



UNITED STATES
DEPARTMENT OF THE INTERIOR
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September 25, 1995

In Reply Refer To:
AESO/SE
2-21-93-F-430

MEMORANDUM

TO: District Manager, Safford District, Bureau of Land Management, Tucson, Arizona

FROM: State Supervisor

SUBJECT: Amendment to Biological Opinion 2-21-93-F-430, Cienega Creek Headcut Repair

This memorandum constitutes an amendment to the February 7, 1994 Biological Opinion on the Cienega Creek Headcut Repair (2-21-93-F-430). The U.S. Fish and Wildlife Service has received your memorandum dated September 14, 1995, and received on September 16, requesting reinitiation of of section 7 consultation. Your memorandum and subsequent telephone conversations contained ample information to determine the change in the proposed action and the possible effects on the endangered Gila topminnow (*Poeciliopsis o. occidentalis*).

Proposed Action

The Biological Opinion assessed the effects of repair and replacement of the original erosion control structures. However, the new erosion control structures are distinct enough from the original structures to constitute a modification of the agency action and to require reinitiation of consultation.

The new proposal has two components: four check dams and direct protection of the headcut. The check dams will be 8, 6, 5, and 4 feet high and extend 200 feet downstream from the headcut. Each dam will be constructed of logs found in the area and rocks acquired from a commercial source. All dams will be anchored to the banks by using long logs that extend into each bank about 2 feet. Metal T-posts would be used to anchor the large logs and additional logs would be tied with wire to the large logs. The downstream side of each check dam will be filled in with rock. The fill slope will be 2:1 down from the

dam and will be covered with chicken wire. This sill of rock will be sloped downward from the channel edges to the center of the stream in order to maintain water flow in the center of the channel, away from the banks. The upstream face of each check dam will also be covered with rock at about a 1:1 slope. The area covered by each dam and rock sill will be about 16 x 20 feet.

Portions of the streambed at the actively eroding face of the headcut will be protected with an apron. The apron will extend seven feet from the face and be covered with one layer of rock which will be covered with chicken wire. The wire will be fastened with stakes. The total area to be covered with rip rap at the eroding face is estimated at 1,200 square feet.

Effects Of The Action

Additional effects caused by the new actions should benefit Gila topminnow in the long term. However, short term negative effects will include alteration of 200 linear feet of stream channel and the potential for incidental take of Gila topminnow during construction of the erosion control structures.

About 200 feet of stream channel and fish habitat, from the headcut to the most downstream check dam, will be affected by the additional proposed action. The 200-foot section will be covered with either ponded water or the check dams and rip rap materials. It is anticipated that the check dams will not function as barriers to fish movement and this stream reach will be colonized by fish shortly after project completion. Take of Gila topminnow may happen directly from construction activities and from changes in water quality.

The headcut is about 5 feet deep now. After construction of the dams, ponded water at the headcut will be 3 feet deep and flowing water will drop 2 feet into the pool. Under the waterfall will be the rock apron constructed at the base of the head cut.

If the proposed erosion control structures function as envisioned, the Gila topminnow population will accrue long term benefits. These long term benefits include protecting 2.5 miles of high quality stream cienega habitat above the headcut and reducing the amount of active erosion and sediment transport. Stabilization of the eroding stream section would also have benefits for downstream areas by reducing flood velocity and intensity.

Incidental Take

The authorized amount of incidental take shall remain the same, that is, 15 Gila topminnow. No changes or additions to the reasonable and prudent measures, terms and conditions, or conservation recommendations are needed with one exception. An additional written report, similar to your memorandum dated September 6, 1994, will be provided. Information on monitoring completed since the first report was done will be included.

This concludes the amendment to the Biological Opinion 2-21-93-F-430. We appreciate your prompt and diligent attempts to repair the headcut and to ensure that Cienega Creek functions properly. If you have any questions or concerns about this consultation or the consultation process in general, please feel free to contact Doug Duncan or Ted Cordery.



Sam F. Spiller

cc: Regional Director, Fish and Wildlife Service, Albuquerque (AES)
Arizona State Director, Bureau of Land Management, Phoenix AZ
Director, Arizona Game and Fish Department, Phoenix, AZ