

**ENVIRONMENTAL PROTECTION  
AGENCY**
**40 CFR Part 52**

[PA106-4113b; FRL-6959-7]

**Approval and Promulgation of Air  
Quality Implementation Plans;  
Pennsylvania; Approval of VOC and  
NOx RACT Determinations for Merck  
and Company, Inc**
**AGENCY:** Environmental Protection  
Agency (EPA).

**ACTION:** Proposed rule.

**SUMMARY:** EPA proposes to approve the State Implementation Plan (SIP) revision submitted by the Commonwealth of Pennsylvania for the purpose of establishing and requiring reasonably available control technology (RACT) for a facility of Merck and Company, Inc. located in Montgomery County. This facility is a major source of volatile organic compounds (VOC) and nitrogen oxides (NO<sub>x</sub>). In the Final Rules section of this **Federal Register**, EPA is approving the Commonwealth's SIP submittal as a direct final rule without prior proposal because the Agency views this as a noncontroversial submittal and anticipates no adverse comments. A detailed rationale for the approval is set forth in the direct final rule. If no adverse comments are received in response to this action, no further activity is contemplated. If EPA receives adverse comments, the direct final rule will be withdrawn and all public comments received will be addressed in a subsequent final rule based on this proposed rule. EPA will not institute a second comment period. Any parties interested in commenting on this action should do so at this time.

**DATES:** Comments must be received in writing by May 18, 2001.

**ADDRESSES:** Written comments should be addressed to Makeba Morris, Chief, Permits and Technical Assessment Branch, Air Protection Division, Mailcode 3AP11, U.S. Environmental Protection Agency, Region III, 1650 Arch Street, Philadelphia, Pennsylvania 19103. Copies of the documents relevant to this action are available for public inspection during normal business hours at the Air Protection Division, U.S. Environmental Protection Agency, Region III, 1650 Arch Street, Philadelphia, Pennsylvania 19103; Bureau of Air Quality Control, P.O. Box 8468, 400 Market Street, Harrisburg, Pennsylvania 17105.

**FOR FURTHER INFORMATION CONTACT:** Melik A. Spain, (215) 814-2299, at the EPA Region III address above, or by e-mail at [spain.melik@epa.gov](mailto:spain.melik@epa.gov).

**SUPPLEMENTARY INFORMATION:** For further information, please see the information provided in the direct final action, with the same title, located in the "Rules and Regulations" section of this **Federal Register** publication.

Dated: March 19, 2001.

**William C. Early,**
*Acting Regional Administrator, Region III.*

[FR Doc. 01-9481 Filed 4-17-01; 8:45 am]

**BILLING CODE 6560-50-U**
**DEPARTMENT OF THE INTERIOR**
**Fish and Wildlife Service**
**50 CFR Part 17**
**Endangered and Threatened Wildlife  
and Plants; 12-month Finding for a  
Petition To List the Sicklefin Chub  
(*Macrhybopsis meeki*) and the  
Sturgeon Chub (*Macrhybopsis gelida*)  
as Endangered**
**AGENCY:** Fish and Wildlife Service,  
Interior.

**ACTION:** Notice of 12-month petition  
finding.

**SUMMARY:** We, the U.S. Fish and Wildlife Service, announce a 12-month finding for a petition to list the sicklefin chub (*Macrhybopsis meeki*) and the sturgeon chub (*Macrhybopsis gelida*) as endangered under the Endangered Species Act of 1973, as amended. After review of all available scientific and commercial information, we find that listing either of these two species is not warranted at this time.

**DATES:** The finding announced in this document was made on April 10, 2001.

**ADDRESSES:** Data, information, comments, or questions regarding this notice should be sent to Mr. Allyn Sapa, Field Supervisor, 3425 Miriam Avenue, Bismarck, North Dakota, 58501. The complete administrative file for this finding is available for inspection during normal business hours, by appointment, at the above address. The status review document for the sicklefin chub and the sturgeon chub also may be obtained at that address, or at our Internet web site at <http://mountain-prairie.fws.gov/endspp/chubs>.

