United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
420 South Garfield Avenue, Suite 400
Pierre, South Dakota 57501-5408

January 22, 1999

State Conservationist
Natural Resource Conservation Service
Federal Building, Room 203
200 Fourth Street, S.W.
Huron, SD 57350-2475

Dear Sir:

Enclosed is a copy of a recent Federal Register (63 FR 69008) publication which completes the listing of the Topeka shiner (Notropis topeka) as an endangered species, without critical habitat, pursuant to the U.S. Endangered Species Act of 1973, as amended. The effective date of the listing was January 14, 1999.

The Topeka shiner is a small species of fish in the minnow family that inhabits small headwater streams in prairie or former prairie areas. The species' historic range includes portions of Iowa, Kansas, Minnesota, Missouri, Nebraska, and South Dakota.

As of January 14, 1999, all federally sponsored, permitted, or funded projects or actions which may potentially affect the species or its habitat will require interagency consultation under section 7 of the Endangered Species Act. Consultation occurs between the U.S. Fish and Wildlife Service (Service) and the primary Federal "action" agency.

Enclosed is a list of Topeka shiner locations (known and historical) by watershed for your use when reviewing potential Federal actions. You should carefully review projects affecting the Big Sioux River, James River, and Vermillion River watersheds. Primary threats to the species include habitat destruction, degradation, modification, and fragmentation resulting from siltation, reduced water quality, tributary impoundment, stream channelization, stream dewatering, and piscivorous fish introduction.

To help guide your project reviews, the following Federal actions may warrant section 7 consultation in relation to the species' primary threats.

- Construction of flood control dams or other watershed tributary impoundments
- Maintenance of drainage ditches and channelized streams
- Stream channelization

- In-stream gravel mining
- Stream dewatering
- Water withdrawal for municipal use and irrigation
- Pesticide use near and adjacent to habitat
- Confined animal feeding operations
- Road and bridge construction and maintenance
- Suburban development
- Overland runoff
- Conversion of watersheds from prairie to other uses resulting in water quality degradation

This list may not be inclusive of all potential Federal actions which may affect the Topeka shiner. Federal action agencies remain ultimately responsible for reviewing all Federal actions and their potential impacts to federally listed species.

As all Federal agencies share the responsibilities for the conservation and recovery of endangered species, I encourage you to consider conservation actions for the Topeka shiner in all of your programs. Recovery of the species primarily involves the conservation of remaining populations and habitats, ensuring their continued survival, and rehabilitation of degraded habitats. Measures involving stream and riparian protection programs, including support from the Service's Partners For Wildlife Program, and conservation agreements with various Tribal, State, and Federal governmental agencies, private entities, and landowners will be essential for the recovery of the species.

If you have further questions concerning these issues, please contact me or Nell McPhillips of this office at (605) 224-8693, Extensions 24 and 32 respectively.

Sincerely,

Pete Gober
Field Supervisor
South Dakota Field Office

Enclosures

TOPEKA SHINER LOCATIONS IN SOUTH DAKOTA WATERS

(H) Historical
(R) Recent, found since 1990
(S) Surveyed since October 1997

JAMES RIVER WATERSHED
Elm River (H - 1975; S. - 1997)
Shue Creek (H - 1989; S - 1997)
Pearl Creek (R - 1997; S - 1997)
Middle Pearl Creek (R - 1997; S - 1997)
Wolf Creek (R - 1997; S - 1997)
Firesteel Creek (H - 1975; R - 1997; S - 1997)
Timber Creek (No H; S - 1997)
Foster Creek (No H; S - 1997)
Redstone Creek (No H; S - 1997)
Sand Creek (No H; S - 1997)

BIG SIOUX RIVER WATERSHED
Big Sioux River (H - 1971; S - 1997)
Medary Creek (No H; R - 1997; S - 1997)
6-Mile Creek (No H; R - 1997; S - 1997)
Split Rock Creek (No H; R - 1998; S - 1998)
Pipestone Creek (No H; R - 1998; S - 1998)
Flandreau Creek (No H; S - 1997)
Mud Creek (No H; S - 1997)
Tetonka Lake Drainage (H - 1949; S - 1997)

VERMILLION RIVER WATERSHED
East Fork Vermillion River (H - 1959; R - 1997; S - 1997)
West Fork Vermillion River (H - 1991; R - 1998; S - 1998)
Turkey Ridge Creek (H - 1943; R - 1992)

MISSOURI RIVER WATERSHED
Cheyenne River embayment (H. 1968-1969)
Moreau River embayment (H. 1968-1969)
Grand River embayment (H. 1968-1969)

August 10, 1998

C. Paperwork Reduction Act

The Paperwork Reduction Act does not apply because the final rule does not impose any information collection requirements that require the approval of the Office of Management and Budget under 44 U.S.C. 3501, et seq.

List of Subjects in 48 CFR Part 236

Government procurement.

Michele P. Peterson,

Executive Editor, Defense Acquisition Regulations Council.

Therefore, 48 CFR Part 236 is amended as follows:

PART 236—CONSTRUCTION AND ARCHITECT-ENGINEER CONTRACTS

1. The authority citation for 48 CFR Part 236 continues to read as follows:

Authority: 41 U.S.C. 421 and 48 CFR Chapter 1.

236.601 [Amended]

2. Section 236.601 is amended in paragraph (1)(ii) by removing ''$300,000'' and adding in its place ''$500,000''.

[FR Doc. 98–33176 Filed 12–14–98; 8:45 am]

BILLING CODE 5000–04–M

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

RIN 1018–AE42

Endangered and Threatened Wildlife and Plants; Final Rule To List the Topeka Shiner as Endangered

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: The U.S. Fish and Wildlife Service determines the Topeka shiner (*Notropis topeka*) to be an endangered species under the authority of the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 et seq.). The Topeka shiner is a small fish presently known from small tributary streams in the Kansas and Cottonwood river basins in Kansas; the Missouri, Grand, Lamine, Chariton, and Des Moines river basins in Missouri; the North Raccoon and Rock river basins in Iowa; the James, Big Sioux and Vermillion river watersheds in South Dakota; and, the Rock and Big Sioux river watersheds in Minnesota. The Topeka shiner is threatened by habitat destruction, degradation, modification, and fragmentation resulting from siltation (the build up of silt), reduced water quality, tributary impoundment, stream channelization, and stream dewatering. The species also is impacted by introduced predaceous fishes. This determination implements Federal protection provided by the Act for *Notropis topeka.* We further determine that designation of critical habitat is neither beneficial nor prudent.

EFFECTIVE DATE: January 14, 1999.

ADDRESSES: The complete file for this rule is available for inspection, by appointment, during normal business hours at the U.S. Fish and Wildlife Service, Kansas Ecological Services Field Office, 315 Houston Street, Suite E, Manhattan, Kansas 66502.

FOR FURTHER INFORMATION CONTACT: William H. Gill, Field Supervisor, or Vernon M. Tabor, Fish and Wildlife Biologist, at the above address (913/539–3474).

SUPPLEMENTARY INFORMATION:

Background

The Topeka shiner was first described by C.H. Gilbert in 1884, using specimens captured from Shunganunga Creek, Shawnee County, Kansas (Gilbert 1884). The Topeka shiner is a small, stout minnow, not exceeding 75 millimeters (mm) (3 inches (in)) in total length. The head is short with a small, moderately oblique (slanted or sloping) mouth. The eye diameter is equal to or slightly longer than the snout. The dorsal (back) fin is large, with the height more than one half the predorsal length of the fish, originating over the leading edge of the pectoral (chest) fins. Dorsal and pelvic fins each contain 8 rays (boney spines supporting the membrane of a fin). The anal and pectoral fins contain 7 and 13 rays respectively, and there are 32 to 37 lateral line scales. Dorsally the body is olivaceous (olive-green), with a distinct dark stripe preceding the dorsal fin. A dusky stripe is exhibited along the entire longitudinal length of the lateral line. The scales above this line are darkly outlined with pigment, appearing cross-hatched. Below the lateral line the body lacks pigment, appearing silvery-white. A distinct chevron-like spot exists at the base of the caudal (tail) fin (Cross 1967; Pflieger 1975; Service 1993).

The Topeka shiner is characteristic of small, low order (headwater), prairie streams with good water quality and cool temperatures. These streams generally exhibit perennial (year round) flow, however, some approach intermittency (periodic flow) during summer. At times when surface flow ceases, pool levels and cool water temperatures are maintained by percolation (seepage) through the streambed, spring flow and/or groundwater seepage. The predominant substrate (surface) types within these streams are clean gravel, cobble and sand. However, bedrock and clay hardpan (layer of hard soil) overlain by a thin layer of silt are not uncommon (Minckley and Cross 1959). Topeka shiners most often occur in pool and run areas of streams, seldom being found in riffles (choppy water). They are pelagic (living in open water) in nature, occurring in mid-water and surface areas, and are primarily considered a schooling fish. Occasionally, individuals of this species have been found in larger streams, downstream of known populations, presumably as waifs (strays) (Cross 1967; Pflieger 1975; Tabor *in litt.* 1992a).

Data regarding the food habits and reproduction of Topeka shiners are limited and detailed reports have not been published. However, Pflieger (Missouri Department of Conservation, *in litt.* 1992) reports the species as a nektonic (swimming independently of currents) insectivore (insect eater). In a graduate research report, Kerns (University of Kansas, *in litt.* 1983) states that the species is primarily a diurnal (daytime) feeder on insects, with chironomids (midges), other dipterans (true flies), and ephemeropterans (mayflies), making up the bulk of the diet. However, the microcrustaceans cladocera and copapoda (zooplanktons) also contribute significantly to the species' diet. The Topeka shiner is reported to spawn in pool habitats, over green sunfish (*Lepomis cyanellus*) and orangespotted sunfish (*Lepomis humilis*) nests, from late May through July in Missouri and Kansas (Pflieger 1975; Kerns *in litt.* 1983). Males of the species are reported to establish small territories near these nests. Pflieger (*in litt.* 1992) states that the Topeka shiner is an obligate (essential) spawner on silt-free sunfish nests, while Cross (University of Kansas, pers. comm. 1992) states that it is unlikely that the species is solely reproductively dependent on sunfish, and suggests that the species also utilizes other silt-free substrates as spawning sites. Data concerning exact spawning behavior, larval stages, and subsequent development is lacking. Maximum known longevity for the Topeka shiner is 3 years, however, only a very small percentage of each year class attains the third summer. Young-of-the-year attain total lengths of 20 mm to 40 mm (.78 to 1.6 in), age 1 fish 35 mm to 55 mm (1.4 to 2.2 in), and age 2 fish 47 mm to 65 mm (1.8 to 2.5 in) (Cross and Collins 1975; Pflieger 1975).

