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AESO/SE  
2-21-03-F-0462  
CL 2003646

June 29, 2004

Memorandum

To: Field Manager, Tucson Field Office, Bureau of Land Management, Tucson, Arizona

From: Field Supervisor

Subject: Conference Opinion, Martinez Canyon Native Fish Restoration

This document constitutes our conference opinion based on our review of the proposed reestablishment of Gila chub (*Gila intermedia*) in Martinez Canyon [File No. 6840(060)] in Pinal County, Arizona, under section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*). In this conference opinion we evaluate the effects of the proposed action on Gila chub and its critical habitat. Your July 24, 2003, request for formal conference was received on July 29, 2003. You requested that we conduct this conference as per the procedures for formal consultation, as provided at 50 CFR 402.14.

This conference opinion is based on information provided in the July 2003 biological assessment, the Environmental Assessment, communications with you and the Arizona Game and Fish Department (Department), telephone conversations, meetings, field investigations, and other sources of information. We provided a draft conference opinion on March 15, 2004. You provided comments on March 25, 2004. A complete administrative record of this conference is on file in this office. We have assigned log number 2-21-03-F-0462 to this conference. Please refer to that number in future correspondence on this conference.

**Consultation History**

- January 17, 2003 – interagency meeting on Martinez Canyon and Gila chub;
- July 29, 2003 - request for conference received from BLM;
- March 14, 2004 - Draft conference opinion sent to BLM and AGFD;
- March 26, 2004 – comments on draft conference opinion and request for finalization received from BLM.

## CONFERENCE OPINION

### DESCRIPTION OF THE PROPOSED ACTION

#### Fish Translocation

The Bureau of Land Management (BLM), Tucson Field Office, in coordination with the Department and Fish and Wildlife Service has been working to establish a native fish community in Martinez Canyon, Pinal County (T3S, R12E, and Section 19). The proposed action is the release of Gila chub, and subsequent management of Martinez Canyon. Longfin dace (*Agosia chrysogaster*)(85 individuals) were collected from the west end of Aravaipa Creek and stocked on May 11, 2002, and speckled dace (*Rhinichthys osculus*)(90 individuals) were collected from Hot Springs Canyon and stocked April 10, 2003, in Martinez Canyon.

The Department will be responsible for collecting and moving native fish with the assistance of the BLM and us. The project consists of collecting 1,000 longfin dace and 1,000 speckled dace from either Mineral Creek, Pinal County; Aravaipa Canyon, Pinal County; or Hot Springs Canyon, Cochise County. Gila chub will be collected from Redfield Canyon, Graham County. The number of Gila chub collected will depend on what is available and will not exceed 500 juvenile fish over three years.

The Department proposes to collect Gila chub from many sites within Redfield Canyon to increase genetic diversity. Fish will be collected and transferred to Martinez Canyon from September through November when the largest numbers of juvenile fish are available at sizes where field identification is possible. Fish will be double screened by experienced biologists for positive identification to avoid contamination of the site with non-target fishes. Fish will be collected and released into Martinez Canyon over a three-year period. The first stocking will contain about 100 Gila chub (more if an abundance of juveniles is available). Over the next two years, 400 additional juvenile Gila chub and 900 longfin and speckled dace will be added to Martinez Canyon (2004 and 2005). Ideally, juvenile chub will be collected by seining or hoop nets, but other collection methods including electrofishing may be required depending on conditions. Captured fish will be identified and double-checked by two biologists familiar with the species. The chub will then be counted and placed into aerated fish haulers. Fish will be handled using the best practices yet devised for hauling native warmwater fishes. This will include the addition of salt and the additive Stresscoat®, a water conditioner, as a precautionary measure. This treatment acts as a liquid bandage to prevent the loss of electrolytes and to protect and heal damaged tissue against disease-causing organisms. Fish will then be transported via a Bureau of Reclamation helicopter to Martinez Canyon. Following transport, fish will be acclimated to water conditions in Martinez Creek before being released. Fish will be placed below a natural waterfall that will prevent upstream migration and occupation of the upper portion of the stream containing a vehicle ford and a short piece of channel leading to the headspring.

## **Monitoring**

Reestablished fish populations will be monitored annually to evaluate the success of the project as a cooperative effort between the BLM and Department. This will be done to the degree that funding and staff time permit. Monitoring of fish and aquatic habitats to identify factors related to the success or failure of the newly established population will occur in the spring and fall to determine overwintering and summer mortality factors.