**FOR FURTHER INFORMATION CONTACT:** William Bicknell at the above address, telephone (701) 250-4414, or e-mail [william\\_bicknell@fws.gov](mailto:william_bicknell@fws.gov).

**SUPPLEMENTARY INFORMATION:**
**Background**

The sicklefin and sturgeon chub are members of the Cyprinidae or minnow family. They are native to the Missouri

River basin and the Mississippi River downstream from the confluence with the Missouri River. Both species are highly adapted for conditions found in large free-flowing rivers with relatively high levels of turbidity.

The sicklefin chub is usually yellowish or tan colored on the back and silvery-white on the belly with a snout protruding slightly beyond the mouth. A single pair of maxillary barbels is located at the corners of the mouth. Average adult length ranges from 3.6 to 10.1 centimeters (1.4 to 4.0 inches) with the average adult weight ranging from 0.6 to 6.2 grams (0.02 to 0.2 ounce). The sicklefin is a relatively short-lived species with a small percentage of the population reaching age 4. The sicklefin chub can be most readily distinguished by its elongated pectoral fins and a sickle-shaped dorsal fin.

The sturgeon chub is tan to pale green on the back and cream to white on the belly. A few black speckles occasionally are present on the sides and back. It has a long, fleshy snout with a single pair of maxillary barbels located at the corners of the mouth. Average adult length ranges from 3.8 to 9.6 centimeters (1.5 to 3.8 inches) and average adult weight ranges from 0.3 to 9.3 grams (0.01 to 0.3 ounces). The sturgeon chub is relatively short-lived species with a maximum life-span of about 4 years. Sturgeon chub can be identified by the unique longitudinally-arranged ridges or keels on most scales.

Section 4(b)(3)(B) of the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*), requires that within 90 days of receipt of the petition, to the maximum extent practicable, we make a finding on whether a petition to list, delist, or reclassify a species presents substantial scientific or commercial information indicating that the requested action may be warranted. If the petition contains substantial information, the Act requires that we initiate a status review of the species and publish a 12-month finding indicating whether the petitioned action is (a) not warranted, (b) warranted, or (c) warranted but precluded from immediate listing proposal by other pending proposals of higher priority. Such 12-month findings are to be published promptly in the **Federal Register**.

In 1993, we issued status reports for the sicklefin chub and sturgeon chub (U.S. Fish and Wildlife Service 1993a, b). The reports indicated the range and populations of sicklefin and sturgeon chubs had been substantially reduced. On June 29, 1994, we received a petition from a coalition of groups to list the

sicklefin and sturgeon chubs as endangered throughout their range in accordance with the provisions of the Act. The petitioners include American Rivers, Environmental Defense Fund, Mni Sose Intertribal Water Rights Coalition, National Audubon Society, and the Nebraska Audubon Council.

The petitioners assert that, historically, sicklefin chub and sturgeon chub populations inhabited a substantial portion of the Missouri River, its larger tributaries, and the Mississippi River downstream from the confluence with the Missouri River. They indicate that the historic range of sicklefin and sturgeon chubs included waters in or bordering 13 and 14 States, respectively.

The petitioners indicate that sicklefin and sturgeon chubs have physically adapted through evolution to inhabit turbid, swift-flowing rivers. The petitioners assert that the impoundment and channelization of the Missouri River have drastically altered the natural habitat of the chubs by altering the natural hydrograph and reducing water temperature and turbidity levels. The petitioners also contend that aquatic insect larvae are the primary food source for these species. They believe the removal of snags from the Missouri River and dam construction have affected the range and abundance of aquatic insect larvae.

The petitioners conclude that the reduction of sicklefin chub and sturgeon chub habitat has severely impacted the species ability to survive. Transformation of the Missouri River has created colder, less turbid conditions which favor other Missouri River fish. The petitioners assert that the existing programs are not adequate to protect sicklefin and sturgeon chub populations. They believe listing these species as endangered will ensure consultation under section 7 of the Act for actions authorized, funded, or carried out by Federal agencies. The petitioners also indicate that scientists desperately need more information about both species and listing will place a higher priority on funding sicklefin and sturgeon chub research needs.

