



United States Department of the Interior  
Fish and Wildlife Service

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In Reply Refer To:  
AESO/SE  
2-21-94-F-243

September 11, 1997

Mr. John Bedell  
U.S. Forest Service  
P.O. Box 640  
Springerville, Arizona 85938

Dear Mr. Bedell:

This memorandum amends the June 16, 1997, biological opinion on the normal and flood-related maintenance and repair of Forest Road (FR) 281 and associated Greenlee County maintained roads along the upper Blue River. That opinion considered effects to the loach minnow (Tiaroga cobitis), bald eagle (Haliaeetus leucocephalus), razorback sucker (Xyrauchen texanus), southwestern willow flycatcher (Empidonax traillii extimus), and American peregrine falcon (Falco peregrinus anatum). The Forest Service is the lead agency for the consultation, with the U.S. Army Corps of Engineers as a joint agency.

#### CONSULTATION HISTORY

The June 16 biological opinion contains an extensive history of this consultation. The following information is in addition to that information. The need for this amendment was first discussed, via telephone, between the Forest Service and Fish and Wildlife Service in June 1997. Specific items for the amendment were identified and discussed in a meeting on July 25, 1997, at Clifton, Arizona, among representatives of the Forest Service, Service, and Greenlee County. The draft amendment was sent to the Forest Service and Corps of Engineers for review on July 31, 1997. Comments were received from both agencies on September 10, 1997, and have been incorporated.

#### BIOLOGICAL OPINION AMENDMENT

This amendment does not change the description of the proposed action, species descriptions and status, environmental baseline, or cumulative effects sections of this opinion. This amendment does not change the findings made for the 5 species in the Conclusion section of this opinion.

## *DIRECT AND INDIRECT EFFECTS OF THE ACTION*

The analysis of direct and indirect effects is amended in the sections dealing with effects to loach minnow (page 68) and effects to razorback sucker (page 72). All other portions of the effects analysis are unchanged.

### *Effects to Loach Minnow*

The first paragraph of this section is amended to read as follows:

*Adverse effects to loach minnow are expected to occur through several direct and indirect mechanisms. The most direct of these is the crushing of loach minnow and their eggs by movement of work equipment and normal-use vehicles on low-water crossings and by use of machinery within the watered channel during maintenance and repair operations, such as diversion of the river around work sites or repair work on crossing structures. Loach minnow are very susceptible to crushing because of their habit of seeking cover under cobble and boulders and maintaining that position in the presence of disturbance. Loach minnow that flee from the vehicles or machinery experience harassment that may disrupt feeding, resting, and breeding behavior thus exposing those individual loach minnow to greater risks of predation, displacement downstream, or other adverse effects. Direct mortalities of loach minnow would also occur when the river is diverted, rerouted, or rediverted to prepare work sites or prevent road erosion. Although some loach minnow in the dewatered channel might move into undiverted river sections, most would likely die due to desiccation.*

### *Effects to Razorback Sucker*

The first paragraph of this section is amended to read as follows:

*Effects to razorback sucker would be similar to those previously discussed for loach minnow. However, razorback sucker use pool, rather than riffle, habitat. Therefore, the potential for direct mortality of adult razorback sucker during vehicular operation in the watered channel is extremely low. There is the potential for death of larval and juvenile razorback sucker in shallow edgewater or low-water crossings and other areas of machinery use. The probability of this is considered low since the likelihood that razorback sucker are reproducing in the Blue River is low. Like loach minnow, razorback sucker within river sections that are diverted, rerouted, or rediverted, are likely to die from desiccation.*

## INCIDENTAL TAKE STATEMENT

*ANTICIPATED LEVEL OF INCIDENTAL TAKE*

This amendment does not change the level of anticipated take for bald eagle, southwestern willow flycatcher, or American peregrine falcon.