Fish distribution and abundance will be monitored using passive capture techniques (e.g., hoop-nets, minnow traps, visual observations) by trained fishery biologists in the fall. The use of passive gear to monitor fish will prevent or reduce injuries. In addition, BLM volunteers are willing and able to assist in monitoring Gila chub in addition to their ongoing monitoring duties. Volunteers visit Martinez Canyon regularly and are already visually monitoring and reporting on the longfin dace and speckled dace populations. Monitoring will need to be covered by State and Federal scientific collection permits.

## **Recreation**

Martinez Canyon is in White Canyon Resource Conservation Area. Demand for recreational opportunities is high. Recreational use occurs year round, but because of climatic conditions and visitor preference, use is higher during the cooler months in fall, winter and spring. Popular activities include hunting, off-highway vehicle use, camping and picnicking, and sightseeing. The area is readily accessible, and recreation use is increasing. Based on estimated traffic and field observations, the annual use for the White Canyon Resource Conservation Area in 2001 was 19,000 visits. However, because of topography, only a small portion of the creek in Martinez Canyon can be traversed. The downstream habitat with fish cannot be traversed by motor vehicles.

## **Fencing and livestock water**

Barbed-wire fencing will enclose the perennial part of the creek from the downstream side of the road crossing downstream to the first arroyo (unnamed) coming in from the east. This is about 1,500 feet of fencing. The fence will meet BLM standards for wildlife. The fence will not extend along the eastern perimeter of the canyon, as steep topography should limit access by livestock. A gate will be provided at the downstream end of the enclosure to facilitate the removal of cattle that gain access to the enclosure. The construction of a spring box to water livestock outside of the enclosure has been proposed by the permittee to replace surface water that is no longer accessible to livestock. The box should be constructed at the last pool just inside the fence when the pool is dry. The pipeline would be buried in the streambed leading to a drinker about ¼ mile downstream.

| Table 1. LEN Allotment acreage, range condition, and trend. |               |             |                 |                            |        |        |                           |                |
|---|---------------|-------------|-----------------|----------------------------|--------|--------|---------------------------|----------------|
| Allotment name  | Number AUM's  | Total acres | BLM acres % BLM | Current grazing management | Rating | Trend  | Type of analysis          | Last inspected |
| LEN   | 2,956 (246hd) | 37,224      | 23,303 81%      | Year-long 9/1—4/1          | Fair   | Stable | professional judgment PFC | 2000           |

### Livestock grazing

Martinez Canyon is part of the LEN allotment (#6197), which is currently in deferment (Table 1). The uplands of this allotment are divided into three pastures, but there is no management strategy to allow growing season rest on these various pastures. Most of this allotment is inaccessible, and the terrain is rugged in the watershed above the project area with limited accessibility to livestock. Formal consultation was completed on this allotment (and others) on October 23, 2003 (02-21-00-F-0029). A season of use (winter) restriction will be placed on the riparian areas with the exception of Martinez Canyon where the perennial portion will be excluded from grazing activities and water piped to a drinker outside the project area.

### STATUS OF THE SPECIES (range-wide)

The Gila chub was proposed as endangered with critical habitat on August 9, 2002 (USFWS 2002). Historically, Gila chub have been recorded in about 30 rivers, streams, and spring-fed tributaries throughout the Gila River basin in southwestern New Mexico, central and southeastern Arizona, and northern Sonora, Mexico (Miller and Lowe 1967; Rinne and Minckley 1970; Minckley 1973; Rinne 1976; DeMarais 1986; Bestgen and Propst 1989). Today the Gila chub has been restricted to small isolated populations scattered throughout its historical range.

The decline of this fish is due to habitat loss and invasion of nonindigenous fish species. Habitat loss has included past and current dewatering of rivers, springs, and cienegas; diversion of water channels; impoundments; regulation of flow; and land management practices. All of these activities have promoted erosion and arroyo formation and the introduction of predacious and competing nonindigenous fish species (Miller 1961, Minckley 1985). Life history information can be found in the status review (Weedman et al. 1996), the proposed rule (USFWS 2002), and references cited there.

