

## DEPARTMENT OF THE INTERIOR

## Fish and Wildlife Service

## 50 CFR Part 17

## Endangered and Threatened Wildlife and Plants; Proposed Endangered Status and Critical Habitat for the Chihuahua Chub

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Proposed rule.

**SUMMARY:** The Service proposes to determine the Chihuahua chub to be an Endangered species. This action is being taken because populations of the Chihuahua chub have been significantly reduced by habitat destruction resulting from channelization, development of flood control levees, massive diversion of surface water for irrigation, dam construction, pollution, deforestation, and excessive groundwater pumping. The Chihuahua chub occurs in the Guzman Basin including the Mimbres River of New Mexico and the Rio Casas Grandes, Rio Santa Maria, and Laguna Bustillos drainages of Mexico. Critical Habitat is included with this proposed rule. The proposed rule, if promulgated, would provide protection to wild populations of this species. Comments and information from the public are sought.

**DATES:** Comments from the public must be received by March 16, 1981. Comments from the Governor of New Mexico must be received by March 16, 1981. The public meeting on this proposal will be held January 6, 1981, at 7:00 p.m.

**ADDRESSES:** Interested persons or organizations are requested to submit comments to Director (OES), U.S. Fish and Wildlife Service, Department of the Interior, Washington, D.C. 20240. Comments and materials relating to this proposed rule are available for public inspection by appointment during normal business hours at the Service's Office of Endangered Species, Suite 500, 1000 North Glebe Road, Arlington, Virginia. The public meeting on this proposal will be held at the Light Hall Auditorium, Western New Mexico University, Silver City, New Mexico.

**FOR FURTHER INFORMATION CONTACT:** For further information on this proposal, contact Mr. John L. Spinks, Jr., Chief, Office of Endangered Species (703/235-2771).

**SUPPLEMENTAL INFORMATION:****Background**

The Chihuahua chub was first discovered in 1851, inhabiting the Mimbres River of New Mexico and the Rio Casas Grandes of Mexico. Adult chubs average about six inches in length and are usually found in pools (greater than three feet in depth) or associated with some type of cover (such as undercut banks, submerged trees or shrubs) in small and medium size streams. This species is assumed to feed primarily on aquatic invertebrates and insect larva; however, no data are available to support this assumption. Spawning occurs in the spring, possibly extending through summer, perhaps in quiet pools over beds of aquatic vegetation. Little else is known about the biology of the Chihuahua chub.

Populations of the Chihuahua chub have been significantly reduced because of recent modifications in the aquatic habitats of the Guzman Basin. The chub's preferred pool and undercut bank habitat has been virtually eliminated through a combination of factors including diversion of surface water for irrigation, channelization, construction of dams and levees, and deforestation. The excessive pumping of underground water supplies has also caused springs and other permanent aquatic habitats maintaining the species to dry up. Pollution is reported to be responsible for the elimination of chubs from some streams in Mexico.

The Service has received recommendations or resolutions urging the listings of the Chihuahua chub as Endangered from the following organizations: the Albuquerque District of the U.S. Army Corps of Engineer, the American Fisheries Society Endangered Species Committee (Fisheries 4: 29-44), the New Mexico Wildlife Federation, and the Desert Fishes Council. In 1978, the Service contracted biologists from the University of Michigan to survey the status of the Chihuahua chub in the United States and Mexico. These workers found no evidence of successful reproduction in the one small surviving Chihuahua chub population (less than ten adult fish) in the United States. They also documented the disappearance of chubs from six localities in Mexico where they were previously common or abundant. Their final report recommended that the Chihuahua chub be officially listed as an Endangered species for both the United States and Mexico.

**Factors Affecting the Species**

In 50 CFR 424.11(b) of the Service's regulations for Listing Endangered and Threatened Species and Designating

Critical Habitat (45 FR 13022-26) it is stated that:

"A species shall be listed if the Director determines on the basis of the best scientific and commercial data available to him after conducting a review of the species' status that the species is Endangered or Threatened because of any one or a combination of the following factors:

- (1) The present or threatened destruction, modification, or curtailment of its habitat or range;
- (2) Utilization for commercial, sporting, scientific, or educational purposes at levels that detrimentally affect it;
- (3) Disease or predation;
- (4) Absence of regulatory mechanisms adequate to prevent the decline of a species or degradation of its habitat; and
- (5) Other natural or manmade factors affecting its continued existence."

