

SUMMARY: The Service determines the Borax Lake chub to be an Endangered species and the Borax Lake area, Harney County, Oregon to be its Critical Habitat. The total land and water area designated as Critical Habitat is 640 acres. This action is being taken because the distribution of the Borax Lake chub is limited to Borax Lake, its outflow, and Lower Borax Lake in Harney County, Oregon. Geothermal development in and around Borax Lake and human modification of the lake threaten the integrity of the species' habitat and, hence, its survival. The rule will provide protection to the Borax Lake chub and its habitat.

DATES: This rule becomes effective on November 4, 1982.

ADDRESSES: Interested persons or organizations can obtain information from the Regional Director, U.S. Fish and Wildlife Service, Lloyd 500 Building, Suite 1692, 500 N.E. Multnomah Street, Portland, Oregon 97232. Comments, data, and materials relating to the rule are available for public inspection by appointment during normal business hours at the Service's Office of Endangered Species, Room 531, 1000 North Glebe Road, Arlington, Virginia.

FOR FURTHER INFORMATION CONTACT: Mr. Sanford Wilbur, Senior Staff Biologist, U.S. Fish and Wildlife Service, Lloyd 500 Building, Suite 1692, 500 N.E. Multnomah Street, Portland, Oregon 97232 (503/231-6131).

SUPPLEMENTARY INFORMATION: Background: On May 28, 1980, the Service published an emergency rule (45 FR 35821-35823) effective for 240 days, listing the Borax Lake chub as Endangered and delineating its Critical Habitat. The Service published proposed rules on October 16, 1980 (45 FR 68886-68888) proposing the Borax Lake chub as Endangered with Critical Habitat and announced a public meeting and a public hearing. The public meeting was held in Burns, Oregon, on November 13, 1980. The public hearing was also held in Burns, Oregon, on December 2, 1980.

The Borax Lake chub is found only in Borax Lake (a small 10.2 acre, natural, thermal lake), its outflow, and Lower Borax Lake located in the Alvord Basin of south-central Oregon. It inhabits the highly mineralized, thermal lake that is fed by a thermal spring. The fish feeds on a variety of aquatic invertebrates and terrestrial insects which utilize the waters and wetlands surrounding Borax Lake.

Over time, the precipitation of minerals from the spring water maintaining the level of Borax Lake has raised the perimeter of the lake

approximately 30 feet above the valley floor and isolated the chub from the surrounding watershed. The perched nature of the lake makes it extremely susceptible to human disturbance. In 1980, a modification of the perimeter of the lake diverted water from the lake and lowered its level approximately 1 foot. The lower levels adversely affect the chub by decreasing habitat and increasing water temperatures.

A second major threat to the Borax Lake chub is geothermal development. The entire Alvord Basin is a Known Geothermal Resource Area (KGRA) within which the Bureau of Land Management has already leased rights for geothermal exploration to private energy development companies. Such development adjacent to Borax Lake could adversely impact the species' habitat. One of the problems of exploratory drilling in this area is the possibility of interconnecting aquifers or springs. This kind of interconnection could, in effect, drain the lake which is at a higher elevation than the valley floor where much of the drilling will be occurring. This drilling could also disrupt the hot water aquifer feeding the lake, thus changing the aquifer pressure or temperature, and consequently change the lake. This alteration could range from a simple change in the temperature to a complete elimination of the flow. These threats to Borax Lake resulted in an emergency rule listing the Borax Lake chub as Endangered on May 28, 1980.

The Critical Habitat encompasses Borax Lake and the aquatic environments associated with its outflow located in T37S; R33E; SW¼ Sec. 11, W¼ Sec. 14, and E¼ of the SE¼ Sec. 15 and SE¼ of the NE¼ Sec. 15, Harney County, Oregon. Some of the Critical Habitat is privately owned, but most is federally owned (Bureau of Land Management). The total area of the Critical Habitat is 640 acres.