The requirements for stopping work due to exceedance of the anticipated take are clarified by amending the first paragraph of this section and adding a second paragraph to read as follows:

*If, during the course of the action, the amount or extent of the incidental take anticipated is exceeded, the Forest Service and COE must reinitiate consultation with the Service immediately to avoid violation of section 9. Operations must be stopped in the interim period between the initiation and completion of the new consultation if it is determined that the impact of the additional taking will cause an irreversible and adverse impact on the species. Actions that are not expected to result in any additional taking, either directly or indirectly, may be continued during the period between initiation and completion of the new consultation. Actions that may result in additional indirect take through habitat modification, but that are not expected to result in adverse effects not addressed in this opinion, that are not expected to result in irretrievable or irreversible commitments that would limit the formulation of Reasonable and Prudent Measures or Terms and Conditions during reinitiation, and that are otherwise in conformance with the project description, BMPS and these Terms and Conditions, may be continued during the period between initiation and completion of the new consultation.*

*In emergencies involving imminent danger to human life and property, actions taken to save human lives or to prevent serious damage to substantial human property are not subject to the restrictions regarding stopping operations if take exceeds anticipated levels. If take occurs during such actions, and if that take is not within the parameters of this incidental take statement, then the Forest Service or COE should notify the Service before, or as soon after as reasonably possible, of the additional take and enter emergency consultation under the provisions of 50 CFR 402.05.*

*Loach Minnow and Razorback Sucker Anticipated Incidental Take*

The anticipated level of incidental take for loach minnow and razorback sucker (page 79) is amended to change the second paragraph to read as follows:

*The anticipated level of incidental take of loach minnow cannot be directly quantified due to the low level of data on the loach minnow population in the area and the inability to predict long-term project effects. Because of their small size and benthic habit and due to the velocity of the river, it is unlikely that loach*

*minnow or eggs killed as a result of the proposed project would be observed. The anticipated level of take of razorback sucker cannot be directly quantified due to the lack of information on the razorback sucker population in the area. Therefore, for all proposed activities except those involving river diversion, rerouting, or returning to earlier channels, take for loach minnow and razorback sucker for the proposed action will be considered to have been exceeded if at any time during project activities:*

- 1. More than 20 dead fish of any species are found in the area of any road repair or maintenance activity or within 500 yards downstream,*
- 2. Maintenance or repair work occurs outside the road easement (33 feet on each side of the centerline of the road), or*
- 3. Any spill of toxic materials occurs in the Blue River or its floodplain during road repair or maintenance activities.*

*For proposed activities involving river diversion, rerouting, or returning to earlier channels, take of loach minnow and razorback sucker is anticipated to include all loach minnow and razorback sucker present in the diverted, rerouted, or rediverted section of the river. Therefore, as long as the diversion, rerouting, or rediversion actions are within the terms of the biological opinion, take cannot be exceeded due to harm to or death of the fish within the diverted, rerouted, or rediverted section. However, for areas of the river upstream; downstream; or in river channels parallel to the diverted, rerouted, or rediverted section; the three indices given above for the anticipated level of take still apply.*

#### *REASONABLE AND PRUDENT MEASURES*

The reasonable and prudent measures are not changed by this amendment.

#### *TERMS AND CONDITIONS FOR IMPLEMENTATION*

Term and condition 1.2 (page 82) is amended to read as follows:

*1.2 Except during emergency situations, all work requiring entry of vehicles or equipment into surface water will not be conducted during loach minnow spawning season (March 1 to June 1 and September 1 to October 31). To accommodate funding and time constraints, the September 1 to October 31 restriction will not apply during 1997. Emergency situations include any where human life is in danger, where substantial human property is danger of serious loss or damage, or where access by area residents to vital services is cut off. In emergency situations all reasonable efforts shall be made to minimize the amount of area disturbed and length of time in which work and use of equipment occurs*

*in surface water. Work shall be restricted to that necessary to make it minimally passable to passenger vehicles and shall not include reshaping or restructuring beyond that necessary for minimal passage.*