These factors, and their application to the Chihuahua chub, are as follows:

1. *The present or threatened destruction, modification, or curtailment of its habitat or range.* The Mimbres River of New Mexico, which in the past supported an abundant Chihuahua chub population, has been drastically modified by agricultural and flood control developments. These activities have resulted in the elimination of much of the natural pool and undercut bank habitat, restricting the present population, probably fewer than ten adult chubs, to one small section of the Mimbres River. Further flood reclamation work, maintenance of push-up irrigation diversions, channelization, and development of flood control levees without concern for the Chihuahua chub will severely threaten the continued existence of this species in the United States. Studies in Mexico revealed that historic Chihuahua chub habitats were destroyed because of pollution, massive diversion of surface waters for irrigation, development of hydroelectric facilities, construction of levees, and channelization. Some streams were found to be completely dry, probably due to excessive pumping of underground aquifers or diversion of surface waters. Undoubtedly, manipulation of the stream habitat will continue as the interior of Mexico and areas along the Mimbres River in New Mexico are further developed.

2. *Utilization for commercial, sporting, scientific, or educational purposes at levels that detrimentally affect it.* The Chihuahua chub is not being pursued for any commercial endeavors. In the early twentieth century, the chub was taken for sport and referred to as "gila trout." However, this practice does not occur today, at least partially because of the extremely low density of the existing population. It

Habitat. The Service has prepared a draft impact analysis. The Service is notifying Federal agencies that may authorize, fund or carry out activities in the area under consideration in this proposed rule. These Federal agencies and other interested persons or organizations are requested to submit information on economic or other impacts of this proposed action. The Service will prepare a final impact analysis prior to the time of publishing a final rule.

The major threat to the Chihuahua chub is the destruction of habitat caused by channelization, development of flood control levees, massive diversion of surface water for irrigation, deforestation and excessive pumping of ground water. Federal agencies (U.S. Army Corps of Engineers, Soil Conservation Service, and Federal Disaster Assistance Administration) may be authorized through the Emergency Levee Rehabilitation Program (Pub. L. 84-99), after a future flood, to repair privately constructed flood control levees along the Mimbres River in the vicinity of the proposed Critical Habitat. The Corps is aware of the presence of the Chihuahua chub and is cooperating with the Service and the New Mexico Department of Game and Fish to insure their future activities do not adversely impact the remaining population of this species. Although the U.S. Forest Service controls a significant portion of Grant County, the agency has no jurisdiction in the proposed Critical Habitat. However, the Forest Service is negotiating for the purchase of a 160 acre tract referred to as the Cooney Place, which is adjacent to the Mimbres River, for use as a trail head. If this property is acquired by the Forest Service, they plan to assess the potential of this site for the successful reintroduction of the Chihuahua chub. Since this parcel of land is not being proposed as Critical Habitat, this action will not affect any of the Forest Service's intentions concerning the Cooney Place.

The Soil Conservation Service has proposed a bank stabilization program along the Mimbres River including the Critical Habitat, but funds for this project have not been appropriated. If this action is approved, any modification effected to eliminate impacts to the Chihuahua chub is expected to have a negligible effect on the Soil Conservation Service program. The Agricultural Stabilization and Conservation Service is involved in two programs within the Mimbres River Valley: (1) the ASCP program which authorizes cost sharing for County

committee approved soil and water conservation projects, and (2) the Emergency Conservation Loan Program which provides financial assistance to farmers and ranchers for clean-up operations following floods. Both programs are restricted to activities on or involving farm lands. These programs should not be affected by the designation of Critical Habitat on the Mimbres River. No other Federal activities are known that may impact the habitat of the Chihuahua chub.

Any Federal activities in the chub's Critical Habitat potentially would be subject to conferral or consultation under the requirements of Section 7 of the Endangered Species Act of 1973, as amended. It should be emphasized, however, that modification, and not curtailment, of the affected Federal activity traditionally has been the result of Section 7 consultations.