Section 4(a) of the Act (16 U.S.C. 1531 *et seq.*) states:

"General—(1) The Secretary will by regulation determine whether any species is an endangered species or a threatened species because of any 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

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

Endangered and Threatened Wildlife and Plants; Endangered Status and Critical Habitat for Borax Lake Chub (*Gila boraxobius*)

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

species or degradation of its habitat; and

(5) other natural or manmade factors affecting its continued existence."

This authority has been delegated to the Assistant Secretary.

Summary of Factors Affecting the Species

These findings are summarized herein under each of the five criteria of Section 4(a) of the Act. These factors, and their application to the Borax Lake chub, are as follows:

1. *The present or threatened destruction, modification, or curtailment of its habitat or range.*—The Borax Lake chub is endemic to Borax Lake and its outflow. Borax Lake is an extremely fragile aquatic ecosystem which, because of its position, approximately 30 feet above the valley floor, is vulnerable to adverse alteration. Once in recent years (1980), channels were chipped along its perimeter to direct water toward the eastern side of the lake instead of allowing the outflow to follow its natural pathway toward a marsh located on the western side of the lake. If flows from the natural outlet are sufficient, water flows through the marsh and into Lower Borax Lake where it provides additional chub habitat. Because of the artificial diversion, much of the lower lake has been dry for several months during the year. Historically, because of its intermittent nature, most of the lower lake has probably never provided chub habitat throughout the year. However, some of the marsh retains permanent water from seepage around the lake and this area does provide suitable chub habitat. Much of this marsh habitat is currently dry because of the unnatural water diversion from the upper lake. If more diversions are constructed along the eastern side of the lake, the lake level will continue to decline, the marsh will continue to dry, and the continued existence of the chub will be increasingly threatened.

Development of the geothermal resource poses a substantial threat which may adversely affect the Borax Lake chub by modifying or destroying its aquatic habitat. Interest in geothermal exploration has been demonstrated in the Alvord Basin, an area designated by the U.S. Geological Survey as a Known Geothermal Resource Area, because of its geothermal potential. Some geothermal leases in the Alvord Basin have been issued by the Bureau of Land Management. The private land on which Borax Lake is located has also been leased to an energy company for geothermal exploration. The geothermal potential will be explored by the

Anadarko Production Company, the holder of leases surrounding Borax Lake. Their plans presently call for three exploratory wells to be drilled in the Borax Lake area beginning September to December of this year. As part of the BLM leasing process Anadarko agreed to a monitoring program for the protection of Borax Lake. They also agreed to a stipulation that any change in the water quality or quantity of Borax Lake, resulting from their drilling, would result in suspension of operations until the problem was resolved. The U.S. Geological Survey has estimated that the Borax Lake area has the potential for production of 91 megawatts of electricity for 30 years. The survey has also stated that the actual probability of finding the geothermal reservoir is at worst 1 chance in 20 and at best 1 chance in 4. Anadarko has indicated it may take several years to determine if there is a geothermal resource large enough to develop in the Borax Lake area. Thus far there have been no adverse impacts to the Borax Lake ecosystem.

Development of a hot springs resort at Borax Lake for recreational purposes has been considered by a private landowner, but because of the lake's remoteness this appears unlikely.

2. *Overutilization for commercial, sporting, scientific, or educational purposes.* None.

3. *Disease or predation.* None.

4. *The inadequacy of existing regulatory mechanisms.* The Borax Lake chub is on the Oregon endangered species list but its habitat is not protected by Oregon State laws.

5. *Other natural or manmade factors affecting its continued existence.* None.

Summary of Comments and Recommendations

Section 4(b)(1)(B) of the Act requires that a summary of all comments and recommendations received be published in the *Federal Register* prior to adding any species to the List of Endangered and Threatened Wildlife and Plants. Comments received on the proposal are summarized below.

A total of 14 written comments were received, one from the Governor of Oregon, one from the Oregon Department of Fish and Wildlife, one from BLM, one from Anadarko Company, one from Harney County Chamber of Commerce, one from the County Court for Harney County, two from conservation organizations, and six from individuals.