#### Status Review

On January 18, 1995, we published a positive 90-day finding for both species in the **Federal Register** indicating that the petitioned action may be warranted. At that time, we requested public comments on the 90-day finding and any available information on the status of the species. We established a status assessment team, consisting of biologists from Service Regions 3, 4, and 6, to gather information documenting

sicklefin chub and sturgeon chub populations and to determine whether listing these species as threatened or endangered under the Act was warranted. A draft 12-month finding was completed in August 1995 and subsequently revised in 1997, 1999, and 2000, to include substantial new information. The Montana Rivers Coalition filed a 60-day notice of intent to sue the Secretary of the Interior on April 6, 2000, for the Service's alleged failure to act on the petition in the timeframes established by the Act. The Montana Rivers Coalition's action resulted in a settlement agreement in which we agreed to submit the 12-month finding for the sicklefin and sturgeon chubs for publication in the **Federal Register** on or before April 12, 2001.

We received information concerning the status of sicklefin and sturgeon chub populations from State game and fish departments, the U.S. Bureau of Reclamation, U.S. Geological Survey, tribal representatives, universities, and other organizations and individuals. We also reviewed information on the sicklefin and sturgeon chub from peer-reviewed journal articles, agency reports and file documents, telephone interviews, and written correspondence with fisheries biologists familiar with these species.

Around the time the petition to list the sicklefin and sturgeon chubs as endangered was filed, fishery biologists modified the gear used to sample cyprinid populations. Until 1993, researchers primarily relied on seines to collect small fish in the Missouri and Mississippi Rivers. Seines allowed sampling in shallow water, usually not exceeding 1.5 meters (4.9 feet) in depth, in sandbar and border channel habitats. Grisak (1996) was the first to use a benthic trawl, modified to catch small fish, to characterize the fish population in a portion of the Missouri River. Grisak's work above Fort Peck Reservoir in Montana during 1994 and 1995 and the results of subsequent field investigations using benthic trawls have provided new information on the range and relative abundance of the sicklefin and sturgeon chubs.

#### Sicklefin Chub Status Summary

Based on our current understanding of this species, we believe that the sicklefin chub historically occurred in approximately 85 miles of the Lower Yellowstone River, approximately 1,950 miles of the main stem Missouri River, and about 1,150 miles of the Mississippi River, below the mouth of the Missouri River.

Since 1993, when we completed a Sicklefin Chub Status Report (U.S. Fish and Wildlife Service 1993a), additional surveys have been conducted throughout most of this species' historical range. These studies indicate that sicklefin chub are more widely distributed and more common than previously believed. The effectiveness of sampling techniques has dramatically improved with the use of benthic trawls that have been modified to collect small fish. Benthic trawls have permitted sampling in deep-water habitats where seines, the traditional cyprinid collection method, are ineffective or cannot be used.

Recent studies using benthic trawls indicate that sicklefin chub comprise a significant part of the fish population at three locations in the Missouri River drainage—above Fort Peck Reservoir in Montana; the Yellowstone/Missouri River confluence area in North Dakota and Montana; and the lower Missouri River in Missouri. Grisak (1996) used both seines and a benthic trawl to sample the fish population in the Missouri River above Fort Peck Reservoir in 1994 and 1995. He found sicklefin chubs comprised 21.9 percent of the benthic trawl catch and only 0.08 percent of the catch with seines. Sicklefin chubs were the second most common species collected in benthic trawl tows. In 1999 and 2000, Gardner (2000a,b) sampled the same general area as Grisak. The sicklefin chub was the most common species collected in 1999 (41.5 percent of the catch) and the third most common species collected in 2000 (5.1 percent of the catch). Welker (2000) used both seines to sample shallow border channel habitat and a benthic trawl to sample deep-water habitat in the Yellowstone/Missouri River confluence area in 1997 and 1998. Sicklefin chubs were the most common species collected in benthic trawl tows, comprising 33.2 percent of the trawl catch. By contrast, only 12 sicklefin chub were collected in seine hauls (0.005 percent of the catch using seines). Liebelt (in litt. 1999) sampled the Missouri River above the headwaters of Lake Sakakawea in 1999. Sicklefin chubs were the third most common species collected, making up 8.6 percent of the catch. Grady and Milligan (1998) sampled the Missouri River in Missouri in 1997. They collected 3,934 fish in seine hauls, including 1 sicklefin chub. By contrast, sicklefin chubs were the second most common species collected with a benthic trawl (8.4 percent of the catch).