Historically, the Topeka shiner was widespread and abundant throughout low order tributary streams of the central prairie regions of the United States. The Topeka shiner's historic range includes portions of Iowa, Kansas, Minnesota, Missouri, Nebraska, and South Dakota. Stream basins within the range historically occupied by Topeka shiners include the Des Moines, Raccoon, Boone, Missouri, Big Sioux, Cedar, Shell Rock, Rock, and Iowa basins in Iowa; the Arkansas, Kansas, Big Blue, Saline, Solomon, Republican, Smoky Hill, Wakarusa, Cottonwood, and Blue basins in Kansas; the Des Moines, Cedar, and Rock basins in Minnesota; the Missouri, Grand, Lamine, Chariton, Des Moines, Loutre, Middle, Hundred and Two, and Blue basins in Missouri; the Big Blue, Elkhorn, Missouri, and lower Loup basins in Nebraska; and the Big Sioux, Vermillion, and James basins in South Dakota. The number of known occurrences of Topeka shiner populations has been reduced by approximately 80 percent, with approximately 50 percent of this decline occurring within the last 25 years. The species now primarily exists as isolated and fragmented populations.

Recent fish surveys were conducted across the Topeka shiner's range. In Missouri, 42 of the 72 sites historically supporting Topeka shiners were resurveyed in 1992. The species was collected at 8 of the 42 surveyed locales (Pflieger, *in litt.* 1992). In 1995, the remaining 30 historical sites not surveyed in 1992 and an additional 64 locales, thought to have potential to support the species, were sampled. Topeka shiners were found at 6 of the 30 remaining historical locations and at 6 of the 64 additional sites sampled. In total, recent sampling in Missouri identified Topeka shiners at 14 of 72 (19 percent) historic localities, and at 20 of 136 (15 percent) total sites sampled (Gelwicks and Bruenderman 1996). Gelwicks and Bruenderman (1996) also note that the species has apparently experienced substantial declines in abundance in the remaining extant (existing) populations in Missouri, with the exception of Moniteau Creek.

In Iowa, 24 locales within 4 drainages were sampled in 1994 at or near sites from which the species was reported extant during surveys conducted between 1975 and 1985. The Topeka shiner was captured at 3 of 24 sites, with these 3 captures occurring in the North Raccoon River basin (Tabor, U.S. Fish and Wildlife Service, *in litt.* 1994). Menzel (*in litt.* 1996) reports 6 collections of the species in 1994 and 1995, also from the same drainage. In 1997, surveys in Iowa found the species at 1 site in the North Raccoon basin, and at a new locality in the Little Rock drainage in Oscelola County. Less than 5 individual Topeka shiners were identified in 1997.

In Kansas, 128 sites at or near historic collection localities for the Topeka shiner were sampled in 1991 and 1992. The species was collected at 22 of 128 (17 percent) sites sampled (Tabor, *in litt.* 1992a; Tabor, *in litt.* 1992b). Extensive stream surveys completed from 1995 through 1997 identified 10 new localities for Topeka shiners and reconfirmed the species in a historic locale where it was previously believed extirpated (removed) (Mammoliti, *in litt.* 1996).

In South Dakota in the early 1990s, the species was captured from one stream in the James River basin and four streams in the Vermillion River basin. (Braaten, South Dakota State University, *in litt.* 1991; Schumacher, South Dakota State University, *in litt.* 1991). In 1997, stream surveys were conducted in the Big Sioux and James river watersheds. No Topeka shiners were captured from the Big Sioux basin during these surveys. However, collections made in the Big Sioux basin by South Dakota State University students in 1997 identified several specimens from two streams in Brookings County, South Dakota. In the James River basin, 3 new localities for the species were identified, and the species was reconfirmed from a historic locality. Two of the new locations were in Beadle County, where 29 and 4 individual Topeka shiners were captured. The other new location was in Hutchinson County, where 1 Topeka shiner was captured. The reconfirmed historic locale was in Davison County, where 1 Topeka shiner was captured.

In Minnesota, 14 streams in the range of the Topeka shiner were surveyed between 1985 and 1995. The species was collected from 5 of 9 (56 percent) streams with historic occurrences, and was not found in the 5 streams with no historic occurrences. These locales were in the Rock River drainage (Baker, *in litt.* 1996). In 1997, additional surveys were completed with the species being captured at 15 sites in 8 streams, including a stream in the Big Sioux River basin (Baker, *in litt.* 1997). These surveys are continuing.

In Nebraska, the species was assumed extirpated (absent) from all historic locales. However, in 1989 the species was discovered in the upper Loup River drainage, where two specimens were collected (Michl and Peters 1993). In 1996, a single specimen was collected from a stream in the Elkhorn River basin (Nebraska Game and Parks Commission, *in litt.* 1997). In Nebraska, these were the first collections of Topeka shiners since 1940. It is presently considered extant (in existence) at these two localities (Cunningham, University of Nebraska—Omaha, pers. comm. 1996).

The Topeka shiner began to decline throughout the central and western portions of the Kansas River basin in the early 1900's. Cross and Moss (1987) report the species present at sites in the Smoky Hill and Solomon River watersheds in 1887, but by the next documented fish surveys in 1935, the Topeka shiner was absent. The Topeka shiner was extirpated (extinct) from the Wakarusa River watershed during the 1970's (Cross, University of Kansas, pers. comm. 1995). The species disappeared from the Big Blue River watershed (Kansas River basin) in Nebraska after 1940 (Clausen, Nebraska Game and Parks Commission, *in litt.* 1992). The last record of the Topeka shiner from the Arkansas River basin, excluding the Cottonwood River watershed, was in 1891 near Wichita, Kansas (Cross and Moss 1987). In Iowa, the species was extirpated from all Missouri River tributaries except the Rock River watershed prior to 1945. It also was eliminated from the Cedar and Shell Rock River watersheds prior to 1945. Since 1945, the Topeka shiner has subsequently been extirpated from the Boone, Iowa, and Des Moines drainages, with the exception of the North Raccoon River watershed (Harlan and Speaker 1951; Harlan and Speaker 1987; Menzel, Iowa State University, *in litt.* 1980; Dowell, University of Northern Iowa, *in litt.* 1980; Tabor *in litt.* 1994). In Missouri, the species has been apparently extirpated since 1940 from many of the tributaries to the Missouri River where it formerly occurred, including Perche Creek, Petite Saline Creek, Tavern Creek, Auxvasse Creek, Middle River, Moreau River, Splice Creek, Slate Creek, Crooked River, Fishing River, Shoal Creek, Hundred and Two River, and Blue River watersheds.

Previous Federal Action

The Topeka shiner first received listing consideration when the species was included in the Animal Candidate Review for Listing as Endangered or Threatened Species, as a category 2 candidate species, published in the **Federal Register** (56 FR 58816) on November 21, 1991. Category 2 candidate species were those species for which information in the possession of the Service indicated that a proposal to list the species as endangered or threatened was possibly appropriate,

but sufficient data on biological vulnerability and threats were not currently available to support proposed rules. In 1991, our Kansas Field Office began a status review of the Topeka shiner, including information gathered from stream sampling, and by request from knowledgeable individuals and agencies. Included were State fish and wildlife conservation agencies, State health and pollution control agencies, colleges and universities, and other Service offices. A status report, dated February 16, 1993 (Service 1993), was subsequently prepared on this species. In the November 15, 1994, Animal Candidate Review for Listing as Endangered or Threatened Species, published in the **Federal Register** (59 FR 58999), the Topeka shiner was reclassified as a category 1 candidate species. Category 1 candidates comprised taxa for which we had substantial information on biological vulnerability and threats to support proposals to list the taxa as endangered or threatened. We have since discontinued the category designations for candidates and have established a new policy defining candidate species. Candidate species are currently defined as those species for which the Service has sufficient information on file detailing biological vulnerability and threats to support issuance of a proposed rule, but issuance of the proposed rule is precluded by other listing actions. In the February 28, 1996, Review of Plant and Animal Taxa That Are Candidates for Listing as Endangered or Threatened Species, published in the **Federal Register** (61 FR 7596), the Topeka shiner was reclassified as a candidate species. A proposed rule to list the Topeka shiner as endangered with no critical habitat was published in the **Federal Register** on October 24, 1997 (62 FR 55381).

Processing of this proposed rule conforms with the Service's Listing Priority Guidance for Fiscal Years 1998 and 1999, published on May 8, 1998 (63 FR 25502). The guidance clarifies the order in which the Service will process rulemakings giving highest priority (Tier 1) to processing emergency rules to add species to the Lists of Endangered and Threatened Wildlife and Plants (Lists); second priority (Tier 2) to processing final determinations on proposals to add species to the Lists, processing administrative findings on petitions (to add species to the Lists, delist species, or reclassify listed species), and processing a limited number of proposed or final rules to delist or reclassify species; and third priority (Tier 3) to processing proposed or final rules designating critical habitat. Processing of this Final rule is a Tier 2 action.

