



UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
ARIZONA ECOLOGICAL SERVICES STATE OFFICE
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November 17, 1994

In Reply Refer To:
AESO/SE
2-21-90-F-178

Mr. William H. Karsell
Division of Environmental Affairs
Department of Energy
Western Area Power Administration
P.O. Box 3402
Golden, Colorado 80401

Dear Mr. Karsell:

The Fish and Wildlife Service has received a request from your office, dated November 4, 1994, and received by us on November 7, 1994, to amend the biological opinion for the Mead-Phoenix Transmission Line Project (2-21-90-F-178). Western Area Power Administration (Western) proposes six modifications to the project description pertinent to the Nevada portion of the transmission line route. These modifications were developed by Western in coordination with staff from this office and biologists from EcoPlan Associates, Inc. for the purpose of reducing the potential for lethal take of desert tortoise, *Gopherus agassizii*, a threatened species. At issue are effects that implementation of the modified project description may have on the desert tortoise.

This represents the second amendment to the December 26, 1990, biological opinion for this project. The first amendment, dated October 14, 1993, reevaluated effects of the proposed action on listed species, primarily the desert tortoise, based on new information not available during the preparation of the 1990 biological opinion. This first amendment resulted in a new biological opinion that replaced the 1990 opinion. The amended opinion found that the proposed action is not likely to jeopardize the continued existence of the Mojave population of the desert tortoise, the southwestern population of the bald eagle, *Haliaeetus leucocephalus*; American peregrine falcon, *Falco peregrinus anatum*; California brown pelican, *Pelecanus occidentalis*; Yuma clapper rail, *Rallus longirostris yumanensis*; razorback sucker, *Xyrauchen texanus*; bonytail chub, *Gila elegans*; Colorado squawfish, *Ptychocheilus lucius*; woundfin, *Plagopterus argentissimus*; desert pupfish, *Cyprinodon macularis*; Hualapai Mexican vole, *Microtus mexicanus hualapaiensis*; and Arizona cliffrose, *Purshia subintegra*.

Since the October 14, 1993, amended opinion was issued, critical habitat has been designated for the Mojave population of the desert tortoise (59 FR 5820-5846 - February 8, 1994), and for the razorback sucker, Colorado squawfish, and bonytail chub (59 FR 13374-13400 - March 21, 1994). Project features are not located within the critical habitat for the desert tortoise and the Colorado squawfish. Therefore the proposed action is not likely to destroy or adversely modify critical habitat for these two species. Although the transmission line would span critical habitat of the bonytail chub and razorback sucker in the Colorado River downstream of Hoover Dam, no project features are located in the aquatic habitats of the Colorado River, and thus the proposed action is not likely to destroy or adversely modify the critical habitat of these species.

The modifications to the proposed action, as described in Western's November 4, 1994, letter include the following:

1. Capture up to 10 Mojave desert tortoises and provide them with transmitters. The purpose will be to locate and plot movement of adult tortoises whose home ranges include the Mead-Phoenix access road and construction areas in the Clark County, Nevada portion of the route.
2. At a minimum, from structure 5 to structure 30 and from the Mead substation to the Marketplace substation in Nevada, the pilot lines for conductor stringing will be flown in. (Normally this operation would require several large trucks and pulling devices to move up and down the right-of-way several times).
3. In addition to monitoring construction activity during periods of tortoise activity, the project sponsors will provide biological monitors during conductor pulling and sleeving. ("Sleeving" is the term used to identify the operation of joining two pieces of conductor together.)
4. Although not specifically requested in the biological opinion, the biological monitors will be present at pulling and sleeving sites during those activities.
5. The project sponsors will install a gate and extend the fence at the boundary of the Lake Mead National Recreation Area to further restrict traffic along the project's access road. The fence and gate shall be located to avoid impact to the Mojave desert tortoise. Access will be restricted to transmission line construction and maintenance traffic and traffic permitted by the National Park Service.
6. When the access road is no longer needed for construction, water bars will be placed in the road to divert runoff and slow traffic.

Modification 1 may increase non-lethal take of desert tortoises, but the potential for lethal take would be reduced. The highest apparent densities of tortoises occur in an area of volcanic rocks and boulders, many of which are similar in shape and color to a desert

tortoise. Tortoises on the surface are extremely difficult to detect and track among these rocks. Attaching transmitters to tortoises found near construction areas and the right-of-way would increase their detectability and reduce the chance that they may be harmed or killed during construction activities. However, to minimize disturbance to animals, transmitters should be small and attached in a nonpermanent manner. Steve Hale of EcoPlan Associates, Inc. suggested using a small transmitter with a limited battery life and range. The transmitter could be applied with velcro or another nonpermanent adhesive. We recommend that Western and staff from EcoPlan Associates, Inc. develop and present a transmitter methodology to the Service for review. The transmitters would be attached to desert tortoises only after approval from the Service.