In addition to the Missouri River populations, field studies conducted by the Missouri Department of

Conservation since 1997 have documented viable populations of sicklefin chub in the Middle Mississippi River and in the Wolf Island area of the Lower Mississippi River. Prior to these studies, collections of sicklefin chub in the Lower Mississippi River were rare and generally document the presence of an individual fish.

Based on the information provided by these surveys, we now estimate that sicklefin chub currently occupy approximately 1,110 miles or about 54 percent of the species' historic range in the Missouri River drainage.

#### Sturgeon Chub Status Summary

We believe that the sturgeon chub historically occurred in approximately 2,100 miles of the main stem Missouri River and about 1,150 miles of the main stem Mississippi River. The species also was found in the Yellowstone River in Montana and North Dakota and 30 tributaries to the Yellowstone and Missouri Rivers. The sturgeon chub occurred in portions of four tributaries in Wyoming, nine in Montana, five in North Dakota, six in South Dakota, six in Nebraska, and four in Kansas. Tributaries such as the Powder River, which provides sturgeon chub habitat in both Wyoming and Montana, are included in the tallies for both States. Other tributaries that historically provided sturgeon chub habitat in two states include the Big Horn, Little Missouri, and Republican Rivers.

Studies conducted since 1994 using benthic trawls designed to collect small fish from deep-water areas of the border and main channel have provided new information about the distribution and relative abundance of sturgeon chub. Grisak (1996) conducted the first studies using a benthic trawl with small mesh netting to specifically collect cyprinids and other small fish in the Missouri River. He sampled the Missouri River above Fort Peck Reservoir in 1994 and 1995 and found that sturgeon chub comprised 18.9 percent of the benthic trawl catch compared to only 0.16 percent of the catch with seines. In Grisak's study, sturgeon chub were the third most common species collected in benthic trawl tows. In 1999 and 2000, Gardner (1999, 2000) sampled the same general area as Grisak. Gardner collected 218 sturgeon chub (16.1 percent of the catch) in August 1999 and 145 sturgeon chub (32.0 percent of the catch) in August 2000 using a benthic trawl. Welker (2000) used both seines and a benthic trawl to sample the fish population in the Yellowstone/Missouri River confluence area in North Dakota. Sturgeon chub were the second most common species collected (32.3 percent

of the catch) in benthic trawl samples taken in the main channel. Shallow border channel areas also were sampled with seines. Sturgeon chubs were rare in seine samples, representing less than 0.01 percent of the catch. Liebelt (*in litt.* 1999) sampled a reach of the Missouri River from Williston, North Dakota, downstream to the headwaters of Lake Sakakawea in August 1999. Sturgeon chubs were the second most common species collected, representing 11.1 percent of the catch in benthic trawl tows. In Missouri, Grady and Milligan (1998) sampled the Lower Missouri River with seines and benthic trawls in 1997. They collected 3,934 fish with seines; however, no sturgeon chub were captured. Sturgeon chub ranked fourth in abundance for fish collected in benthic trawl tows (4.1 percent of the catch).