Summary of Comments and Recommendations

In the October 24, 1997, proposed rule (62 FR 55381), the December 24, 1997, notice of public hearings and reopening of comment period (62 FR 67324), and other associated notifications, all interested parties were requested to submit comments or information that might bear on whether to list the Topeka shiner. The first comment period was open from October 24, 1997, to December 23, 1997. The second comment period, to accommodate the public hearings, was opened January 12, 1998, to February 9, 1998. Appropriate State agencies, county governments, Federal agencies, scientific organizations, and other interested parties were contacted and requested to comment. Newspaper notices inviting public comment were published in the following newspapers: In Iowa, *Des Moines Register, Greene County Bee Herald, Calhoun County Advocate,* and *Oscelola County Tribune*; in Kansas, *Emporia Gazette, Manhattan Mercury,* and *Topeka Capital-Journal;* in Minnesota, *Minneapolis Star-Tribune and Pipestone County Star;* in Missouri, *Kansas City Star, Columbia Daily Tribune, Grundy County Republican Times, Bethany Republican-Clipper, Galatin North Missourian,* and *Clark County Kahoka Weekly;* in Nebraska, *Omaha World Herald* and *Norfolk News;* and in South Dakota, *Sioux Falls Argus-Leader* and *Huron Plainsman*. In these newspapers, notices announcing the proposal, opening of the first comment period, and the request for public hearings were published between October 24, 1997, and November 12, 1997. Notices announcing the public hearing schedule and the reopening of the comment period were published in these same newspapers between January 4, 1998, and January 17, 1998.

We received 12 requests for hearings in four states. Locations and times of hearings were published in the December 24, 1997, **Federal Register** notice (62 FR 67324), and the above listed newspapers. We held 4 public hearings from January 26—29, 1998, in Manhattan, Kansas; Bethany, Missouri; Fort Dodge, Iowa; and Sioux Falls, South Dakota. Attendance at the hearings was 104, 86, 17, and 54 persons, respectively. Transcripts from the hearings are available for inspection (see **ADDRESSES**).

A total of 184 written comments were received at our Kansas Field Office: 92 supported the proposed listing; 80 opposed the proposed listing; and 12 expressed neither support nor opposition.

Oral or written comments were received from 60 parties at the hearings: 21 supported the proposed listing; 33 opposed the proposed listing; and 6 expressed neither support nor opposition, but provided additional information to the proposed listing.

In total, oral or written comments were received from 23 Federal and State agencies or officials, 24 local agencies or officials, and 197 private organizations, companies, and individuals. All comments received during the comment period are addressed in the following summary. Comments of a similar nature are grouped into a number of general issues.

Issue 1: The Service did not have sufficient status information to make a determination that the species should be listed, and the quality of the data that the Service is using to make its determination is questionable. Section 4 of the Act requires that you use the ''best scientific and commercial data available,'' to make the determination. Additional recent surveys in Kansas produced the discovery of new populations. Could additional survey work produce similar results in other states?

Service Response: Our determination is based on accurate and thorough data for the Topeka shiner. The large number of historic records of occurrence in concert with general fish surveys and recent intensive surveys for the species, throughout its range, provide a factual picture of a species undergoing serious decline. Population losses estimated for the Topeka shiner are based on total number of known localities of occurrence, in ratio to the present number of locations where the species is known to exist. Since 1989, over one thousand stream fish samples have been collected throughout the historic range of the species. This sampling was conducted at or near present and historic localities for the species, as well as in other stream sites within the historic range. These surveys were completed by biologists from various State natural resource and environmental agencies, universities, and the Service. These surveys, whether for general fish fauna information, fishery research, or water quality; and/or specifically for the Topeka shiner, in reference to the known historic range of the species, constitute a very sound data base for the determination of the present status of the species. Additional surveys throughout the range of the species continue to refine current understanding of the distribution and

abundance of the species; with a few new populations found, and many other populations determined to be lost or in decline. However, we believe that current data adequately support our listing proposal. Additional Topeka shiner surveys are in progress in Minnesota. Preliminary results suggest the species may be more abundant than previously reported in the Rock River system of Minnesota, especially in streams surrounded by pasture land, as opposed to crop land. The Rock River of Minnesota makes up only a small portion of the range of the species. Even if the Rock River population is found to be relatively abundant, the range-wide status of the species remains unchanged. These surveys are continuing, and their results will be incorporated into recovery planning for the species, and may play an important role in identifying recovery populations and establishing delisting goals for the species. Survey efforts for the species have been greatly increased during the last few years; therefore, it is expected that a few new locations will continue to be discovered. The significance of the results of these intensive survey efforts is that very few additional sites have been discovered. Further, very low numbers of individual Topeka shiners have been found at new sites during recent surveys, indicating that population densities at these sites also is very low. This leads us to conclude that our current understanding of the species' range and its historical contraction is accurate.

Issue 2: The Service has not demonstrated that the species meets any of the 5 listing criteria specified under the Act.

Service Response: There are 5 criteria for listing under the Act, of which 1 or more must be met to consider a species for listing. Data indicates that criterion A, ''The present or threatened destruction, modification, or curtailment of its [Topeka shiner] habitat or range,'' is clearly met, and is the major factor leading to the species listing. Criteria C, ''Disease or predation,'' D, ''The inadequacy of existing regulatory mechanisms,'' and E, ''Other natural or manmade factors affecting its continued existence,'' are also factors considered in this listing determination, as discussed under the subheading, ''Summary of Factors Affecting the Species.''

Issue 3: The Service has failed to provide data that sustains a determination of endangered. During a public hearing it was stated that several populations in Kansas would not go extinct even if the species is not listed.

Service Response: The Act defines an endangered species as, ''any species which is in danger of extinction throughout all or a significant portion of its range.'' In determining a status of endangered we considered the following factors and threats: (1) continued implementation of the small watershed flood control programs in portions of the species' range that threatens the continued existence of the most viable populations and population complexes remaining; (2) numerous recent extirpations, and dramatic reductions in abundance of the Topeka shiner in Missouri streams; (3) the nearly complete extirpation of the species from Iowa in recent years, once a major portion of the species' range; (4) data solicited and received from various State agencies, universities, and knowledgeable individuals, and findings from stream fish surveys across the remaining portion of the species' range that indicates an overall, and often critical, decline in numbers of populations, and abundance within these populations over the recent past. These factors and threats were considered in respect to the widespread, chronic degradation of Topeka shiner habitat, the characteristic isolated nature of most of the persisting populations, and the potential viability of these populations in relation to population trends and required habitat conditions range-wide.

Since publication of the proposed rule, an additional serious threat to South Dakota's Vermillion River basin population has developed. Multiple reservoir construction is now planned on streams occupied by the Topeka shiner in this basin, further threatening the species.

The statement that several populations in Kansas would not go extinct even if the species is not listed has been misinterpreted. There are indeed a number of populations in Kansas that are quite viable, inhabiting very high quality streams. Unfortunately, the continued existence of these populations is now severely threatened by tributary dam development. Several populations that inhabited this area, previously considered some of the best remaining, are now gone.

Issue 4: There is no recent scientific survey work in areas inhabited by the species in South Dakota, and Federal and State officials admittedly do not know where the Topeka shiner exists within the State, thus they are unable to determine the species' status. Data for South Dakota populations of Topeka shiners are very limited.

Service Response: In July and September, 1997, 36 sites on 20 streams in the James and Big Sioux river basins of South Dakota were surveyed for Topeka shiners. All sites sampled were at or near previous collection locations for the species with the exception of 3 sites in the Big Sioux drainage which were upstream from previously recorded sites. Topeka shiners were collected from 4 of the 36 sites sampled (Cunningham and Hickey 1997). In 1991 and 1992, 66 fish collections were completed in the Vermillion River basin. Topeka shiners were collected from 11 sites in 4 streams (Braaten 1993; SD Natural Heritage data *in litt.* 1997). In 1989, multiple fish collections were made in the James River basin. Topeka shiners were collected at 1 site (Schumacher *in litt.* 1991). Although the data used by the Service to determine the status of the species in South Dakota are not as extensive as that available for other States within the species' range, these data do provide both an accurate assessment of the present and historic extent, and population trends for the species in South Dakota.

Issue 5: Most populations of Topeka shiners occur on private land. Both the interests of the Topeka shiner and the landowner would be better served through voluntary landowner agreements and cooperative conservation methods in lieu of listing. In Kansas, watershed districts have entered into conservation agreements with the Kansas Department of Wildlife and Parks, and the Service for the protection of the Topeka shiner. These agreements are an example of what can happen when all parties work together.

Service Response: We recognize that there are many potential benefits to the Topeka shiner from the development and implementation of conservation agreements. At present one conservation agreement affecting the species, with the Mill Creek Watershed District (in Wabaunsee County, Kansas), the Kansas Department of Wildlife and Parks, and the Service, has been developed and signed. Development of this agreement began in 1995 and was signed by the involved parties in August, 1997. We recognize the Mill Creek agreement as a good example of Federal-State-private cooperation; however, this agreement is yet to be fully implemented and has not resulted in the expected on-the-ground conservation benefits to the species. In entering this agreement the Mill Creek watershed board of directors was aware that this agreement by itself would not prevent the listing of the Topeka shiner. We are hopeful that this agreement will eventually become fully implemented. However, similar agreements must be

achieved for a large percentage of private properties, throughout the entire range of the species, to halt or reverse the species' declining trend. Cooperation with private landowners is very important in conserving this species, and will be critical in its recovery, but the species is in trouble now and the criteria for listing has been substantially met. We also believe that listing the Topeka shiner does not preclude or discourage the development of additional cooperative agreements.

We are cooperating with private landowners in several important other ways. Specifically, the Habitat Conservation Planning (HCP) program under section 10(a)(1)(B) of the Act provides for species protection and habitat conservation within the context of non-Federal development and land-use activities. It provides a tool that promotes negotiated solutions that reconcile species conservation with economic activities. The purpose of the habitat conservation planning process and subsequent issuance of incidental take permits is to authorize the incidental take of threatened or endangered species. The incidental take permit and associated HCP must ensure that the effects of the authorized incidental take will not appreciably reduce the likelihood of the survival and recovery of the species in the wild. Additionally, the impacts to the covered species must be adequately minimized and mitigated to the maximum extent practicable through the development and implementation of a HCP. The incidental take permit allows the permittee to engage in otherwise lawful activities that result in incidental take of covered species without violating section 9 of the ESA.

Safe Harbor agreements are voluntary, cooperative ventures between a landowner and us that can provide benefits to both the landowner and listed species. Under these agreements, a landowner would be encouraged to maintain or enhance existing populations of listed species, to create, restore, or maintain habitats, and/or to manage their lands in a manner that will benefit listed species. In return, we would provide assurances that future landowner activities would not be subject to ESA restrictions above those applicable to the property at the time of enrollment in the program.