Gila chub commonly inhabit pools in smaller streams, springs, and cienegas, and can survive in small artificial impoundments (Miller 1946; Minckley 1973; Rinne 1975). Gila chub are highly secretive, preferring quiet, deeper waters, especially pools, or remaining near cover including terrestrial vegetation, boulders, and fallen logs (Rinne and Minckley 1991). Undercut banks

created by overhanging terrestrial vegetation with dense roots growing into pool edges provide ideal cover (Nelson 1993). Gila chub can survive in larger stream habitat such as the San Carlos River and artificial habitats like the Buckeye Canal (Stout et al. 1970; Rinne 1976). The Gila chub interact with spring and small stream fishes regularly (Meffe 1985), but adults are usually restricted to deeper waters (Minckley 1973). Adults often are found in deep pools and eddies below areas with swift current, as in the Gila chub habitats found in Bass Canyon and Hot Springs in the Muleshoe Preserve area. Young-of-the-year inhabit shallow water among plants or eddies, while older juveniles use higher velocity stream areas (Minckley 1973, 1991).

In Arizona, small remnant populations remain in several tributaries of the upper Verde, San Pedro, San Carlos, Blue, San Francisco, Agua Fria, and Gila rivers. The San Pedro River Basin has three extant, stable-threatened populations in Redfield Canyon (Graham and Pima counties), O'Donnell Creek (Santa Cruz County), and Bass Canyon (Graham and Cochise counties).

Reestablishment of Gila chub has been attempted in three Arizona sites; two are believed to be extant. Lousy Canyon and Larry Creek (Yavapai County) are tributaries to the Agua Fria River and were stocked with 200 Gila chub from Silver Creek in July 1995. The third site, Gardner Canyon (Cochise County), was stocked from Turkey Creek (Santa Cruz County) with 150 Gila chub in July 1988. In May 1995, no Gila chub or any other fish were captured during sampling surveys.

Eighty-five to ninety percent of the Gila chub's habitat has been degraded or destroyed, and much of it is unrecoverable. Only 29 extant populations of Gila chub remain; all but one are small, isolated, and threatened. The current status of the Gila chub is poor and declining.

## **ENVIRONMENTAL BASELINE**

The environmental baseline includes past and present impacts of all Federal, State, or private actions in the action area; the anticipated impacts of all proposed Federal actions in the action area that have undergone formal or early section 7 consultation; and the impact of State and private actions which are contemporaneous with the consultation process. The environmental baseline defines the current status of the species and its habitat in the action area to provide a platform to assess the effects of the action now under consultation.

The action area includes the Martinez Canyon watershed. The action area also includes Redfield Canyon, since it is the source of chub for the translocation.

Martinez Canyon is in the Mineral Mountains, northeast of Florence. The Arizona State Land Department, BLM, and private parties own most land in Martinez Canyon. The predominant use in the area is motorized recreation. This area of the Mineral Mountains is nationally renowned for its off-highway vehicle recreation. Grazing occurs in the watershed, but the LEN allotment is presently deferred from grazing. Historically, mining impacted the area extensively, but most current mining occurs outside the Martinez Canyon watershed. Additional information can be

found in the biological evaluation and environmental assessment, which are incorporated here by reference.

There are several factors that could affect the success of the proposed reestablishment of Gila chub in Martinez Canyon, including water quality and limited habitat availability. Water-quality sampling has shown that dissolved oxygen is lower than State water quality standards. Lead in water has been found at levels that can lead to chronic effects.

The area around Redfield Canyon at the southern tip of the Galiuro Mountains, where the Gila chub will come from, is within the Muleshoe Ranch Cooperative Management Area. The area is cooperatively managed by the BLM, The Nature Conservancy (TNC), and the U.S. Forest Service.

### **Status of the species within the action area**

Gila chub do not currently occur in Martinez Canyon, though longfin dace and speckled dace were reestablished in 2002 and 2003, respectively. Proposed critical habitat in Redfield Canyon includes 3.6 km (2.2 mi) of creek, beginning at T. 11 S., R. 20 S, Section 31 SE, continuing upstream to the confluence with Sycamore Canyon.

Redfield Canyon has an abundant and healthy Gila chub population. The first documented Gila chub collection in Redfield Canyon was in 1961. A number of collections of Gila chub occurred from 1976 to 1983 (USFWS 2002). Redfield Canyon contains one of the few populations of Gila chub for which population studies have been conducted (Griffith and Tiersch 1989). Fall Fish Count sites were established and surveyed by volunteers from 1988 through 1990. TNC established monitoring stations from 1991 to 1994. Gila chub were collected each year, and they were the most abundant species caught in 1991 (72%) (Weedman et al. 1996). TNC surveyed Redfield in November 2001 and found Gila chub. This section of Redfield Canyon is very remote and has not had a lot of human impact. Also, no livestock grazing is permitted which contributes to the existence and quality of the primary constituent elements of proposed critical habitat. Redfield Canyon contains one or more of the primary constituent elements of proposed critical habitat, including perennial pools, the necessary vegetation that provides cover, and adequate water quality (USFWS 2002).