The Governor of Oregon and the Oregon Department of Fish and Wildlife supported the proposed Endangered status and Critical Habitat for the Borax

Lake chub. The Governor did stress the importance of balancing the listing and Critical Habitat designations with the potential geothermal benefits of the area. He also pointed out that the Oregon Department of Energy had worked closely with the geothermal lease holders in the Borax Lake area and that a plan for the protection of the chub and its habitat had been developed. The Oregon Department of Fish and Wildlife did recommend additional area around Borax Lake be determined as Critical Habitat.

The Bureau of Land Management supported the proposed Endangered status and Critical Habitat for the Borax Lake chub. In response, BLM provided observations of their biologists of the Borax Lake chub and its habitat. They also recommended changes, additions, and deletions, in the proposed Critical Habitat area in Section 15. The BLM comments included socioeconomic considerations in view of the potential geothermal development.

The Anadarko Production Company, which holds geothermal leases on private and Federal lands in the Borax Lake area, commented on the recognition of the Borax Lake chub as a distinct species, the proposed Critical Habitat and economics. They felt that there was not adequate information at this time to decide on the taxonomic status of the Borax Lake chub. They indicated that the chub in Borax Lake could represent a geographically isolated population of the Alvord chub, a subspecies of the Alvord chub or a distinct new species. The Critical Habitat comments suggested additions and deletions to the proposed area. They also suggested that the constituent elements of the habitat as specified by the Service be defined. Several of their comments expressed concern for the possible economic effects resulting from the listing.

The U.S. Geological Survey categorizes the basin as a Known Geothermal Resource Area (KGRA). There is potential for geothermal development. A BLM lease has been made of land in the Critical Habitat area to Anadarko Production Company for geothermal exploration. The geothermal reservoir has not yet been found. From statements made at the public meeting by Anadarko Production Company and by BLM, the U.S. Geological Survey has stated that the probability of finding such a reservoir is from 1 in 4 to 1 in 20.

Section 7 consultation on this leasing was initiated following the emergency listing of this species. This consultation has taken place and it is believed that the regulations stipulated in the BLM

lease are adequate for protection of the species. Anadarko is in agreement with the regulations and has stated that such regulation will not prohibit their development of the area if geothermal resources are present.

It is expected that the listing will not conflict with the geothermal development of the area, that no quantifiable economic cost will accrue as a result of the listing, and that the benefits of such development would be allowed to flow to residents of the Harney County area.

The comments from Harney County Chamber of Commerce and County Court for Harney County expressed concern over the possible economic impacts of Critical Habitat delineation on the geothermal explorations in the county. They also suggested that if private landowners are not allowed to develop geothermal resources in the area that they should receive compensation.

Two conservation organizations, Audubon Society of Portland and Oregon High Desert Study Group expressed support for the proposed listing and Critical Habitat delineation.

Comments were received from six individuals familiar with the Borax Lake area. Five supported the proposed listing and Critical Habitat determination for the Borax Lake chub. They pointed out the uniqueness of the area and urged protection of the proposed Critical Habitat. One individual opposed the proposal on the grounds that it would restrict geothermal explorations on private and Federal lands.

The concern expressed most frequently in response to the proposed Endangered status and Critical Habitat for the Borax Lake chub was relative to the potential impact on geothermal exploration on private and BLM lands in the area. At this time, the Service foresees no significant impact on geothermal exploration activities. Actually, there are many kinds of actions which can be carried out within the Critical Habitat of the Borax Lake chub which would not be expected to adversely affect the species or its habitat. Indeed no activity is automatically excluded. This point is poorly understood by much of the public. There is a widespread and erroneous belief that a Critical Habitat designation is somewhat akin to the establishment of a wilderness wildlife sanctuary and automatically closes an area to most uses. A Critical Habitat designation applies only to Federal agencies and their actions, and is an official notification to these agencies that their responsibilities under Section 7 of the Endangered Species Act are

applicable in a certain area. The Service has consulted with BLM regarding the geothermal explorations in the Borax Lake area. As a result, the following two stipulations were included in the November 18, 1980, BLM geothermal lease that involves the Borax Lake area.