Issue 6: Private landowners and drainage districts in Iowa are being told that they will not be able to clean and maintain drainage ditches without section 7 consultation with the Service if the species is listed. This is the case even though Topeka shiners are not known to inhabit drainage ditches. A blanket exemption for drainage ditches should be given for all maintenance activities on ditches to avoid this burdensome regulation.

Service Response: Section 9 of the Act prohibits the taking of listed species. ''Take'' is further defined to include a number of activities, including those that result in ''harm'' or ''harassment'' to the species, prohibiting actions which impair normal breeding, feeding, or sheltering activities. Blanket exemptions from the section 9 prohibition against ''take'' of an endangered species are not available under the Endangered Species Act. However, the issue of drainage ditch maintenance can be handled in one of two ways.

(1) Section 404 Permit Stipulations—Private landowners and drainage districts are required to obtain a permit from the U.S. Army Corps of Engineers for dredge and fill activities in waters of the United States under section 404 of the Clean Water Act. The Clean Water Act also provides for an exemption from this permit requirement for the maintenance (but not construction) of drainage ditches associated with normal farming, silviculture, and ranching practices (40 CFR 232.3 (c)(1)(ii)(B)(3)). In this regard, some discrepancies may exist in defining the differences between ''drainage ditches'' and ''channelized streams.'' We defer to the Corps of Engineers, on a case-by-case basis, as to the classification of these conveyance structures and whether the exemption from 404 applies to them. However, there is still some potential for downstream impact to the Topeka shiner and its habitat from activities which are otherwise exempt from 404 permitting.

In cases where in-stream activities and ditch maintenance activities exceed original ditch dimensions and thus are determined to be non-exempt from section 404 permitting requirements, and such activities may affect the Topeka shiner, formal consultation under section 7 of the Endangered Species Act, would be required. The Corps of Engineers, as the permitting agency, would initiate consultation with us. The Incidental Take Statement resulting from this section 7 consultation could address the taking of a certain number of Topeka shiners or the disturbance of a certain area of habitat resulting from ditching activities. In cases where no Topeka shiners are present in watersheds where in-stream maintenance is needed, there will be no need for section 7 consultation. Although channelized streams and drainage ditches are not considered suitable permanent habitat for Topeka shiners, if Topeka shiners are present downstream of ongoing maintenance activities, potential impacts to the species could be possible (i.e., releases of habitat-damaging sediment to downstream reaches). However, technology exists, and is frequently used (i.e., sediment screens or curtains), to reduce or eliminate this type of impact. The use of such methods can be stipulated in the conditions of permits (if required) to allow the necessary protection of Topeka shiner habitat and the required channel maintenance.

(2) Habitat Conservation Plans and Incidental Take Permits—In cases where an activity is exempt from the permitting requirements of section 404, and the activity is determined to have a potential for take of Topeka shiner, an option is available for drainage districts and other non-federal entities to complete a Habitat Conservation Plan for their actions and apply for an incidental take permit under section 10 of the Endangered Species Act. Such a plan would outline the proposed activities, the potential nature of the adverse impact on the listed species, and the steps the applicant plans to take to avoid or minimize the impact, and to provide mitigation for habitat which may be lost. Upon approval by the Director of the Service, the incidental take permit would authorize maintenance of the ditches and specify the level of habitat disturbance or species take that would not be considered excessive and that would be allowed under the Act. In all cases, even where 404 permits are not required, drainage districts will still have responsibilities to avoid unpermitted ''take'' of the Topeka shiner as outlined under section 9 of the Endangered Species Act and codified at CFR 50 17.21.

Issue 7: In the last several years, severe flooding has affected many streams within the Topeka shiner's range. This flooding quite likely shifted populations, and the Service does not take into account the possibility that populations might have moved to other locations.

Service Response: It has been established that flood flows can increase the level of dispersion in some stream fishes, particularly in channelized and manipulated streams (Simpson et al. 1982). However, in natural systems flood flows do not displace entire populations of native stream fishes (Minckley and Mefee 1987). Bank overflow areas, debris piles, and other stream structures provide refuge areas for fishes during flood flows. This is certainly true for Topeka shiners. Capture of Topeka shiners from areas

with marginal or temporary habitat suitability may occur in years immediately following large flood flows, presumably as a function of some level of dispersion (Cross, pers. comm. 1998; Tabor, pers. comm. 1998). However, those individuals will not survive and develop into new viable populations unless they have dispersed into suitable habitat. While it is true that the species can occupy different microhabitats temporally (i.e. areas near flowing water margins during summer, and slack water near overhanging vegetation and debris in winter), the species as a whole does not disperse from suitable habitat.

Issue 8: The proposed rule maintains, and the Service has similarly stated in public hearings, that there will be little, if any, impacts to private citizens or agricultural producers resulting from a listing of the Topeka shiner. However, in 3 of the 4 actions addressed in the proposed rule that you believe would not result in a violation of section 9, you caveat each of the actions with the phrase, '' . . . except where the Service has determined that such an activity would negatively impact the species.'' This caveat leads the average landowner to believe you may force reductions in the number of cattle grazed, require trees to be planted along all streams, and restrict annual burning within the range. What does ''long-term management of the range or prairie ecosystem,'' really mean? The costs to bring all farm land into the description of number 2 of the actions identified will run in the billions of dollars. The landowner cannot afford this expense.

Service Response: Many current farming and ranching practices are consistent with the long-term conservation of the local land and water resources, and thus will not negatively impact the species. However, without knowing precisely what changes may take place on the agricultural landscape in the future, we are unable to make a blanket statement that each of the referenced practices will never result in a violation of section 9 of the Act. We have neither the authority nor the desire to force landowners to plant trees, manipulate cattle numbers, or implement specific burning regimes. While we are willing to cooperate whenever possible with landowners who desire technical and financial assistance to implement habitat improvements on their property, forcing such actions is beyond the scope of the Act. However, where a landuse is resulting in degradation of Topeka shiner habitat that could lead to take of the species, responsible persons will be notified of the problems caused by such use, and duly advised of the potential for violations of the Act posed by the continuation of such use.

Issue 9: It is irresponsible for the Federal government to list an endangered species found primarily in public waters adjacent to private lands without identifying specific mechanisms for the conservation and recovery of the species.

Service Response: We are directed under the Act to develop and implement recovery plans for the survival and conservation of a listed species, unless it is determined that such a plan would not promote the conservation of the species. However, recovery plan development is not a concurrent activity with the listing process. It would not be prudent to utilize resources on recovery planning during the listing phase, when additional information and comments, which may impact the listing decision, are still being solicited. It is our intent on publication of this final rule, to begin the recovery process with the formation of a recovery team. A recovery team is usually composed of a number of individuals with expertise regarding the species. Also, stakeholder groups interested in, or potentially affected by, recovery actions may be involved in recovery team activities and development of recovery plans.

Issue 10: Listing the Topeka shiner as an endangered species will cause State, county, and township road, bridge, and culvert maintenance and construction projects to be delayed or eliminated due to required extra measures such as, erosion control, fish surveys, and utilization of the individual 404 permitting process instead of the nationwide 404. This additional process will require added manpower and expense for compliance. It also will be detrimental in areas where governmental entities utilize gravel from local streams, because of likely bans on dredging of stream gravel.

Service Response: In section 7 consultation involving 404 permits, individual 404 permits will only be required when the proposed activity may adversely affect the Topeka shiner. The nationwide 404 will still be the appropriate permitting tool in the vast majority of road and bridge projects occurring throughout the range of the Topeka shiner. However, individual permits will be required in some cases. In most instances, it is already known whether the Topeka shiner occurs within a particular stream system, eliminating the need for extensive extra surveys. It should be realized however, that the occurrence of the species and its direct taking at a specific construction site is not the only consideration for a permittee. Potential adverse affects for the Topeka shiner, as well as other aquatic species, may extend considerably downstream from construction sites. This is the case with project-associated erosion and resulting downstream sedimentation. However, such projects should not require extra erosion control measures because, if the permittee is in compliance with their permit, even in the case of a nationwide permit, these control measures should already be in place. A nationwide permit does not allow for uncontrolled release of sediment into stream waters.

We have not stated that bans on gravel removal from streams will occur; and we would only be involved in such regulation, through section 7 review and the Corps' 404 permitting process, if the gravel removal activity was proposed in or near Topeka shiner habitat. Through this review, permit stipulations that allow for gravel excavation while still maintaining viable Topeka shiner habitat can most likely be developed. This is the case for another listed species, Niangua darter, in central Missouri (Corps of Engineers, *in litt.* 1995).

Issue 11: The Service held public hearings only to fulfill a legal obligation and will not pay attention to the public comments.

Service Response: We disagree with this characterization of the role of public hearing and the fairness of the notice and comment administrative process to listing determinations. Section 553 of the Administrative Procedure Act (APA) requires agencies to give the public notice and an opportunity to comment on a proposed rule and to discuss in the final rule the significant issues raised in the comments. The validity of an agency action is subject to judicial review under the APA. Because of these requirements, all comments are carefully evaluated before we make a determination on whether to proceed with a final rule. The purpose of the public hearings and comment periods is to allow the public to present additional data that may or may not support the listing, and to hear the concerns the public has regarding the proposed listing. In this case our analysis of the information provided by the public comments in light of the best available scientific information supports an endangered finding. The concerns expressed during the hearings and comment period are also very important in that they provide a focal point for inclusion of the public in the development of the recovery plan, and in working with the concerned groups

and landowners during the recovery process.

Issue 12: The public was not adequately notified of the listing proposal or that public hearings were to be held.

Service Response: We made substantial efforts to notify the public of the listing proposal, public comment periods, request for public hearings, and schedule of public hearings throughout the present range of the Topeka shiner. Contacts include congressional delegations, Federal and State agencies, county governments, and a variety of interested groups and individuals. Immediately following publication of the proposed rule in the **Federal Register** on October 24, 1997, we published public notices in newspapers in and near areas where the species occurs. These notices announced the proposal to list the Topeka shiner, and announced the opening of 45 day and 90 day periods for request for public hearings, and request for public comments, respectively. Following the request for public hearings, we published a **Federal Register** notice on December 24, 1997, announcing the hearing locations and times, and reopening the public comment period. During the second week of January, 1998, we again published public notices in these same newspapers announcing hearing locations and times, and the reopening of the public comment period. In addition, we twice issued general press releases concerning the Topeka shiner from our Minneapolis, Minnesota and Denver, Colorado Regional Offices.

