



UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

ECOLOGICAL SERVICES
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Phoenix, Arizona 85019

2-21-89-F-052

March 6, 1990

Memorandum

To: Operations Manager, Bureau of Reclamation, Arizona Projects
Office, Phoenix, Arizona (Attn: APO-150, ENV-4.00)

From: Field Supervisor

Subject: Amendments to the Biological Opinion on Verde River
Safety of Dams Modifications

The Fish and Wildlife Service (Service) understands that the Bureau of Reclamation (Reclamation) received the Service's Biological Opinion, dated December 27, 1989, and is prepared to implement all of the reasonable and prudent measures and conservation recommendations provided in the opinion. However, by memorandum dated February 14, Reclamation addressed concerns that reasonable and prudent measure number 1 would be unnecessarily restrictive and result in significant scheduling delays, increased costs, and a possible increase in the amount of time necessary to complete the Safety of Dams (SOD) modifications. A meeting was held on January 18, 1990, with Denise Baker and Robert Mesta (Service), Tom Gatz and Dan Fritz (Reclamation), and Larry Riley (Arizona Game and Fish Department) to discuss these concerns. Accordingly, the Service's biological opinion will be amended as follows:

The Service believes the following reasonable and prudent measures are necessary and appropriate to minimize the take at the Bartlett nest site:

1. Prohibit helicopter use associated with Safety of Dams modifications within the Bartlett eagle breeding area as defined by Tonto National Forest closure order #12-29 (2R) and as shown in the atlas of Bald Eagle Nesting Areas in Arizona compiled by the Salt River Project. This restriction would not apply to the use of helicopters within the closure to monitor bald eagle occupancy and reproduction, to rescue injured or prematurely fledged eagles, or to perform emergency human rescue operations. Any requests to use helicopters within this area during the non-breeding season or during non-critical periods of the breeding season should be coordinated with Robert Mesta of the Service (Telephone: 602/379-4720);
2. Contact an acoustical authority to determine if the noise of the maximum size blasting charge anticipated to be used at Bartlett Dam will be audible two miles downstream at the eagle nest site. If it is not likely to be audible, conduct some test blasts of the maximum size near the dam and monitor the reaction of the eagles during a non-critical period of the nesting cycle, when young are thermo-regulating but not old enough to prematurely fledge. If the blast is expected to be very

loud at the nest site, conduct the test during the non-breeding season when the adults are present, monitor the noise level at the nest, and the response of the eagles to determine if blasting restrictions during the breeding season are necessary. All testing would be done under the supervision of the Service and coordinated with Romona Saunders and Ron Clifton of Reclamation;

3. If blasting restrictions are necessary, prohibit blasting from December 1 to April 1;
4. If natural precipitation patterns, Salt River Project operations, water-user demands or construction requirements result in low or no flows below Bartlett Dam during the SOD activities; and as a result, the eagles are required to feed from the reservoir and forage or fly near the construction site, then re-initiate consultation with the Service to determine if additional blasting and helicopter restrictions are necessary;
5. Prohibit vehicle and foot traffic in the Bartlett eagle breeding area as defined by Tonto National Forest closure order #12-29(2R) from December 1 to July 1; and
6. Monitor bald eagle behavior at the Bartlett breeding area by continuing the bald eagle nest watch program. In addition, report any adverse affects to eagles as a result of construction related activities.

Reclamation's memorandum also stated to "change conservation recommendation number 2 to a reasonable and prudent measure since this action (halting activity and re-consulting if construction is observed to adversely affect the eagles) should be required and not discretionary." However, reasonable and prudent measures should only have a minor effect on the project and not halt or alter the project's timing. Therefore, the Service believes that conservation recommendation number 2 should remain as is in the original biological opinion.

If we may be of further assistance, please call Denise Baker or me (Telephone: 602/379-4720 or FTS 261-4720).



Sam F. Spiller

cc: Regional Director, Fish and Wildlife Service, Albuquerque, New Mexico
(FWE/HC)
Director, Arizona Game and Fish Department, Phoenix, Arizona
(Attn: Larry Riley)
Regional Director, Bureau of Reclamation, Lower Colorado River,
Boulder City, Nevada (Attn: LC-153A ENV 4.00)