1. Any operation plan proposing drilling must include a plan to monitor the water quantity and quality in Borax Lake and springs northwest of the lake.

2. Upon notification by the supervisor or other authorized party that there has been a significant change in the water quantity or quality of Borax Lake, all operations will cease until the problem has been identified and resolved.

These two stipulations should allow protection of the habitat of the Borax Lake chub.

Anadarko, the company holding the geothermal lease in the Borax Lake areas, stated in the conclusion of their comments that:

The position of Anadarko has been and is that geothermal development of the Borax Lake area under the Federal leases held by the Company can and must be carried out with full protection of the Borax Lake chub and the habitat necessary for that fish. We believe this to be true whether or not the chub is listed as an Endangered Species and whether or not a Critical Habitat is established under the Endangered Species Act.

Several comments addressed the boundary of the proposed Critical Habitat in T37S; R33E; Harney County, Oregon. The Oregon Fish and Wildlife Department and BLM suggested adding all or a portion of the NE¼ of Sec. 15. They indicated that all or at least a portion was Critical Habitat for the chub. Based on this recommendation and field examination, the Service is adding the SE¼ of the NE¼ of Sec. 15. BLM also suggested deleting portions of the W¼ of the SE¼ of Sec. 15. Based on this recommendation and field examination, the Service is deleting the W¼ of the SE¼ of Sec. 15. Anadarko supported the additions and deletions as suggested by BLM. Anadarko also suggested the deletion of portions of the proposed Critical Habitat in Sections 11 and 14. After field examination and consultation with other biologists, the Service did not believe that deletion of portions of Sections 11 and 14 from the proposed Critical Habitat was justified. Critical Habitat boundaries in Sections 11 and 14 are unchanged from the proposal.

A public hearing was held on December 2, 1980, in Burns, Oregon, to answer questions and receive statements relative to the Endangered status and Critical Habitat of the Borax Lake chub. A total of six statements

were made at the hearing and included those from representatives from BLM, Anadarko Production Company, Harney County Chamber of Commerce and three individuals.

The statement made by the BLM indicated that they supported the permanent listing of the Borax Lake chub as Endangered as proposed in the Federal Register of October 16, 1980. They did recommend two changes in the location of the proposed Critical Habitat. One of the two changes involved adding the NE¼ of Sec. 15, T37S, R33E. The Service agrees in part with this recommendation and has added the SE¼ of the NE¼ sec. The other change involved the deletion of 55 acres west of Lower Borax Lake in the SE¼ of Sec. 15, T37S, R33E. The Service agrees in part and has deleted 30 acres in the western portion of the SE¼ of Sec. 15, T37S, R33E.

The BLM earlier reported on the socio-economic estimates based on potential geothermal resources sufficient to generate up to 110 megawatts of electrical energy. (This estimate was based on information which was superseded by later data concerning the actual expected impact of the listing.) The earlier data stated income generated, based on 7 cents per kwh for a 110 megawatt plant, would be worth about \$54 million per year. Taxes produced from this income would be an estimated \$27 million annually. Annual property tax revenue to Harney County, based on the current rate of \$15.85 per \$1,000 valuation would be between \$1.85 and \$5.2 million per year. Other county and State revenues would be derived from the 50 percent of the Federal revenues the State gets and passes on to the counties. These include annual lease rental and royalty income. There is a \$2.00 per acre minimum rental income on KGRAs for the first 5 years, and the rental escalates after that. Royalty of 10 percent for income on a projected \$3.5 million worth of steam or hot water produced for a 110 megawatt plant comes to \$350,000 per year, with the State and county getting half. The BLM closed by expressing their appreciation for the cooperative attitude shown by the Fish and Wildlife Service during both the Section 7 consultation on the Borax Lake chub and the continued interaction during the listing process.

The Anadarko Production Company opened their statement by pointing out that they had been active in geothermal exploration and development in the Alvord Basin area since 1971. They indicated that they are committed to an exploration and development program that included the leases which they

acquired in the vicinity of Borax Lake. Anadarko went on record that they agreed with the assessments made by the speaker from the BLM, but pointed out that the USGS in their most recent document (circular 790) estimated that the Borax Lake area had the potential for the production of 91 megawatts of electricity for 30 years, slightly less than the 110 megawatts referred to earlier.