Term and condition 1.4 (page 82) is amended to read as follows:

*1.4 In addition to the provisions of the BMPs, all reasonable efforts shall be made to minimize rerouting or diversion of the river channel. A provision shall be added to item 4.19 of Action 7 of the BMPs stating that any rerouting or diversion of the Blue River over 2000 feet in length is not covered by the BMPs and requires additional section 7 consultation beyond this biological opinion and its amendment.*

Term and condition 2.4 (page 82) is amended to read as follows:

*2.4 A provision shall be added to item 4.15 of Action 3 of the BMPs that projects anticipated to take longer than a season (i.e. projects anticipated to be incomplete by the onset of flooding) will require additional consultation with the Service.*

Term and condition 3.1 (page 82) is amended to read as follows:

*3.1 All reasonable efforts shall be maintained to monitor for the presence of dead or dying fish in or within 500 yards downstream of the project area at all times when project activities are ongoing in or within 100 yards of the river that involve a) work within wetted areas, b) placement of any materials into a wetted area, c) removal of any riparian vegetation, or d) any work off the immediate road surface or travelway, including any work on the sideslopes of the road prism. The Service shall be notified immediately by telephone upon detection of more than 20 dead or dying fish of any species. Operations must be stopped in the interim period between the notification and completion of a new consultation if it is determined that the impact of the additional taking will cause an irreversible and adverse impact on loach minnow or razorback sucker (see clarification in first paragraph of Anticipated Level of Incidental Take section).*

Term and condition 4.1 (page 83) is amended to read as follows:

*4.1 Except during emergency situations, all work along portions of the roads where peregrine falcons are known to be present within one-half mile, based on monitoring (see term and condition 5.1), shall occur outside the peregrine falcon breeding season (March 1 to July 15). Emergency situations include any where human life is in danger, where substantial human property is in danger of serious loss or damage, or where access by area residents to vital services is cut off. In emergency situations all reasonable efforts shall be made to minimize the amount*

*of area disturbed and length of time in which work and use of equipment occurs in surface water. Work shall be restricted to that necessary to make it minimally passable to passenger vehicles and shall not include reshaping or restructuring beyond that necessary for minimal passage.*

### CONSERVATION RECOMMENDATIONS

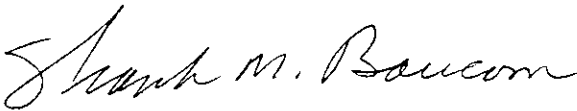
No change to the conservation recommendations is made by this amendment.

### REINITIATION NOTICE

The provisions of the reinitiation notice of the June 16, 1997, biological opinion apply to this amendment.

If we can be of further assistance, please contact Sally Stefferud or Bruce Palmer.

Sincerely,

  
for Sam F. Spiller  
Field Supervisor

- cc: Director, U.S. Fish and Wildlife Service, Washington, D.C. (DES)  
Regional Director, U.S. Fish and Wildlife Service, Albuquerque, NM (GMA)(ES)  
Field Supervisor, U.S. Fish and Wildlife Service, Albuquerque, NM  
Project Leader, U.S. Fish and Wildlife Service, Pinetop, AZ  
Regional Solicitor, U.S. Fish and Wildlife Service, Albuquerque, NM (Attn: Beverly Ohline)  
District Ranger, Alpine Ranger District, Apache-Sitgreaves National Forests, Alpine, AZ  
Chief, Regulatory Branch, U.S. Army Corps of Engineers, Phoenix, AZ
- Director, Arizona Game and Fish Department, Phoenix, AZ  
Director, New Mexico Department of Game and Fish, Santa Fe, NM  
Director, Arizona Division of Emergency Management, Phoenix, AZ  
County Engineer, Greenlee County, Clifton, AZ  
Chairman, Greenlee County Board of Supervisors, Clifton, AZ  
Bill Marks, Blue, AZ