Since 1997, field studies conducted by the Missouri Department of Conservation indicate a viable population of sturgeon chub exists in the Middle Mississippi River and in the Wolf Island area of the Lower Mississippi River (Hrabik and Herzog, *in litt.* 2000 a,b). Historic collections of sturgeon chub in the Lower Mississippi River below Wolf Island are rare and do not provide adequate information to assess if this area historically provided important sturgeon chub habitat.

Using these studies we believe the distribution of sturgeon chub in the main stem Missouri and Mississippi Rivers is similar to that of the sicklefin chub. Like the sicklefin chub, sturgeon chub comprise a significant portion of the Missouri River fish community above Fort Peck Reservoir in Montana, in the Yellowstone/Missouri River confluence area in Montana and North Dakota, and in the Lower Missouri River in Missouri.

In total, we estimate that sturgeon chub currently occupy approximately 1,155 miles or about 55 percent of the species, historic range in the Missouri River. The species also continues to be found in 11 of 30 tributaries to the Yellowstone and Missouri Rivers that have been documented as providing sturgeon chub habitat. Viable populations of sturgeon chub are also present in the Middle Mississippi River and in the Wolf Island area of the Lower Mississippi River. As with the sicklefin chub, information documenting sturgeon chub populations in the Mississippi River is limited by comparison to the Missouri River data set.

The Act defines a "threatened species" as any species which is likely to become an endangered species within the foreseeable future throughout all or

a significant portion of its range. An "endangered species" is defined as any species which is in danger of extinction throughout all or a significant portion of its range.

Section 4(a) of the Act describes five threat factors that we must consider to determine whether any species is a threatened or endangered species for purposes of the Act. Any one or combination of the five threat factors may indicate the appropriateness of a warranted 12-month administrative finding. Section 4(b) of the Act requires that we also give consideration in our determination of a species' status to efforts being made by any State or foreign nation to protect such species. We considered the five threat factors established by the Act and any ongoing conservation measures for sicklefin and sturgeon chubs in our determination. A full discussion of the threats appears in the current status review (U.S. Fish and Wildlife 2001) for these species, and is summarized as follows:

#### 1. *The present or threatened destruction, modification, or curtailment of the species habitat or range.*

Water development projects on the Missouri and Middle and Lower Mississippi Rivers and tributaries have impacted sicklefin and sturgeon chub populations. 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. These impacts have resulted in a reduction in the range of these species by approximately one half.

There are potential impacts associated with coalbed methane production in Wyoming and Montana, and future water impoundment and depletion projects on the Yellowstone River, its tributaries, and tributaries to the Missouri River. Information documenting how coalbed methane products will affect water quality in tributaries such as the Powder River is not known at this time. The amount of water involved with the potential depletions is not of a sufficient magnitude to suggest major impacts to the chubs. The impact of these projects on aquatic ecosystems will be investigated further during the planning and permitting process.

Although the chubs have suffered reductions in range, our status survey determined that both species currently have a wider distribution than previously thought, and there are numerous populations that appear to be

viable throughout the range of both species. Channelization projects continue to be implemented in the Missouri River Basin, but at a pace much reduced from the levels experienced in the first half of the 20th century. The construction of new large reservoirs is not anticipated. The fact that these short-lived fish are clearly reproducing where stream habitat conditions are adequate leads us to conclude that neither species will become threatened or endangered in the foreseeable future due to habitat loss.

*2. Overutilization for commercial, recreational, scientific, or educational purposes.*

We are not aware of any significant threats to either species in this category. However, removal of individuals from the wild could have occurred and may continue to occur from harvest of bait fish. We find no evidence of significant impacts to the chub species from overutilization for commercial, recreational, scientific, or educational purposes.

*3. Disease or predation.*

No diseases are currently known to threaten the species. Predation has likely increased over historic levels due to stocking of piscivorous fish into the reservoirs and remaining riverine sections. Reduced turbidity levels in chub habitat also may have resulted in increased predation rates. However, we find no evidence to indicate that current levels of predation threaten the continued existence of either chub species. Sampling of chub habitats in recent years strongly suggests that these short-lived species are reproducing in adequate numbers to sustain viable populations for the foreseeable future.