Anadarko also agreed that the resource there, if it exists, could be in the 90 to 110 megawatts range. They also pointed out that the USGS had also stated that the actual probability of finding the geothermal reservoir was, at the worst, perhaps 1 chance in 20 and at the best, perhaps 1 chance in 4. They went on to explain that there is no way of knowing whether there is a geothermal reservoir until they have at least one successful exploratory well. At that point, they could determine the actual size of the resource and whether it would be economically productive for a period of 30 years.

In closing, Anadarko stated that:

Geothermal is not similar to many major energy projects in that it will not create a sudden land rush or a "boom town" characteristic in the Alvord area. We will probably not see that happen even if a discovery is made at Borax Lake or anywhere in that area. We will probably not see more than two drilling rigs, oil field scale drilling rigs, operating in that area over the next ten years. Because of the relatively unknown nature of geothermal at the present time, we simply can't rush at it. We have to be very orderly in the development. We are not going to have a massive influx of people into the valley. Probably if a discovery was made, the peak, as far as people moving into the valley would be concerned, would occur during the construction of the power plant. At best that is still several years off.

A member of the audience asked the Anadarko speaker a question concerning the total land area impacted by a 110 megawatt development. In response, Anadarko indicated that the first plant would be small, approximately 20 megawatts, would take 4 to 5 years to develop and would affect about 400 acres. A larger plant, approximately 55 megawatts, would affect approximately 600 to 700 acres. This acreage includes all generating facilities, production, and reinjection wells.

The representative from the Harney County Chamber of Commerce opened his statement by pointing out that the habitat of the Borax Lake chub had been altered considerably by human modification over the past 100 years. Most notable of these was the borax operation which diverted mineral rich water from the lake to extract borax. The body of water referred to as Lower

Borax Lake may have been formed during the borax extraction operation. He also indicated that diversion of flow for irrigation, public or private should be at the option of the owner. The Chamber of Commerce stated that if the option is abridged or excluded by the designation of Critical Habitat full restitution of potential value should be awarded to the landowner.

Three individuals made brief statements concerning the Borax Lake chub proposal. One of the three supported the proposed listing and Critical Habitat designation, the other two opposed the proposal.

After a thorough review and consideration of all the information available, the director has determined that the Borax Lake chub is in danger of becoming extinct throughout all or a significant portion of its range due to one or more of the factors described in Section 4(a) of the Act, as specified in the proposal of October 16, 1980 (45 FR 68886-68888). Listing as Endangered and determination of Critical Habitat will provide this species with necessary protection to ensure its survival.

Critical Habitat

The Act defines "Critical Habitat" to include (a) areas within the geographical area occupied by the species at the time that species is listed which are essential to the conservation of the species and which may require special management considerations or protection and (b) specific areas outside the geographic area occupied by the species at the time, upon a determination by the Secretary that such areas are essential for the conservation of the species.

Critical Habitat for the Borax Lake chub is proposed as follows:

Oregon. Harney County. Borax Lake and environment associated with the outflow from Borax Lake located within T37S; R33E; SW¼ Sec. 11, W¼ Sec. 14, E¼ of the SE¼ Sec. 15, and the SE¼ of the NE¼ of Sec. 15.

These areas provide the Borax Lake chub with all the necessary requirements for survival and reproduction such as food, spawning habitat, water temperatures, etc.

Section 4(f)(4) of the Act requires, to the maximum extent practicable, that Critical Habitat determinations be accompanied by a brief description and evaluation of those activities which, in the opinion of the Secretary, may adversely modify such habitat if undertaken, or those Federal actions which may be impacted by such designation. Such activities are identified below for this species. It should be emphasized that Critical Habitat designation may not affect each

of the activities listed below, as Critical Habitat designation only affects Federal agency activities through Section 7 of the Act.