We also provided information on the listing proposal, comment period, and public hearings on the World Wide Web at two different Service web sites:

http://www.fws.gov/r3pao/eco__serv/endangrd/fishes/fishindx.html#Topekashiner and

http://www.r6.fws.gov/endspp/shiner/index.htm.

Issue 13: Listing is not necessary because of existing protections afforded under various State laws, including State threatened and endangered species legislation, and the new Kansas Non-game and Endangered Species Task Force legislation (HB 2361); section 404 of the Clean Water Act; Fish and Wildlife Coordination Act; and, National Environmental Policy Act. Any activity that could affect the habitat of the species would have to undergo these reviews, and such work could not be done with impunity.

Service Response: To date, the species has declined even with these regulations in place. These regulations do not ensure that habitat for the Topeka shiner will be protected. We believe the protection mechanisms of the Act are necessary to prevent the species' extinction. See factors considered in this listing determination, as discussed under the subheading, ''Summary of Factors Affecting the Species.''

Issue 14: The agriculture industry as a whole, has recently taken a very pro-active stance on environmental issues involving the management and use of pesticides and fertilizers. Certification requirements for applicators, technology in application, and general field practices, such as minimum tillage and no-till, has resulted in very minimal runoff and very efficient utilization of pesticides and fertilizers in crop fields. These factors, in combination with the increased planting of filter strips and grass waterways, have minimized agricultural chemical impact to water quality and should be a factor in the withdrawl of the listing proposal.

Service Response: The use of pesticides, consistent with approved labeling and application protocol, and the use of fertilizer consistent with sound, scientifically based application rates, in combination with stable riparian vegetation buffers serving as filtering mechanisms to reduce non-point source runoff, will not be considered to be a violation of section 9 of the Act. However, many agricultural chemicals have yet to undergo section 7 consultation and the subsequent Environmental Protection Agency implementation of reasonable and prudent measures to minimize incidental take of listed species. Evaluation of all chemicals for their impacts on Topeka shiners has yet to be completed. In the future, we anticipate working with the Environmental Protection Agency to identify alternative chemicals and methods to reduce any impacts which are identified to this species. In many areas dispersed throughout the range of the Topeka shiner, filter strips and riparian areas do not exist, with rowcropping extending to the stream channel. Pesticide and fertilizer applications in these non-protected stream areas have the potential to impact the species, particularly through runoff following heavy precipitation events where these buffer mechanisms are not in place. Although it is recognized that increasingly filter strips, grass waterways, and other riparian protections are being established, there are presently numerous areas along streams without buffers that may impact the species.

Issue 15: Livestock grazing does not impact the Topeka shiner. The Topeka shiner evolved with varying degrees of grazing pressure by historically occurring animals; including, bison, deer, and elk. The Service will make all landowners fence their streams to exclude cattle from water sources and natural cover.

Service Response: Many grazing regimes are consistent with the conservation of the Topeka shiner. The extent to which grazing will result in degradation of Topeka shiner habitat will vary with differing riparian ecosystems, type of livestock, seasonality of use, and other factors. In some instances, livestock management can impact stream habitat and water quality. The primary example of this activity is livestock feeding and wintering activities concentrated in small confinements within perennial or ephemeral stream channels. This practice leads to chronic and/or acute inputs of sediment, feces, nutrients, and other organic material directly into streams, which impacts stream habitat and water quality. Although prairie ecosystems evolved with native grazing ungulates, domestic livestock do not, and most often cannot (i.e. due to fencing) forage, herd, or move in the same manner as native species. We have neither the authority nor the desire to require the fencing of streams for the exclusion of livestock. However, in cases where existing management could impact the Topeka shiner, livestock exclusion can provide benefit.

Issue 16: The Service is remiss in its obligation to designate critical habitat. Listing critical habitat is prudent and determinable. If the Service does not designate critical habitat, affected landowners will not be informed and they will forfeit their right to demonstrate economic impacts to their land. The Service states, ''* * * conservation and recovery actions could be significantly impaired by public apprehension or misunderstanding of a critical habitat designation.'' This is a poor reason not to list critical habitat. The Service also states, ''* * * intentional taking of the Topeka shiner is not known to be a problem * * *'', then states that designation, ''* * * would reasonably be expected to increase the degree of threat to the species * * *.'' If intentional taking is not a known problem, then it is not reasonable to expect designation to result in increased threat. Also, designation of critical habitat would benefit the species because it would allow the public to be better informed of Federal projects/actions through inclusion in public notices; it would be

useful in delineating areas to avoid for pesticide spraying; and, better clarify the importance of certain stream reaches in providing for the long term survival of the species.

Service Response: Federal regulations (50 CFR 424.12(a)(1)) state that a designation of critical habitat is not prudent when one or both of the following situations exist: (1) the species is threatened by taking or other human activity, and identification of critical habitat can be expected to increase the degree of threat to the species, or (2) such designation of critical habitat would not be beneficial to the species. In the notice proposing to designate the Topeka shiner as endangered, published in the **Federal Register** on October 24, 1997, we indicated our determination that designation of critical habitat was not prudent at this time. The reasons for this determination were outlined in that publication, and still apply today.

Although the comments are accurate that intentional taking is not known to be a significant problem, designation of critical habitat could exacerbate whatever threat may exist. A notable example of this occurred recently where an individual at one of the public hearings concerning the proposed listing indicated a willingness to ''take care of the problem'' of having a federally-protected species on their property, indicating a potential for intentional taking of this species. Whether such threats are serious is uncertain, however, they must be considered when weighing the positive and negative aspects of critical habitat for this species. Even if specific threats against the species are never carried out, a negative perception among landowners could be fostered by critical habitat designation. Some individuals are wary of a federal designation on their property, and such an action would likely cause some landowners to be more reluctant to cooperate with our efforts to enact voluntary conservation measures on private property. In this instance, designation of critical habitat could result in an actual adverse effect on conservation of the species.

It is also our position that designation of critical habitat would provide no additional benefit to the species above that afforded by endangered species designation. Because the Topeka shiner is so closely tied to its specific perennial stream habitats, and is a year-round resident rather than a seasonal migrant, impacts to the species and to its habitat are generally considered one and the same. Therefore, prohibitions against taking specified under section 9, and consultation with federal action agencies who provide permit authority for stream modification and for water quality modification specified under section 7, should adequately address the potential for adverse impacts to the species once it becomes listed as endangered, precluding any additional benefits from designation of critical habitat.

There is no requirement to evaluate the economic effect on surrounding property due to a species listing whether or not critical habitat is being designated. If critical habitat is being designated for a species, the Act specifies that the additional economic impact that may result from such designation be assessed and identified in the designation rule. However, the Act specifically prohibits us from considering economic impacts when making listing decisions. When deciding whether to list a species, we are required to rely solely on the best scientific and commercial data available regarding the species' status, without regard to any other factors.

Issue 17: A determination of critical habitat will place undue restrictions and bureaucratic process in areas where Topeka shiner habitat is in good shape and the species is not threatened. Critical habitat will impact private property rights.

Service Response: As indicated in our response to Issue 16, impacts to Topeka shiner habitat are virtually indistinguishable from impacts to the species itself. However, as also indicated in the previous response, designation of critical habitat may carry with it negative connotations for landowners on whose property such designation is made, thereby increasing the level of anxiety surrounding the listing process, resulting in a decreased willingness to participate in voluntary conservation measures to benefit the species. For these and other reasons, we have determined that it is not prudent to designate critical habitat for the Topeka shiner.

Issue 18: In this area of the Topeka shiner's range, people are doing good things for soil and water conservation, many of which will benefit the species. If other States have problems with Topeka shiner habitat then list it in those States, but not where we are improving habitat.

Service Response: The Act does have provisions for the listing of ''distinct population segments'' (DPS), as defined by the joint Fish and Wildlife Service and National Marine Fisheries Service, Final Vertebrate Population Policy (61 FR 4721). However, a DPS cannot be defined by State boundaries, and must be based on biological and geographic factors. In areas where habitat improvements are occurring, the effect on in-stream activities of listing the Topeka shiner would be lessened. This is because activities to conserve the fish are already being undertaken, therefore little change in activities affecting streams would be needed compared to areas where streams remain in a degraded condition.

Issue 19: Grade stabilization structures and small impoundments, such as stock ponds, are being planned and constructed on normally dry gullies, ravines, and streambeds in several portions of the Topeka shiner's range. Most of these structures are designed not only to control erosion and provide livestock water, but are stocked with largemouth bass, bluegill, and catfish to provide additional recreational benefits. Will the threat of escapement of bass prevent fish stocking and/or establishment of permanent pools in these impoundments?

Service Response: Predation by introduced or stocked fishes can impact localized populations of Topeka shiners. However, this is mainly the case where impoundments are created on perennial (recurrent) streams. Many small perennial streams contain habitat that allows introduced predatory fishes to persist, both upstream and downstream from the dam for varying periods of time, often in addition to existing levels of naturally occurring predators. In the case of stock ponds and grade stabilization structures located on drainages that flow only following significant precipitation events, the likelihood and degree of escapement and survivability of individual predators is significantly less. This is primarily due to lack of established aquatic habitat in these normally dry drainages. Upstream movement of predators out of these impoundments into normally dry channels during periods of runoff is inconsequential to populations of Topeka shiners downstream of such structures. In cases where large numbers of structures planned are concentrated on normally dry drainages, in proximity to downstream Topeka shiner populations, and thus the potential numbers of ''washed out'' predators increases, plans for locations and number of structures stocked or having permanent pools may need to be altered to avoid possible negative affects to the species. However, it is anticipated that project changes will not be required in the vast majority of cases involving dam construction on normally dry streambeds. The section 7 process and development of conservation agreements can provide an

avenue for examining and mitigating these impacts.

Issue 20: The Topeka shiner has been recently found in a creek within our watershed that was severely polluted with animal wastes and turbidity and at another location immediately below an impoundment. These findings run counter to the Service's claim of the Topeka shiner being dependent on good water quality, thus invalidating them.