### **Effects of the Action**

The proposed action should have an overall positive effect on the Gila chub by expanding its current range into Martinez Canyon. Since there are only 29 extant populations, reestablishment of Gila chub in Martinez Canyon, if successful, will be a beneficial contribution to its recovery. Most of the effects will be indirect and will occur at Martinez Canyon after chub have been released. Indirect effects may be caused by livestock grazing, recreation, and maintenance of the springbox.

The effects of livestock management on the landscape are related to numerous factors (Holechek et al. 1998). Environmental parameters such as precipitation, temperature regimes, vegetation types, and growing season provide the basis upon which a grazing program is developed (Schmutz 1977). Abiotic factors include soils, climate, geography, and topography. Stocking rates, season of use, utilization levels, class of livestock, and rotation patterns comprise livestock management choices. There may be negative effects to the watershed from livestock grazing when it occurs again. These effects are not likely to cause death or injury of Gila chub because the amount of grazing above the site will be small. Even though the release site will be excluded from livestock, fish are likely to be moved upstream of the enclosure by people (Matter 1991; Mueller 1988, 1990), and livestock will periodically gain access to the enclosure. Livestock periodically go through, under, or over fences; fences go down from tree fall, fires, and floods; and gates may be left open. Therefore, periodic, light impacts are expected within the enclosure.

Recreationists use roads and trails, picnic sites and campgrounds, group-use sites, road pullouts, and educational and interpretive facilities. Impacts include trampling of vegetation and soil, litter, dogs, fires, direct impacts to listed species, human refuse, vandalism, and disturbance of wildlife. Most recreational use will be vehicular. There is a stream road crossing at the upper end of perennial flow. Gila chub will be released below a waterfall below this crossing. Gila chub cannot make it above the waterfall on their own, but it is probable that someone will move them above the waterfall during the life of the project. If Gila chub are moved above the barrier, they will likely be present at the road crossing at least periodically. This could lead to the direct loss of juveniles, fry, or eggs. Loss of individuals is expected to be very small, but is reasonably certain to occur during the life of the project.

Increased public use of the area also increases the chance that nonindigenous species will be released, either intentionally or unintentionally (Welcomme 1988, Courtenay 1993, McMahon and Bennett 1996, Ludwig and Leitch 1996, Claudi and Leach 2000). The area is becoming increasingly popular as a recreation area, and will only continue to do so. Crayfish (*Orconectes virilis*) have been released in Martinez Canyon and persist to this day.

Motorized vehicles driving through the stream channel of Martinez Creek have the potential to disrupt normal behavior of fish and macroinvertebrates, to injure them, increase turbidity, and to destroy fish eggs and larvae. In addition, mechanical action of vehicles can cause damage to existing vegetation and prevent the establishment of vegetation, which affects habitat quality; this has already been documented in the upper-most portion of the creek, and is the reason that the riparian condition was determined to be "functional at risk." Most of these problems will be avoided, at least initially, by restricting the chub release to the area below the first stream crossing.

Small quantities of vehicle fluids (fuel, engine oil, brake system fluid, transmission fluid, or antifreeze) may leak from motorized vehicles crossing the stream, which may enter Martinez Creek and degrade the water quality and negatively impact the Gila chub. However, the level of contamination of surface water is anticipated to be minor, as parking generally occurs away from

the surface water in this canyon-bound creek and is favored where parking space is more abundant.

Picnickers, campers, hikers, and off-highway vehicle users may use Martinez Creek for cleaning and bathing. If soap or other such products are used, water quality may be degraded, impacting the Gila chub, as well as dace and aquatic invertebrates, their primary prey base.

Concentrated recreation activity along Martinez Creek, such as wading, splashing, and walking up and down the creek can injure fish, if contact is made, or displace and stress fishes such as Gila chub, which are secretive and sensitive to frequent disturbances. The level of disturbance is not likely to result in mortality through stress, which predisposes fish to disease and predation. It is possible that stream banks and spawning areas may be damaged by excessive use from hikers and sightseers. Currently the activity level in the area is so light that trampling damage is largely undetectable. It is important to recognize that the majority of the banks are composed of bedrock and bolder substrates, which are extremely durable.