Activities which occur within the proposed Critical Habitat include cattle grazing, nature study, swimming, geothermal exploration, irrigation, and hunting. Of these activities, grazing, hunting, nature study, and swimming do not appear to adversely modify the habitat to any substantial degree. Geothermal exploration and irrigation may adversely modify the habitat should it occur within the area adjacent to Borax Lake or its outflows or should it modify the spring flow and/or its water temperature.

Such disturbances from geothermal development would include, but would not be limited to, subsidence problems and/or modifications in the hydrology of the area that may affect the springs supporting Borax Lake. Full scale development of a geothermal plant may have negative effects on the lake due to air pollution (venting of steam and other gases), possible ground water contamination, subsidence, and other related impacts. If geothermal development occurs in the Alvord Basin (and no plant construction is now known to be scheduled), it will probably entail only small-scale plants, a maximum of 91 to 110 megawatts capacity.

Construction of such plants on Federal land may be restricted so as not to adversely affect the proposed Critical Habitat. Development on private land could possibly be impacted through Section 9 of the Act. It could be further restricted if Federal approval or funding is involved.

Section 4(b)(4) of the Act requires the Service to consider economic and other impacts of specifying a particular area as Critical Habitat. The Service has prepared a final impact analysis and believes at this time that the rule is not a major rule and does not require preparation of a regulatory analysis under Executive Order 12291. The Service has contacted Federal agencies that have jurisdiction over the land and water affected by this action. These Federal agencies and other interested persons or organizations have submitted information on economic or other impacts of this action. This information was used in the preparation of the final impact analysis.

Effect of the Rule

Section 7(a) of the Act provides:

1. The Secretary shall review other programs administered by him and utilize such programs in furtherance of

the purposes of this Act. All other Federal agencies shall, in consultation with and with the assistance of the Secretary, utilize their authorities in furtherance of the purposes of this Act by carrying out programs for the conservation of Endangered species and Threatened species listed pursuant to Section 4 of this Act.

2. Each Federal agency shall, in consultation with and with the assistance of the Secretary, insure that any action authorized, funded, or carried out by such agency (hereinafter in this section referred to as an "agency action") is not likely to jeopardize the continued existence of any Endangered or Threatened species or result in the destruction or adverse modification of habitat of such species which is determined by the Secretary, after consultation as appropriate with the affected States, to be critical, unless such agency has been granted an exemption for such action by the Committee pursuant to Subsection (h) of this section. In fulfilling the requirements of this paragraph, each agency shall use the best scientific and commercial data available.

3. Each Federal agency shall confer with the Secretary on any agency action which is likely to jeopardize the continued existence of any species proposed to be listed under Section 4 or result in the destruction or adverse modification of Critical Habitat proposed to be designated for such species.

Provisions for Interagency Cooperation are codified at 50 CFR Part 402. This rule would require Federal agencies not only to insure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of the Borax Lake chub, but also to insure that their actions are not likely to result in the destruction or adverse modification of their Critical Habitat. Private activity will not be affected by the rule unless it involves a taking under Section 9 of the Endangered Species Act. Other activities affecting the habitat will be impacted only if there is Federal involvement in those activities. No significant modifications to projects with Federal involvement are presently foreseen.

With respect to the Borax Lake chub, all prohibitions of Section 9(a)(1) of the Act, as implemented by 50 CFR 17.21 and 17.23, will apply. These prohibitions,

in part, would make it illegal for any person subject to the jurisdiction of the U.S. to take, import or export, ship in interstate commerce in the course of a commercial activity, or sell or offer for sale these species in interstate or foreign commerce. It also would be illegal to possess, sell, deliver, carry, transport, or ship any such wildlife which was illegally taken. Certain exceptions would apply to agents of the Service and State conservation agencies.

Regulations in 50 CFR 17.22 and 17.23 provide for the issuance of permits to carry out otherwise prohibited activities involving Endangered species under certain circumstances. Such permits involving Endangered species are available for scientific purposes or to enhance the propagation or survival of the species. In some instances, permits may be issued during a specified period of time to relieve undue economic hardship which would be suffered if such relief were not available.