Service Response: Our position on water quality and habitat requirements is based on many years of study and observation of the species by several highly professional scientists. The Topeka shiner has the ability to persist in varying degrees in acutely and chronically reduced water quality and habitat situations. Although the Topeka shiner can tolerate some degree of short-term degradations (Cross, pers. comm. 1998; Tabor, pers. obs. 1998), long-term degradations are undoubtedly detrimental to the species.

At two isolated sites degraded by heavy sediment accumulation and nutrient enrichment, where Topeka shiners persist, there is inflow from seeps and springs which may have a bearing on their continued existence in these areas (Cunningham, pers. comm. 1998; Tabor, pers. obs.). This is in contrast to other streams exhibiting the same degradations within the same general areas, without spring and seep inflow, from which the species is absent. We believe that these populations are likely to disappear during the next period when these springs and seeps cease flowing. Situations that allow severe pollution from animal wastes in streams are not just a threat to the Topeka shiner and the aquatic community in general, but likely a threat to human health as well.

Impacts from watershed dams in basins with Topeka shiners are generally chronic impacts to the species. The development of a dam on a single stream in a basin with several occupied streams would likely impact the single stream. This would allow Topeka shiners to still move from the other occupied, undammed streams into the dammed stream, dependent on the level of stream impacts from the dam. However, when most or all streams are dammed within a basin, hydrology, habitat, and aquatic systems and communities are altered. The dams further serve as barriers to fish passage, all contributing to the decline and extirpation of the species within the basin.

Issue 21: This watershed district has proposed construction of a dam utilizing an altered design to meet flood control purposes and the preservation of a population of Topeka shiners. This proposal was made at a joint meeting with our district, the State, and the Service, but this has now been ostensibly delayed because of the Service's listing proposal.

Service Response: We encourage and recognize all proposals involving the conservation of the Topeka shiner. The listing proposal in no way diminishes, discourages, or delays the ability of a watershed district, or any other entity, to propose conservation activities for the species, including plans for construction of structures that allow fish passage and provide flood control benefits.

Issue 22: Sportfishing is big business throughout many portions of the Topeka shiner's range and Federal dollars are spent to enhance and restore these sportfisheries. The proposed rule includes sportfishes, such as northern pike and largemouth bass, as being threats to the Topeka Shiner. It does not seem logical to spend Federal dollars to stock these sportfishes and spend Federal dollars to list the Topeka shiner.

Service Response: In many cases, Federal funds are appropriated to enhance and stock sportfishes in large reservoir, lake, and river systems. Typically these habitat types are not used by Topeka shiners, and thus would not present significant impacts. However, in certain cases where enhancement is occurring in proximity to populations of Topeka shiners and Federal funds are being utilized, we, as the administrators of Federal Aid in Sportfishing funds, must consider the possible impacts to Topeka shiners resulting from such activity. This would most likely be completed through intra-agency consultation, and communication with the various State fish and wildlife agencies who administer these actions on the ground. A ''Policy for Conserving Species Listed or Proposed for Listing Under the Endangered Species Act While Providing and Enhancing Recreational Fisheries Opportunities'' (61 FR 27978), was developed to meet the requirements set forth in section 4 of Executive Order 12962, Recreational Fisheries. This policy identifies measures to ensure consistency in the administration of the Act, promote collaboration with other Federal, State, and Tribal fisheries managers, and improve and increase efforts to inform nonfederal entities of the requirements of the Act while enhancing recreational fisheries. We believe that there will be minimal impact to sportfishing enhancement activities resulting from the listing of the Topeka shiner.

Peer Review

In accordance with the policy promulgated July 1, 1994 (59 FR 34270), we have solicited the expert opinions of independent specialists regarding the proposed rule. The purpose of such review is to ensure listing decisions are based on scientifically sound data, assumptions, and analyses, including input of appropriate experts and specialists. Peer reviewers were mailed copies of the proposed rule to list the Topeka shiner as an endangered species immediately following publication in the **Federal Register** on October 24, 1997 (62 FR 55381). The reviewers were invited to comment during the public comment period upon the specific assumptions and conclusions regarding the proposed listing. These comments were considered in the preparation of the final rule as appropriate. In conjunction with the proposed rule the comments of three independent experts and/or conservation biologists were solicited. One response was received, which supported the proposal to list the Topeka shiner as an endangered species. The respondent's comments have been considered in the development of this final rule and incorporated where applicable.

Summary of Factors Affecting the Species

After a thorough review and consideration of all available information, we have determined that the Topeka shiner should be classified as an endangered species. Procedures found at section 4(a)(1) of the Act and regulations implementing the listing provisions of the Act (50 CFR part 424) were followed. A species may be determined to be an endangered or threatened species due to one or more of the five factors described in Section 4(a)(1). These factors and their application to the Topeka shiner (*Notropis topeka*) throughout the species' range are as follows:

A. The Present or Threatened Destruction, Modification, or Curtailment of its Habitat or Range.

Once abundant and widely distributed throughout the central Great Plains and western tallgrass prairie regions, the Topeka shiner now inhabits less than 10 percent of its original geographic range. The action most likely impacting the species to the greatest degree in the past is sedimentation and eutrophication (increase of minerals and organic nutrients within a body of water resulting in the decrease of dissolved oxygen) resulting from intensive agricultural development. Most

populations of Topeka shiners occurring west of the Flint Hills region of Kansas are believed to have been extirpated prior to 1935 (Cross and Moss 1987). Minckley and Cross (1959) report that watersheds with high levels of cultivation, and subsequent siltation and domestic pollution, are unsuitable for the species. These streams often cease to flow and become warm and muddy during the summer months. Cross (1970) indicates that some of the areas where depletion of the species has occurred also coincide with areas having poor aquifers resulting from historical changes in drainage patterns affecting the quantity of water. Pflieger (1975) reports that increased siltation as a result of intensive cultivation may have reduced the amount of Topeka shiner habitat in Missouri. Pflieger (*in litt.* 1991) also reports that a known population of the species in Boone County, Missouri was extirpated between 1970 and 1976, presumably due to increased turbidity and nutrient enrichment resulting from urbanization and highway construction. Feedlot operations on or near streams are also known to impact prairie fishes due to organic input resulting in eutrophication (Cross and Braasch 1968).

The species was historically known from open pools of small prairie streams with cool, clear water. Many streams of this nature reportedly existed throughout the geographic range of the Topeka shiner ''prior to the plowing of the prairie sod'' (Cross 1967). These conditions continue to exist in many of the streams in the Flint Hills region of Kansas, primarily due to shallow, rocky soils with numerous limestone exposures which prevent cultivation. This is in contrast to the perturbation of the natural fish faunas and their associated habitats in prairie areas more suitable to intensive rowcrop agriculture, which is characteristic of the vast majority of the natural range of the species (Menzel et al. 1984). Menzel et al. (1984) also notes accelerated rates of soil erosion and instream deposition of fluvium (deposits caused by the action of flowing water) throughout many modified prairie streams in Iowa, encompassed by the former range of the species. Today, outside the Flint Hills region of Kansas, only a few, small isolated areas not severely impacted, or impacted to an extent within the tolerance of the species, continue to exist.

Mainstem reservoir development, tributary impoundment, and channelization also have impacted the species in many areas. Populations located within small tributary streams upstream from both mainstem and tributary impoundments attempt to utilize these water bodies as refuges from drying streams during periods of drought. During this time, the populations are subject to predation by larger predatory fish inhabiting the impounded water bodies. In unaltered systems, fish move downstream during drought to find suitable habitat. Deacon (1961) reports fishes characteristic of the small and mid-sized tributaries of the Neosho and Marais des Cygnes rivers' watersheds occurred in the mainstems following several years of protracted drought in the mid-1950's. Tributary dams also serve to block migration of fishes upstream following drought, prohibiting recolonization of upstream reaches.

Several recently extant populations have been extirpated from tributaries to Tuttle Creek and Clinton reservoirs, both mainstem impoundments in the Kansas River basin of eastern Kansas. The species continues to exist in two tributaries to Tuttle Creek Reservoir. However, during sampling on one of these streams in 1994 only a single Topeka shiner was captured. All populations within the Wakarusa River watershed (Clinton Reservoir) are believed extirpated. Clinton Reservoir's completion coincided with large scale development of tributary impoundments throughout the Wakarusa's upper basin which may have compounded impacts to the species. Layher (1993) reports the extirpation of Topeka shiners from a stream following construction of a single tributary impoundment in Chase County, Kansas. Layher reported that the species had disappeared both upstream and downstream of the dam site, and noted significant habitat changes below the impoundment. Pflieger (*in litt.* 1992) reports that an abundant population of the species in Missouri was extirpated following construction of an impoundment. This population, located downstream from the dam site, was not present when revisited several years after construction. The habitat had changed from clear rocky pools, to pools filled with gravel, layered over by silt and choked with filamentous (threadlike) algae. Pflieger further reports that ''the SCS (Soil Conservation Service) reservoir has profoundly altered the hydrology and biota of this stream by eliminating the scouring floods that formerly created pool habitat and maintained the rocky, silt-free substrate.'' During 1994 sampling efforts in southeast Iowa, a stream with recent records of the species had been undoubtedly impacted by the construction of multiple impoundments throughout its upper reaches and tributaries, as no Topeka shiners were captured (Tabor *in litt.* 1994). Impoundment of prairie streams has also resulted in the documented extirpation of other prairie stream minnow species (Winston et al. 1991), the speckled chub (*Macrhybopsis aestivalis*) and the chub shiner (*Notropis potteri*).