*4. The inadequacy of existing regulatory mechanisms.*

Currently there is no Federal legal protection for the sicklefin and sturgeon chubs. In addition, few States provide any legal protection to these species. Within their historical range, both chubs receive legal protection in the State of Kansas where the sturgeon chub and sicklefin chub are classified officially as threatened and endangered, respectively. Take of either species is prohibited, and provisions allow for habitat protection and designation of critical habitat (Kansas Department of Wildlife and Parks 1992). In South Dakota, both chubs officially are listed as State threatened. The State of Illinois prohibits the take of the sturgeon chub and provides some habitat protection (Sue Lauzon, pers. comm. 1995). Kentucky has restrictions on collections of both chubs (Wayne Davis, Kentucky Department of Fish and Wildlife Resources, pers. comm. 1995), and

Tennessee prohibits the take or possession of either chub, or the knowing destruction of habitats from Federal actions (Bob Hatcher, Tennessee Wildlife Resource Commission, pers. comm. 1995).

Several national and State professional conservation societies and environmental departments within various State governments unofficially have classified the sturgeon chub and sicklefin chub as either threatened or endangered, a species of special concern, rare, on a watch list, deemed in need of management, or transient. However, these designations do not provide any legal protection to either chub species.

*5. Other natural or manmade factors affecting its continued existence.*

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 have been eliminated from approximately 800 miles of the Missouri River that has been converted to reservoir habitat. Tributaries that now flow into reservoirs may never naturally recolonize. However, our status review found that there are numerous viable populations of both species currently extant throughout about half of the species' historic range, which indicates that these species persist through drought cycles.

Our status review examined the impact of entrainment of sturgeon chubs by irrigation structures and potential water quality impacts. We have entered formal consultation under section 7 of the Act concerning impacts to pallid sturgeon (*Scaphirhynchus albus*) associated with the Intake Diversion Structure and lowhead dam, and Reclamation's plans to privatize and transfer the facilities to the Lower Yellowstone Irrigation District. Studies conducted at this structure projected that over 2,000,000 fish were entrained in the irrigation canal system during the 1996, 1997, and 1998 irrigation seasons. Reclamation estimated that over 289,000 ± 113,000 sturgeon chub were entrained during the 3-year study period. Reclamation is working with the Service and others to develop a design that allows for fish passage over the lowhead dam and minimizes entrainment losses. Implementation of "fish friendly" measures will benefit the sturgeon chub population in the Yellowstone River. Conservation measures developed for the Intake Diversion Structure and lowhead dam may be applicable at other water diversion sites on the Yellowstone River.

Another potential threat to sicklefin and sturgeon chub populations is the presence of four species of Asian carp in the Mississippi River and the Missouri River below Gavins Point Dam. There are no data currently available to document that chubs are being impacted by invasive species. However, if Asian carp populations continue to expand, the diversity of species supported by the Missouri and Mississippi River ecosystems, including chubs, may be negatively impacted.

**Conservation Measures**

We also have evaluated ongoing and proposed conservation measures that will have a beneficial impact on sicklefin and sturgeon chub populations when fully implemented. We have identified two conservation actions, one that is being implemented and one that is currently in the planning stage, that will benefit both sicklefin and sturgeon chubs. Implementation and monitoring of the Missouri River Bank Stabilization and Navigation Project (BSNP) fish and wildlife mitigation plan is ongoing. The BSNP was established to create a navigable channel from Sioux City, Iowa, to the mouth of the Missouri River near St. Louis (735 river miles). Originally authorized by the Rivers and Harbors Act of 1912 and officially completed in 1981, the project created one stabilized, self-sustaining channel from numerous small channels using revetments and transverse dikes. In 1986, Congress authorized mitigation for fish and wildlife habitat losses associated with the construction, operation, and maintenance of the BSNP in Nebraska, Iowa, Kansas, and Missouri. The project mitigation plan authorized the acquisition of 29,900 acres (12,109 hectares) and the development of an additional 18,200 acres (7,371 hectares) of existing public land. Recently, the mitigation plan was reauthorized as part of the Water Resources Development Act of 1999, and the acquisition ceiling was increased by 118,650 acres (48,053 hectares). Based on the conceptual plans that have been developed, State and Federal agencies anticipate the rehabilitation of aquatic and terrestrial habitats will benefit fish and wildlife resources, including the sicklefin and sturgeon chub.