National Environmental Policy Act

An Environmental Assessment has been prepared in conjunction with this rulemaking. 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. This assessment is the basis for a decision that this rule is not a major Federal action that significantly affects the quality of the human environment within the meaning of section 102(2)(C) of the National Environmental Policy Act of 1969, implemented at 40 CFR 1500-1508.

Determination of Effects

The Department of the Interior has determined that this rule is not a major rule under Executive Order 12291 and will not have a significant economic effect on a substantial number of small entities under the Regulatory Flexibility Act. The only small entities in the area are the two individuals who use the land for grazing and Harney County, Oregon. Under the present geothermal development plans of the Anadarko Production Company, there will be no significant impact to Harney County, Oregon. The listing is entirely compatible with present grazing practices and no changes in land use are foreseen.

This rule does not contain information

collection subject to Office of Management and Budget approval under 44 U.S.C. 3501 *et seq.*

This finding is made as a result of analysis by the Office of Endangered Species of information received from personnel of the BLM State Office and Fish and Wildlife Service Regional field experts.

Authors

The primary authors of this rule are Dr. Kathleen E. Franzreb, U.S. Fish and Wildlife Service, Endangered Species Staff, 2800 Cottage Way, Sacramento, California 95825 (FTS 468-4106 or 916/484-4664) and Dr. James D. Williams, U.S. Fish and Wildlife Service, Office of Endangered Species, Washington, D.C. 20240 (FTS 235-1975 or 703/235-1975). The following sources were used in the preparation of this final rulemaking:

Williams, J. E. and K. M. Howe.

Environmental Assessment for the protection of the Borax Lake area, Harney County, Oregon. Unpub. report to Unique Wildlife Ecosystem Program, U.S. Fish and Wildlife Service, Boise, Idaho. 35 p.

Williams, J. E. A preliminary report on the taxonomic status of *Gila* inhabiting Borax Lake, Harney County, Oregon. Unpub. report. Dept. of Fisheries and Wildlife, Oregon State University, Corvallis, Oregon. (prep., 1977) 5 p.

Williams, J. E. and C. E. Bond. A new species of cyprinid fish from southeastern Oregon with a comparison to *Gila alvordensis* Hubbs and Miller. Proc. Biol. Soc. Wash. 92(2): 291-298.

List of Subjects In 50 CFR Part 17

Endangered and threatened wildlife, Fish, Marine mammals, Plants (agriculture).

Authority

This rule is issued under the authority contained in the Endangered Species Act 1973, as amended (16 U.S.C. 1531 *et seq.*; 87 Stat. 884, 92 Stat. 3751).

Regulations Promulgation

PART 17 [AMENDED]

Accordingly, Part 17, Subchapter B of Chapter I, Title 50 of the Code of Federal Regulations, is amended by revising the entry in Section 17.11(h) for: "Chub, Borax Lake," under "Fishes" as follows:

§ 17.11 Endangered and threatened wildlife.

Borax Lake Chub

(*Gila boraxobius*)

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
Chub, Borax Lake.....	<i>Gila boraxobius</i>	U.S.A. (OR).....	Entire.....	E.....	123	17.95(e)	N/A

Oregon, Harney County, Borax Lake and environments associated with the outflow from Borax Lake located within SW ¼ Sec. 11, W ½ Sec. 14, E ½ of the SE ¼ Sec. 15, and the SE ¼ of the NE ¼ Sec. 15: T37S; R33E.

§ 17.95 [Amended]

Section 17.95(e), Fishes, is amended by adding Critical Habitat of the Chub,

Borax Lake after that of the Cavefish, Alabama, as follows:

BILLING CODE 4310-55-M

Principal constituent elements of this habitat for the Borax Lake chub are considered to be the constant temperature and flow of water into Borax Lake and the natural water flow out of Borax Lake into associated aquatic environs and the aquatic and terrestrial food organisms of this ecosystem.

Dated: September 15, 1982.

G. Ray Arnett,

Assistant Secretary for Fish and Wildlife and Parks.

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BILLING CODE 4310-55-M

BORAX LAKE CHUB

Harney County, OREGON