In Kansas, substantial tributary impoundment is occurring throughout the Flint Hills region, endangering the viability of Topeka shiner populations at these locales. As of 1993, 46 tributary impoundments had been completed in or near habitat for the Topeka shiner in the Cottonwood River basin, with an additional 115 planned for construction (Service *in litt.* 1993). Presently in the Mill Creek watershed, which contains the largest remaining complex of habitat for the species, 16 dams have been constructed with additional structures planned (Hund, Mill Creek Watershed District, pers. comm. 1997; State Conservation Commission of Kansas, *in litt.* 1992). However, the Mill Creek watershed district board has entered into a conservation agreement with us and Kansas Department of Wildlife and Parks to conserve the species. This conservation agreement allows for continued dam development in portions of the basin without Topeka shiners or where there are less viable populations, and eliminates development in ''critical use'' areas with stable, self-sustaining populations. The agreement also requires habitat improvement and enhancement throughout the occupied portion of the basin. However, this agreement can be terminated by any signatory during the included 5-year review. Also, the agreement would be ineffective if not implemented. In South Dakota, a major flood control project is planned in the Vermillion watershed, involving the construction of numerous structures. The Vermillion River basin contains the largest complex of Topeka shiner populations in South Dakota. Dam construction also is a threat to the species throughout the rest of its range, but to a lower degree due to less immediate and intensive development.

Stream channelization also has occurred throughout much of the Topeka shiner's range. Channelization negatively impacts many aquatic species, including the Topeka shiner, by eliminating and degrading instream habitat types, altering the natural hydrography (physical characteristics of surface waters), and by changing water quality (Simpson et al. 1982). Intensive channelization of low order streams

throughout the species' Iowa range is suspect in the species' drastic decline in this State (Bulkley et al. 1976). Menzel (*in litt.* 1980) reports the extirpation of Topeka shiners from previous collection sites following stream channelization projects in Iowa. During 1994 status surveys across this portion of the range, most streams were found to have been severely altered (Tabor *in litt.* 1994). Changes included elimination of pool habitats, instream debris, and woody riparian vegetation. Water velocities were consistently high throughout the channel and deep silt was the dominant substrate. It is suspected that the Topeka shiner is an obligate or at least a facultative (adaptive) spawner on sunfish (Lepomis spp.) nests (Pflieger *in litt.* 1992) or other silt-free substrates, but no sunfish were captured, nor suitable sunfish spawning habitat observed in these channelized streams. At Iowa sites where Topeka shiners were captured, streams were not as intensively channelized and many natural conditions persist. While channelized streams and drainage ditches do not provide suitable permanent habitat for Topeka shiners, maintainence of previously altered stream systems, such as periodic sediment dredging, could potentially impact the species downstream in more-natural type stream habitat.

Intensive land-use practices, maintainence of altered waterways, dewatering of streams, and continuing tributary impoundment and channelization represent the greatest existing threats to the Topeka shiner. Over-grazing of riparian zones (banks of a natural course of water) and the removal of riparian vegetation to increase tillable acreage greatly diminish a watershed's ability to filter sediments, organic wastes and other impurities from the stream system (Manci 1989). Irrigation draw-down of groundwater levels affects surface and subsurface flows which can impact the species. At present, both Federal and State planning for development of watershed impoundments and channelization and/or its maintainence continue in areas with populations of Topeka shiners. Several impoundments are planned for construction on streams with abundant numbers of the species. Portions of these stream reaches will be inundated by the permanent pools of the reservoirs, imperiling the species' future existence in these localities. Prior to the planning of the impoundments, these populations of Topeka shiners were considered to be the most stable range-wide, due to their occurrence in watersheds dominated by high quality prairie with generally very good grazing management and land stewardship.

B. Overutilization for Commercial, Recreational, Scientific, or Educational Purposes

Some collecting of Topeka shiners by individuals for use as bait fish and display in home aquaria does occur. However, overutilization is not thought to currently contribute to the decline of the Topeka shiner.

C. Disease or Predation

There have been no studies conducted on the impacts of disease or predation upon the Topeka shiner, so the significance of such threats to the species is presently unknown. Disease is not likely to be a significant threat except under certain habitat conditions, such as crowding during periods of reduced flows, or episodes of poor water quality, such as low dissolved oxygen or elevated nutrient levels. During these events, stress reduces resistance to pathogens and disease outbreaks may occur. Parasites, bacteria, and viral agents are generally the most common causes of mortality. Lesions caused by injuries, bacterial infections, and parasites often become the sites of secondary fungal infections. However, Topeka shiners captured from a Missouri stream in 1996 were discovered to be afflicted with scoliosis, a condition of deformity affecting the vertebrae. Scoliosis can result from contact with environmental contaminants, or severely reduced genetic variability resulting from geographic isolation. No causal factor for this occurrence has been identified.

The green sunfish (*Lepomis cyanellus*) is the most common predator typical of Topeka shiner habitat throughout its range. The spotted bass (*Micropterus punctulatus*) and largemouth bass (*M. salmoides*) are also naturally occurring predators of the Topeka shiner in portions of its range but to a much lower degree due to minimal habitat overlap. These bass species typically occur in only the downstream extremes of Topeka shiner habitat. The construction of impoundments on streams with Topeka shiners and the subsequent introduction of piscivorous (fish eating) fish species not typically found in headwater habitats, such as largemouth bass, crappie (*Pomoxis spp.*), white bass (*Morone chrysops*), northern pike (*Esox lucius*), and channel catfish (*Ictalurus punctatus*), may affect the species during drought or periods of low flows when Topeka shiners seek refuge in the impoundments or permanent stream pools now occupied by these introduced fishes. The most common fishes captured in streams directly upstream and downstream of tributary impoundments in Kansas are largemouth bass, crappie, and bluegill (*Lepomis macrochirus*), and these species are often captured to the exclusion of cyprinids, including Topeka shiner (Mammoliti, Kansas Department of Wildlife and Parks, pers. comm., 1997). Tabor (*in litt.* 1994) captured only largemouth bass from a stream segmented by numerous dams in Iowa. A cooperative report completed by the Soil Conservation Service and Kansas Department of Health and Environment (1981) on the effects of watershed impoundments on Kansas streams states that predacious game fishes increased in abundance, and several minnow species, including the Topeka shiner, decreased in abundance upstream and downstream from dam sites following impoundment. While the extent of predation is undocumented, known populations have apparently been extirpated in the time period immediately following impoundment of several low order streams (Layher 1993; Pflieger, *in litt.* 1992; Tabor, *in litt.* 1992b). Topeka shiners were also reportedly extirpated from a small impoundment previously lacking largemouth bass, following stocking of largemouth bass (Prophet et al. 1981). Extirpation of the Topeka shiner from small, direct tributary streams to large mainstem impoundments has also been documented. These extirpations presumably occurred in part due to predation by introduced piscivorous fishes during drought and low flow periods when Topeka shiners seek refuge in permanent water downstream from their typical headwater habitats (Service 1993).

D. The Inadequacy of Existing Regulatory Mechanisms

In Kansas, the Topeka shiner is listed as ''species in need of conservation,'' under the Kansas Nongame and Endangered Species Conservation Act of 1975. This status prohibits the direct taking of specimens but does not protect habitat or give opportunity to review actions or projects which may affect the species in Kansas. Under Missouri law, the species is listed as endangered. This status prohibits direct taking of specimens and provides a limited review process to suggest remediation for actions potentially impacting the species' habitat. Minnesota, Nebraska, and South Dakota consider it a species of concern, with no legal protection. In Iowa, the species has no legal status.

No significant protections exist for Topeka shiner habitat throughout its range. Listing under the Act would

provide significant protection against taking of the species, ensure coordinated review of Federal actions which may affect its habitat, and encourage proactive management throughout its range. As discussed previously, section 404 of the Clean Water Act regulates certain activities in streams and wetlands, and through the section 7 consultation process we are provided the opportunity to review actions proposed for permitting under this section. Listing of the Topeka shiner would require a review of potential section 404 actions which may impact the species, which is not a requirement as long as the species remains unlisted and unprotected by Federal law.

E. Other Natural and Manmade Factors Affecting Its Continued Existence

In the species' Missouri range, possible interspecific (arising between species) competition between the Topeka shiner and the introduced blackstripe topminnow (*Fundulus notatus*) has been suggested (Pflieger, *in litt.* 1992). The absence of the Topeka shiner from suitable habitat, where blackstripe topminnow is present, also has been observed in Kansas (Mammoliti, pers. comm. 1997). Both species are nektonic insectivores utilizing similar pool habitat. At present, the extent of possible competition between these species is undocumented. In degraded or suboptimal habitat conditions where Topeka shiners persist, competition by species more tolerant to these conditions, such as red shiner (*Cyprinella lutrensis*), may negatively affect the species. In portions of the species' Kansas range, interspecific competition may exist to some extent between the Topeka shiner, the southern redbelly dace (*Phoxinus erythrogaster*), and the cardinal shiner (*Luxilus cardinalis*) (Tabor pers. obs.).

We have carefully assessed the best scientific and commercial information available regarding the past, present, and future threats faced by this species in determining to make this rule final. Based on this evaluation, the preferred action is to list the Topeka shiner as endangered. Endangered status, which means that the species is in danger of extinction throughout all or a significant portion of its range, is appropriate for the Topeka shiner. We believe the species' recent significant reduction in range and the extirpation of the species throughout most of its historic range, within the context of the continuing and expected impacts from present and planned projects and activities, support the determination of endangered status. Threatened status is not appropriate considering the extent of the species' population decline and the vulnerability of the remaining populations.

Critical Habitat

Critical habitat is defined in section 3 of the Act as: (i) The specific areas within the geographic area occupied by a species, at the time it is listed in accordance with the Act, on which are found those physical or biological features (I) essential to the conservation of the species and (II) that may require special management considerations or protection and; (ii) specific areas outside the geographic areas occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. ''Conservation'' means the use of all methods and procedures needed to bring the species to the point at which listing under the Act is no longer necessary.

Section 4(a)(3) of the Act, as amended, and implementing regulations (50 CFR 424.12) require that, to the maximum extent prudent and determinable, the Secretary designate critical habitat at the time the species is determined to be endangered or threatened. Our regulations (50 CFR 424.12(a)(1)) state that a designation of critical habitat is not prudent when one or both of the following situations exist—(1) The species is threatened by taking or other human activity, and identification of critical habitat can be expected to increase the degree of threat to the species, or (2) such designation of critical habitat would not be beneficial to the species. We find that designation of critical habitat is not prudent for the Topeka shiner at this time for the following reasons.