The following source documents were consulted in the development of this proposed rule:

#### References

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#### Public Comments Solicited

The Director intends that the rules finally adopted will be as accurate and effective as possible in the conservation of any Endangered or Threatened species. Therefore, any comments or suggestions from the public, other

concerned governmental agencies, the scientific community, industry, private interests, or any other interested party concerning any aspect of these proposed rules are hereby solicited. Comments particularly are sought concerning:

(1) Biological, commercial, or other relevant data concerning any threat (or lack thereof) to the species included in this proposal;

(2) The location of and the reasons why any habitat of this species should or should not be designated as Critical Habitat as provided for by Section 7 of the Act;

(3) Additional information concerning the range and distribution of this species;

(4) Current or planned activities which may adversely modify the area which is being considered for Critical Habitat; and

(5) The foreseeable economic and other impacts of the Critical Habitat designation on federally funded or authorized projects.

**Public Meeting**

The Service hereby announces that a public meeting will be held on this proposed rule. The public is invited to attend this meeting and to present opinions and information on the proposal. Specific information relative to the public meeting is set out below:

Place	Date	Time	Subject
1. Silver City, N. Mex.	January 6, 1981	7 p.m.	Chihuahua Chub

**§ 17.11 Endangered and threatened wildlife.**

Species		Historic range	Status	When listed	Critical habitat	Special rules
Scientific name	Common name					
<i>Gila nigrescens</i>	Chub, Chihuahua	U.S.A. (New Mexico), Mexico (Chihuahua).	E		17.95(e)	NA

**§ 17.95 [Amended]**

2. It is further proposed that § 17.95(e), fishes, be amended by adding Critical Habitat of the Chihuahua chub in alphabetical order as follows:

**CHIHUAHUA CHUB**

*(Gila nigrescens)*

New Mexico, Grant County

The Mimbres River between the confluences of Allie and Sheppard Canyons in S¼ Section 17, Section 20, Section 28, NE¼ Section 29, and Section 33, T16S; R11W; plus two small spring-

**National Environmental Policy Act**

A draft Environmental Assessment has been prepared in conjunction with this proposal. It is on file in the Service's Washington Office of Endangered Species, 1000 North Glebe Road, Arlington, Virginia, and may be examined by appointment during regular business hours. A determination will be made at the time of final rulemaking as to whether this is a major Federal action which would significantly affect the quality of the human environment within the meaning of section 102(2)(C) of the National Environmental Policy Act of 1969 (40 CFR 1500-08).

**Primary Author**

The primary author of this rule is Jim Bednarz, working under contract with the Service's Albuquerque Regional Office.

The Department has determined that this is not a significantly rulemaking under 43 CFR 14 or Executive Order 12044, nor does it require preparation of a regulatory analysis.

**Regulations Promulgation**

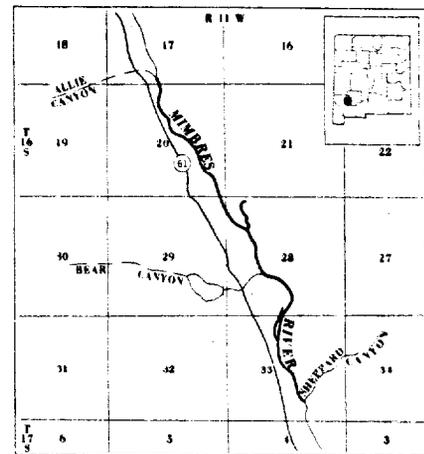
1. It is proposed to amend § 17.11 by adding, in alphabetical order under Fishes, the following to the list of animals:

fed tributaries entering the Mimbres River within the above described Critical Habitat. The spring-fed lateral tributary in NW¼ Section 28, T16S R11W and the spring-fed tributary in SW¼ Section 28 and NW¼ Section 33, T16S R11W. Known primary constituent elements includes: Clean water with pools at least three feet deep, shade and undercut banks or other cover such as downed logs and submerged shrubs.

**Chihuahua Chub**

*Grant Co., New Mexico.*

Critical Habitat for the Chihuahua Chub



Dated: November 26, 1980.

**Robert S. Cook,**

*Acting Director, Fish and Wildlife Service.*

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