Modifications two, three, and four would result in reduced off-highway vehicle use between towers during conductor pulling (modification 2), and increased monitoring by biologists of conductor pulling and sleeving activities (modifications 3 and 4). All three modifications would lessen the chance that desert tortoises would be harmed or killed.

Grading and improvement of the existing access road through the Lake Mead National Recreation Area has encouraged increased vehicular use and increased vehicle speeds on the road. Although term and condition 1.h. of the October 14, 1994, biological opinion limits the speed of construction and maintenance vehicles to 25 miles per hour, recreationists and other users of the road are not so limited. Modification 5 would reduce recreational off-highway vehicle use in and near the right-of-way, thus reducing the potential that desert tortoises would be harmed or their habitat would be destroyed. Implementation of modification 6 (construction of water bars) would, in effect, create speed bumps and force vehicle operators using the road to reduce their speed. Reduced speeds would increase the likelihood that tortoises on the roads would be seen and avoided by drivers. However, a take of desert tortoise could occur during construction of the fence and water bars. The Service believes such take could be avoided and that the overall effect of these actions would be to decrease the likelihood of a take, if the construction is monitored by a qualified biologist.

The six modifications are hereby incorporated into the project description for the Mead-Phoenix Transmission Line Project. Furthermore, the following terms and conditions are added to the October 14, 1994, biological opinion. These terms and conditions correspond to Western's six modifications with slight modifications or added detail:

1. Up to ten Mojave desert tortoises may be captured and equipped with a small transmitter by an authorized biologist(s). Transmitters shall be attached by a nonpermanent method approved by the Service. Only desert tortoises whose home ranges include the Mead-Phoenix access road and construction areas in the Clark County, Nevada portion of the route shall be transmittered. Tortoises with transmitters shall be monitored by biologists to ensure they are not harmed by construction activities. Transmitters shall be removed by an authorized biologist after construction activities are complete.

2. At a minimum, from structure 5 to structure 30 and from the Mead substation to the Marketplace substation in Nevada, the pilot lines for conductor stringing shall be flown in.
3. Qualified desert tortoise biologists shall monitor all pulling and sleeving activities. ("Sleeving" is the term used to identify the operation of joining two pieces of conductor together.)
4. The project sponsors shall install a gate and extend the fence at the boundary of the Lake Mead National Recreation Area to further restrict traffic along the project's access road. Construction of the fence and gate shall be monitored by a qualified biologist to ensure adverse impacts to the desert tortoise and its burrows are avoided or minimized. Vehicular traffic on the access road shall be restricted to transmission line construction and maintenance vehicles and traffic permitted by the National Park Service.
5. When the access road is no longer needed for construction, water bars shall be placed in the road to divert runoff and slow traffic.

The modifications to the project description, as described herein, would not alter our previous determination that the proposed action is not likely to jeopardize the continued existence of the desert tortoise, the southwestern population of the bald eagle, American peregrine falcon, California brown pelican, Yuma clapper rail, razorback sucker, bonytail chub, Colorado squawfish, woundfin, desert pupfish, Mexican Hualapai vole, or Arizona cliffrose. Furthermore, implementation of this modified project description is not likely to result in the destruction or adverse modification of critical habitat for the desert tortoise, razorback sucker, Colorado squawfish, or bonytail chub.

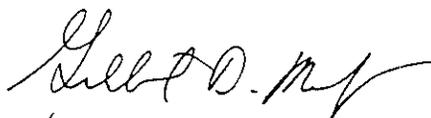
Two factors warrant a reevaluation of the anticipated incidental take of desert tortoises as described on page 15 of the October 14, 1993, amended biological opinion. Desert tortoises are more abundant than previously thought in the project area, which increases the likelihood that an animal may be taken. Thus, the anticipated take resulting from direct mortality of desert tortoises is increased from two to four. Also, implementation of modification 1 will increase the likelihood that take in the form of harassment will occur. Each desert tortoise that is equipped with a transmitter could conceivably be harassed several times, including transmitter attachment, moving the animal out of harm's way, and removing the transmitter. As a result, the anticipated take of desert tortoises in the form of harassment is increased from ten to 30.

Mr. William H. Karsell

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Any questions you may have concerning this matter may be directed to Jim Rorabaugh or Ted Cordery of my staff.

Sincerely,

A handwritten signature in black ink, appearing to read "Sam F. Spiller". The signature is fluid and cursive, with a prominent initial "S" and a long, sweeping underline.

Sam F. Spiller
State Supervisor

cc: Regional Director, Fish and Wildlife Service, Albuquerque, NM (AES)
Office Supervisor, Fish and Wildlife Service, Las Vegas, NV