In November 2000, we completed a biological opinion under Section 7 of the Act on the Corps of Engineers' Operation of the Missouri River Main Stem System, the related operation of the Kansas River Tributary Reservoirs, and the Operation and Maintenance of the Missouri River Bank Stabilization and Navigation Projects (U.S. Fish and

Wildlife Service 2000). We found that, to avoid jeopardizing the continued existence of the pallid sturgeon, least tern, and piping plover, conservation measures to restore riverine and aquatic habitat and hydrologic conditions on segments of the Missouri River between Fort Peck Dam and the headwaters of Lake Sakakawea and below Gavins Point Dam are necessary. The emphasis of the Biological Opinion is to restore or rehabilitate enough of the Missouri River ecosystem to avoid jeopardizing the pallid sturgeon and other listed species. Implementation of the identified conservation measures are expected to have a significant beneficial effect on sicklefin and sturgeon chub through habitat restoration and creation projects, improved water temperature regimes, and flow modifications designed to mimic the natural hydrograph. The Corps of Engineers is currently seeking public input on the Implementation Plan for the Reasonable and Prudent Alternative identified in the Biological Opinion.

### Conclusions

The principal factors impacting sicklefin and sturgeon chub populations are the construction and continuing operation of the dams on the main stem Missouri River and channelization of the Middle and Lower Missouri and Mississippi Rivers. Water depletion projects, impoundments, entrainment, and drought have impacted sturgeon chub populations in the Yellowstone River and tributaries to the Yellowstone and Missouri Rivers. The threats posed by the dams and reservoirs have been in place for over 35 years. Despite the loss of over 1,000 miles of suitable habitat in the Missouri River, viable, self-sustaining populations of sicklefin and sturgeon chubs occur where habitat conditions, flow patterns, and turbidity levels resemble conditions prior to the construction of the main stem dams.

Field studies conducted since the 1993 status reports were issued indicate that sicklefin chub and sturgeon chub are more widespread and occur in

greater numbers than previously believed. Researchers in Montana (Grisak 1996, Gardner 2000a, b), North Dakota (Liebelt, *in litt.* 1999, Everett 1999, Welker 2000), and Missouri (Grady and Milligan 1998, Hrabik and Herzog, *in litt.* 2000a, b) have collected substantially greater numbers of sicklefin and sturgeon chub using trawling techniques. Recently, new locations supporting sicklefin and sturgeon chub populations, such as the Wolf Island area of the Lower Mississippi River, have also been identified.

While major information gaps remain concerning feeding habits, reproduction, seasonal habitat use, and other aspects of sicklefin and sturgeon chub biology, substantially greater emphasis has been placed on documenting chub populations and their habitats during the past 7 years. Therefore, on the basis of the best available information, we conclude that neither the sicklefin chub nor the sturgeon chub is likely to become threatened or endangered in the foreseeable future throughout all or a significant portion of their range. Therefore, listing either the sicklefin chub or the sturgeon chub is not warranted at this time.

This finding is based on our analysis of the current status and potential threats to these two cyprinids. In addition we are encouraged by proposed modifications in the operation of the Federal projects on the main stem Missouri River, which when fully implemented will improve native fish habitat and benefit sicklefin and sturgeon chub populations.

### References Cited

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### Author

The primary author of this document is William Bicknell (see **ADDRESSES** above).

### Authority

The authority for this action is the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Dated: April 10, 2001.

**Marshall P. Jones, Jr.,**

*Acting Director, Fish and Wildlife Service.*

[FR Doc. 01-9443 Filed 4-17-01; 8:45 am]

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