain in
place. And additional term and condition is added to reasonable and prudent measure 2:

2.1 No construction activities will occur within and/or adjacent to the Wagon Wheel PAC (within 1/4 mile) until after June 15, 2000, and the following actions will take place in order to attempt to determine MSO nesting status.

   a) Monitoring of MSO will attempt to confirm an occupied nest site; or to determine beyond a doubt that nesting is not occurring in 2000. This means the following: a) a continually used day roost has been found, b) the male and female MSO are repeatedly located in that location, and, c) repeated monitoring indicates non-nesting behavior such as the taking of multiple mice without delivery to young or flight to a possible nest. To determine beyond a doubt that the MSO are not nesting, monitoring should continue through June 15. If the above behavior is evidenced after this date, then it is highly likely that MSO are not nesting that year; and

   b) The results of the above monitoring will be provided to the Service as the details become available.

NOTE: As the nesting status of the MSO in the Wagon Wheel PAC remains unknown, there exists the possibility that construction activities may take place within 0.25 miles of an occupied nest site during the breeding season (after June 15), thus incidental take is possible. The above term and condition will assist the Service in determining if such incidental take actually takes place. Incidental take is already permitted through the March 3, 1997, biological opinion.

2.2 No construction activity will occur during the MSO breeding season (March 1-August 30) 2000, within 1/4 mile of inadequately surveyed nest/roost habitat in the project area;

   -OR-

   A minimum of two survey visits (of the total of four that are required for follow-up surveys) will be conducted in 2000 at all calling points not surveyed in 1999. These surveys will be conducted at calling points 10-14 according to Forest Service Region 3 Survey Protocol. No construction activity can occur within 1/4 of the inadequately surveyed habitat until at least two of the four survey visits take place. If additional MSO are located, no construction activity can take place within 1/4 mile of the nest/roost site during the breeding season (March 1-August 30). A PAC will be drawn for any additional MOS located as specified in the Recovery Plan. If a PAC overlaps Navajo N-13 (segments 7 or 8), consultation should be reinitiated.

2.3 The following work items will be completed outside the MSO breeding season (i.e. after August 31): Tree planting, installation of right-of-way monuments, and miscellaneous patching of cracks and defective pavement sections. Grading of the unpaved road in segment 8 within and adjacent to (within 1/4 mile) the Wagon Wheel PAC will be
conducted after June 15.

CONSERVATION RECOMMENDATIONS

No changes to the conservation recommendations are made by this amendment.

REINITIATION - CLOSING STATEMENT

The provisions of the reinitiation statement of the March 3, 1997, biological opinion apply to this amendment.

Thank you for your efforts to conserve the threatened Mexican spotted owl. If we can be of further assistance, please contact Michele James (520/527-3042) or Bruce Palmer (602/640-2720).

/s/    David L. Harlow

cc: Field Supervisor, U.S. Fish and Wildlife Service, Albuquerque, NM

Navajo Fish and Wildlife Department, Window Rock, AZ (Attn: John Nystedt)
Director, Arizona Game and Fish Department, Phoenix, AZ

Literature Cited