Most introductions of nonnative fish have been done legally by State fish and wildlife agencies to establish sport fisheries. However, the public occasionally illegally introduces nonnative fishes, frogs, and crayfish. The release of nonnative fish by the public has been a major factor in the spread of these species (Moyle 1976a, 1976b). Nonnative fish are transported for bait and sporting purposes (Moyle 1976a, 1976b), for mosquito control (Meffe et al. 1983), and release of aquarium fishes (Deacon et al. 1964). Nonnative species are probably the largest threat to Gila chub once they are established. However, there is no way to determine the likelihood of surreptitious releases and little opportunity to prevent them. The presence of crayfish in Martinez Canyon, which is extremely remote from other crayfish populations, attests to the risk of further contamination with nonnative aquatic organisms.

The proposed springbox will be installed when that pool is dry, so no direct effects to Gila chub will occur. However, because the exact design of the water collection system is unknown, its operation could cause the loss of Gila chub. If the collection system takes water directly from the pool, eggs, fry, and small fish could be entrained. Even if the intake is buried in the substrate, if it is not buried deeply enough, eggs could be entrained.

The springbox will also require periodic maintenance, and it is possible that maintenance will be necessary when there is water, and therefore Gila chub, in the pool. Gila chub could be disturbed or lost when digging accesses the springbox or collection system, or it is pulled from the substrate.

### **Cumulative Effects**

Cumulative effects include the effects of future State, tribal, local, or private actions that are reasonably certain to occur in the action area considered in this biological opinion. Future Federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the Act. Because almost all of the action area is managed by BLM, there should be virtually no cumulative effects.

### **CONCLUSION**

After reviewing the current status of Gila chub, the environmental baseline for the action area, the effects of the proposed action, and the cumulative effects, it is our conference opinion that the action, as proposed, is not likely to jeopardize the continued existence of the proposed endangered Gila chub. Critical habitat has been proposed for Redfield Canyon, but will not be affected. We base these conclusions on the following:

1. A new Gila chub population will be created;
2. The proposed action includes conservation measures to minimize effects to the donor population in Redfield Canyon; and
3. The proposed action includes conservation measures to minimize effects to the reestablished population in Martinez Canyon.

### **INCIDENTAL TAKE STATEMENT**

Section 9 of the Act and Federal regulation following section 4(d) of the Act prohibit the take of endangered and threatened species, respectively, without special exemption. "Take" is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. "Harm" is defined (50 CFR 17.3) to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. "Harass" is defined (50 CFR 17.3) as intentional or negligent actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding or sheltering. "Incidental take" is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the Act provided that such taking is in compliance with the terms and conditions of this incidental take statement.

The prohibitions against taking the species found in section 9 of the Act do not apply until the species is listed. However, we advise the BLM to consider implementing the following

reasonable and prudent measures. If this conference opinion is adopted as a biological opinion following listing, these measures, with their implementing terms and conditions, will be nondiscretionary, and must be undertaken by the BLM so that they become binding conditions of any grant or permit issued to any permittee, as appropriate, for the exemption in section 7(o)(2) to apply. The BLM has a continuing duty to regulate the activity covered by this incidental take statement. If the BLM (1) fails to assume and implement the terms and conditions or (2) fails to require any permittee to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document, the protective coverage of section 7(o)(2) may lapse. To monitor the impact of incidental take, the BLM or the permittee must report the progress of the action and its impact on the species to us as specified in the incidental take statement [50 CFR §402.14(I)(3)]

### **AMOUNT OF EXTENT OF TAKE ANTICIPATED**

The Gila chub in Martinez Canyon are likely to undergo some form of take, either through death, harm, or harassment. Take at Martinez Canyon will result from recreation, vehicle crossings, and maintenance of the springbox. We anticipate that incidental take of Gila chub will be difficult to detect for the following reasons: dead specimens will be difficult to enumerate and difficult to find, the cause of death may be difficult to determine, and losses may be masked by seasonal fluctuations in numbers.

We anticipate that the following take is reasonably certain to occur:

1. We anticipate that Gila chub within the enclosure will be incidentally taken through direct mortality from livestock trampling or ingestion (when very small). The amount of incidental take authorized will be considered to be exceeded if the following condition occurs:
  - a. Livestock grazing occurs within the enclosure and results in trampling, chiseling, or other physical impact by livestock being detected on more than 10 percent of the alterable streambanks within the enclosure. This level of effects to stream banks would be an indicator of significant livestock use within the enclosure and likely result in harm to or mortality of Gila chub. Exceeding this level of trampling will result in incidental take and adverse effects over and above that anticipated here.
2. We anticipate that 5 Gila chub will be taken at the vehicle crossing in any one year (for recreation and livestock trampling); and
3. We anticipate that 5 Gila chub will be taken at the lower pool during maintenance of the springbox.

