chub (Macrhybopsis gelida) and sicklefin chub (Macrhybopsis meeki) as endangered under the Endangered Species Act of 1973, as amended. The Service finds that with the petition and additional available information there is substantial information provided to indicate that listing the two species as endangered may be warranted. DATES: The finding announced in this document was made on December 29, 1994. To be considered in the 12-month finding for this petition, information and comments should be submitted to the Service by April 18, 1995. ADDRESSES: Data, information, comments, or questions concerning this petition should be submitted to the Field Supervisor, U.S. Fish and Wildlife Service, 1500 East Capitol Avenue, Bismarck, North Dakota 58501. The petition finding, supporting data, and comments are available for public inspection, but appointment, during normal business hours, at the above address.

FOR FURTHER INFORMATION CONTACT: Mark Dryer, biologist, at the above address or telephone (701) 250–4491.

## SUPPLEMENTARY INFORMATION:

## Background

Section 4(b)(3)(A) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.), requires that the Service make a finding on whether a petition to list, delist, or reclassify a species presents substantial scientific or commercial information to demonstrate that the petitioned action may be warranted. This finding is to be based on all information available to the Service at the time the finding is made. To the maximum extent practicable, this finding is to be made within 90 days of the date the petition was received, and a notice regarding the finding is to be published promptly in the Federal **Register**. If the finding is that substantial information was presented. the Service also is required to promptly commence a review of the status of the species involved if one has not already been initiated under the Service's internal candidate assessment process.

The Service initiated a status review for the sturgeon chub (*Macrhybopsis gelida*) and sicklefin chub (*Macrhybopsis meeki*) when it categorized the two species as category 2 candidate species in the 1991 Animal Notice of Review (56 FR 58804). This notice meets the requirement that a notice be published for a 90-day finding made earlier for the petition discussed below.

On August 8, 1994, the Service received a petition dated August 4,

1994, that was submitted by the Environmental Defense Fund and was jointly signed by American Rivers, Mni Sose Intertribal Water Rights Coalition, National Audubon Society, and Nebraska Audubon Council to list the sturgeon chub and sicklefin chub as endangered pursuant to the Act. The petitioners assert that the sturgeon chub and sicklefin chub populations should be listed as endangered species because of the species' inability to adapt to human-induced alterations of the Missouri River. They indicate that sturgeon chub and sicklefin chub are physically adapted through evolution to live in a turbid, swift flowing river. Alterations described by the petitioner include impoundments, channelization, and removal of snags. The petitioners indicate that those alterations have detrimentally impacted the fishes' spawning and feeding habitat by changing the natural hydrograph and water temperatures, short-stopping movement of sediment which reduced turbidity, and reducing the amount of organic matter in the Missouri River (Hesse 1994).

The sturgeon chub and sicklefin chub are both endemic to the mainstem and large tributaries of the Missouri River and Mississippi River. The sicklefin chub has historically been located in 13 States—Arkansas, Illinois, Iowa, Kansas, Kentucky, Louisiana, Mississippi, Missouri, Montana, Nebraska, North Dakota, South Dakota, and Tennessee. Current populations have only been recorded in the States of Missouri, Nebraska, Montana, and North Dakota (USFWS 1993b). The sturgeon chub has historically been located in the above 13 States plus Wyoming. Current populations have only been recorded in States of Missouri, Montana, Nebraska, North Dakota, and Wyoming (USFWS 1993a).

## **Listing Factors**

The following is a summary and discussion of the five listing criteria as set forth in section 4(a)(1) of the Act and regulations (50 CFR Part 424) promulgated to implement the listing provisions of the Act and their applicability to the current status of the sturgeon chub and sicklefin chub.

A. The present or threatened destruction, modification, or curtailment of the species habitat or range. Water development projects have impacted sturgeon chub and sicklefin chub populations as described by the petitioners. Reservoirs flooded river habitat, altered temperature and flow regimes, and reduced sediment transport and turbidity. Dams fragmented populations and restricted movement. Channelization straightened and narrowed river habitat, reduced habitat diversity, and reduced overbank flooding. Pollution and water depletion from industry and agriculture may have altered water quality. Sand and gravel extraction operations have removed habitat and restricted fish movement in some areas.

Future water depletions are likely to result from energy developments in the Upper Missouri River Basin. Other water demands may result from interbasin diversions and increased municipal, industrial, and irrigation usage. Dredging for channel maintenance and sand/gravel extraction will continue in new areas.

B. Overutilization for commercial, sporting, scientific, or educational purposes. None known. However, removal of individuals from the wild could have and may continue to be occurring from harvest of bait fish.

C. Disease or predation. No diseases are currently known to threaten the species. Predation has likely increased over historic levels due to stockings of piscivorous fish into the reservoirs and remaining riverine sections. Future introductions of nonnative fish and other organisms may threaten sturgeon chub and sicklefin chub through predation.

D. Inadequacy of existing regulatory mechanisms. Federal Category 1 candidate species status provides no legal protection for the species. Sturgeon chub are classified as either threatened or endangered by Kansas and South Dakota and as a species of special concern by Kentucky, Missouri, Montana, Nebraska, North Dakota, Wyoming, and Tennessee. There is no classification on sturgeon chub by Arkansas, Iowa, Illinois, Louisiana, and Mississippi. Sicklefin chub are classified as either threatened or endangered by Kansas and South Dakota and as a species concern by Kentucky, Missouri, Montana, Nebraska, North Dakota, and Tennessee. There is no classification on sicklefin chub by Arkansas, Iowa, Illinois, Louisiana, and Mississippi.

E. Other natural or manmade mechanisms. Severe drought in the early 1990's may have eliminated sturgeon chub from some Missouri River tributaries and may reoccur and impact additional tributary populations. Sturgeon chub populations in the mainstem Missouri River may be too small and too widespread to naturally recolonize these tributaries even though suitable habitat may still exist in them. Tributaries that now flow into reservoirs may never naturally recolonize. Similar impacts may have occurred to sicklefin