### **EFFECT OF TAKE**

In this conference opinion, we find the anticipated level of take is not likely to jeopardize the continued existence of the proposed endangered Gila chub.

### **REASONABLE AND PRUDENT MEASURES and TERMS AND CONDITIONS**

1. Conduct the proposed action in a manner which will minimize mortality of Gila chub.
  - 1.1. Construct the springbox when that pool is dry. When possible, maintenance of the springbox should be done when the pool is dry or water is low.
  - 1.2. Ensure that the enclosure is regularly inspected and maintained, and livestock in the enclosure are removed within three days.

#### **Disposition of Dead or Injured Listed Animals**

Upon finding a dead or injured threatened or endangered animal, initial notification must be made to the Service's Division of Law Enforcement, 2450 W. Broadway Road, #113, Mesa, Arizona 85202 (480 967-7900) within three working days of its finding. Written notification must be made within five calendar days and include the date, time, and location of the animal, a photograph, and any other pertinent information. Care must be taken in handling injured animals to ensure effective treatment and care, and in handling dead specimens to preserve biological material in the best possible condition. If feasible, the remains of intact specimens of listed animal species shall be submitted as soon as possible to the nearest Service or AGFD office, educational, or research institutions holding appropriate State and Federal permits.

Arrangements regarding proper disposition of potential museum specimens shall be made with the institution before implementation of the action. A qualified biologist should transport injured animals to a qualified veterinarian. Should any treated listed animal survive, we should be contacted regarding the final disposition of the animal.

#### **CONSERVATION RECOMMENDATIONS**

Section 7(a)(1) of the Act directs Federal agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information on listed species. The recommendations provided here do not necessarily represent complete fulfillment of the agency's section 7(a)(1) responsibilities for the Gila chub. To further the purposes of the Act, we recommend implementing the following discretionary actions:

1. Work with us and the Department to reestablish the Gila chub to suitable habitats.
2. Work with us, the permittees, and the Arizona Game and Fish Department to begin an aggressive program to ensure that nonindigenous aquatic organisms are not introduced to the action area, and if they are, to support actions to remove them.
3. Implement any conservation actions that benefit the species and its habitat.
4. Support any recovery team and the preparation of a recovery plan.
5. Release chub over a 10-year period. Develop a second project to increase the number of Gila chub released into Martinez Canyon to above 500, to insure genetic diversity.

### **REINITIATION NOTICE**

This concludes the conference for the proposed Martinez Canyon native fish restoration project. You may ask us to confirm the conference opinion as a biological opinion issued through formal consultation if the Gila chub is listed. The request must be in writing. If we review the proposed action and find that there have been no significant changes in the action as planned or in the information used during the conference, we will confirm the conference opinion as the biological opinion on the project and no further section 7 consultation will be necessary.

After listing of the Gila chub as endangered and any subsequent adoption of this conference opinion, the BLM shall request reinitiation of consultation if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect the species or critical habitat in a manner or to an extent not considered in this conference opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the species or critical habitat that was not considered in this conference opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action.

The incidental take statement provided in this conference opinion does not become effective until the species is listed and the conference opinion is adopted as the biological opinion issued through formal consultation. At that time, the project will be reviewed to determine whether any take of the Gila chub has occurred. Modifications of the opinion and incidental take statement may be appropriate to reflect that take. No take of the Gila chub may occur between the listing and the adoption of the conference opinion through formal consultation, or the completion of a subsequent formal consultation.

Thank you for your efforts to conserve Arizona's native fishes. The Tucson Field Office has one of the best records of Federal agencies in the state for conserving our native fish species. If you have questions regarding this conference opinion or the consultation process, please contact

Doug Duncan (520) 670-6150 (x236), or Sherry Barrett (520) 670-6150 (x223) of our Tucson Ecological Services Suboffice.

/s/ Steven L. Spangle

cc: Bob Broscheid, Arizona Game & Fish Department, Phoenix, AZ  
Arizona Game and Fish Department, Region 5, Tucson, AZ  
Assistant Field Supervisor, Fish and Wildlife Service, Tucson, AZ

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