Section 7 of the Act requires that Federal agencies refrain from contributing to the destruction or adverse modification of critical habitat in any action authorized, funded or carried out by such agency (agency action). This requirement is in addition to the section 7 prohibition against jeopardizing the continued existence of a listed species, and it is the only mandatory legal consequence of a critical habitat designation. Implementing regulations (50 CFR part 402) define ''jeopardize the continuing existence of'' and ''destruction or adverse modification of'' in very similar terms. To jeopardize the continuing existence of a species means to engage in an action ''that reasonably would be expected to reduce appreciably the likelihood of both the survival and recovery of a listed species.'' Destruction or adverse modification of habitat means an ''alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species.'' Common to both definitions is an appreciable detrimental effect to both the survival and the recovery of a listed species. In the case of adverse modification of critical habitat, the survival and recovery of the species has been significantly diminished by reducing the value of the species' designated critical habitat. Thus, actions satisfying the standard for adverse modification also jeopardize the continued existence of the species concerned.

Many activities that pose threats to the continued existence of the Topeka shiner are funded, permitted, or carried out by Federal agencies (e.g., channelization, impoundment, dredge and fill, and other stream and wetland modification projects). Programs that result in these activities in Topeka shiner habitat are most often regulated by the U.S. Army Corps of Engineers and the U.S. Department of Agriculture, Natural Resources Conservation Service, under a variety of authorities, and are thus subject to section 7 consultation under the Act.

Other State or private actions resulting in ''take'' of Topeka shiners would be prohibited by section 9 of the Act, and remediation of those potential threats would not be significantly advanced by designation of critical habitat.

Recovery activities to assist landowners in maintaining or improving the habitat quality of their streams or otherwise addressing known threats to Topeka shiners would not benefit from a designation of critical habitat. However, such conservation and recovery actions could be significantly impaired by public apprehension or misunderstanding of a critical habitat designation.

Intentional taking of the Topeka shiner is not presently known to be a problem. However, the Topeka shiner is found in very specialized, easily accessible and identifiable habitat characterized by small volumes of flow. Local populations are thus highly vulnerable and can be intentionally targeted for elimination, as suggested at a recent public hearing. The listing of Topeka shiner as an endangered species also publicizes the present vulnerability of this species. Publication of maps providing precise locations and descriptions of critical habitat, as required for the designation of critical habitat, would reasonably be expected to increase the degree of threat of vandalism or the intentional destruction of the species' habitat, increase the

difficulties of enforcement, and could further contribute to the decline of the Topeka shiner.

In light of the above, we conclude that designation of critical habitat would not be beneficial to the species and would increase the degree of threat to the species from taking. We have, therefore, determined that the designation of critical habitat for the Topeka shiner is neither beneficial nor prudent.

Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing results in public awareness and conservation actions by Federal, State, and local agencies, private organizations, and individuals. The Act provides for possible land acquisition and cooperation with the States and requires that recovery actions be carried out for all listed species. Our ''Partners for Fish and Wildlife'' program can also provide a means to help share the cost of conservation measures such as constructing fencing to keep cattle out of streams and providing alternative water source, if necessary. The protection required of Federal agencies and the prohibitions against taking and harm are discussed, in part, below.

Section 7(a) of the Act requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened and with respect to its critical habitat, if any is being designated. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402. Section 7(a)(4) requires Federal agencies to confer on any action that is likely to jeopardize the continued existence of a species proposed for listing or result in destruction or adverse modification of proposed critical habitat. If a species is listed subsequently, section 7(a)(2) requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of the species or destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency is required to enter into formal consultation.

A number of Federal agencies have jurisdiction and responsibilities potentially affecting the Topeka shiner, and section 7 consultation may be required in a number of instances. Federal involvement is expected to include the Corps of Engineers (Corps) throughout the species' range pursuant to the Corps administration of Section 404 of the Clean Water Act. The U.S. Environmental Protection Agency will need to consider the Topeka shiner in the registration of pesticides, adoption of water quality criteria, and other pollution control programs. The U.S. Department of Transportation, Federal Highway Administration, will need to consider the effects of bridge and road construction at locations where known habitat may be impacted. The U.S. Department of Agriculture, Natural Resources Conservation Service and Farm Service Agency, will need to consider the effects of structures and channelization projects installed under the Watershed Protection and Flood Prevention Act, (16 U.S.C. 1001–1009, Chapter 18; Pub.L. 83–566, August 4, 1954, c 656, Sec. 1, 68 Stat. 666; as amended), ''Farm Bill'' programs, and other activities which may impact water quality, quantity, or timing of flows. The Federal Energy Regulatory Commission will need to consider potential impacts to the Topeka shiner and its habitat resulting from gas pipeline construction over streams and from hydroelectric development.

The Act and its implementing regulations set forth a series of general prohibitions and exceptions that apply to all endangered wildlife. The prohibitions, codified at 50 CFR 17.21, in part, make it illegal for any person subject to the jurisdiction of the United States to take (includes harass, harm, pursue, hunt, shoot, wound, kill, trap, or collect; or to attempt any of these), import or export, ship in interstate commerce in the course of commercial activity, or sell or offer for sale in interstate or foreign commerce any listed species. It also is illegal to possess, sell, deliver, carry, transport, or ship any species that has been taken illegally. Certain exceptions apply to entities having an agency relationship with us (agents) and to State conservation agencies.

Permits may be issued to carry out otherwise prohibited activities involving endangered wildlife species under certain circumstances. Regulations governing permits are at 50 CFR 17.22 and 17.23. Such permits are available for scientific purposes, to enhance the propagation or survival of the species, and/or for incidental take in connection with otherwise lawful activities.

Requests for copies of the regulations regarding listed wildlife and inquiries about prohibitions and permits may be addressed to the U.S. Fish and Wildlife Service, P.O. Box 25486, Denver Federal Center, Denver, Colorado 80225 (303/236–8189) or facsimile (303/236–0027).

It is our policy to identify (59 FR 34272), to the extent known at the time a species is listed, specified activities that will and will not be considered likely to result in violation of section 9 of the Act. The intent of this policy is to increase public awareness of the effect of the listing on ongoing and likely activities within a species' range. We believe the following actions would not likely result in a violation of section 9:

(1) Actions that may affect Topeka shiner that are authorized, funded or carried out by a Federal agency when the action is conducted in accordance with an incidental take statement issued by the Service pursuant to section 7 of the Act;

(2) Actions that may result in take of Topeka shiner when the action is conducted in accordance with a permit under section 10 of the Act; and

(3) Private actions which avoid ''take'' under section 9, that are not federally funded or permitted, undertaken within or near habitat occupied by Topeka shiners, and not be subject to the regulations as stated above in section 7 of the Act. Private actions not subject to section 7 consultation include, but are not limited to: farming and ranching practices, construction of private stock watering ponds on normally dry channels, and fuelwood harvest.

We believe that the actions listed below may result in a violation of section 9; however, possible violations are not limited to these actions alone:

(1) Actions that take Topeka shiner that are not authorized by either a permit under section 10 of the Act, or an incidental take permit under section 7 of the Act; the term ''take'' includes harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting, or attempting any of these actions;

(2) Possess, sell, deliver, carry, transport, or ship illegally taken Topeka shiner;

(3) Interstate and foreign commerce (commerce across State and international boundaries) without the appropriate permits under section 10(a)(1)(a)and 50 CFR 17.32.

(4) Unauthorized collecting or handling of the species;

(5) Destruction or alteration of the species' habitat (i.e., actions that change water quality, quantity, and/or timing of flows; dredging or other physical modifications that impact instream habitat, including trampling of stream habitat by livestock and allowing animal wastes from feedlots or waste lagoons to

enter streams) such that it would result in take of the species;

(6) The intentional introduction of nonnative fish species that result in direct competition with or predation on the Topeka shiner at known locations of occupied habitat;

(7) Use of fertilizers or pesticides inconsistent with approved labeling and application procedures; and

(8) Contamination of soil, streams, or groundwater by illegal spills, discharges, or dumping of chemicals, silt, or other pollutants.

Questions regarding whether a specified activity will constitute a violation of section 9 should be directed to the Field Supervisor of our Manhattan, Kansas Field office (see **ADDRESSES** section).

National Environmental Policy Act

We have determined that Environmental Assessments and Environmental Impact Statements, as defined under the authority of the National Environmental Policy Act of 1969, need not be prepared in connection with regulations adopted pursuant to section 4(a) of the Endangered Species Act of 1973, as amended. A notice outlining the reasons for this determination was published in the **Federal Register** on October 25, 1983 (48 FR 49244).

Required Determination

This rule does not contain any information collection requirements for which the Office of Management and Budget (OMB) approval under the Paperwork Reduction Act of 1995, 44 U.S.C. 3501 et seq. is required. An information collection related to the rule pertaining to permits for endangered and threatened species has OMB approval and is assigned clearance number 1018–0094. This rule does not alter that information collection requirement. For additional information concerning permits and associated requirements for threatened species, see 50 CFR 17.32.

References Cited

A complete list of all references cited herein, as well as others, is available upon request from the Manhattan, Kansas Field Office (See **ADDRESSES** section).

Author

The primary author of this document is Vernon M. Tabor, U.S. Fish and Wildlife Service (see **ADDRESSES** section).

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

Regulation Promulgation

Accordingly, part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, is amended as set forth below:

PART 17—[AMENDED]

1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361–1407; 16 U.S.C. 1531–1544; 16 U.S.C. 4201–4245; Pub. L. 99–625, 100 Stat. 3500, unless otherwise noted.

2. Section 17.11(h) is amended by adding the following, in alphabetical order under FISHES, to the List of Endangered and Threatened Wildlife to read as follows:

§ 17.11 Endangered and threatened wildlife

* * * * *

(h) * * *

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common Name	Scientific name						
*	*	*	*	*	*		*
FISHES							
*	*	*	*	*	*		*
Shiner, Topeka	*Notropis topeka (=Notropis tristis).*	KS, IA, MN, MO, NE, SD.	Entire	E	654	NA	NA
*	*	*	*	*	*		*

Dated: November 25, 1998.

Jamie Rappaport Clark,

Director, Fish and Wildlife Service.

[FR Doc. 98–33100 Filed 12–14–98; 8:45 am]

BILLING CODE 4310–55–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 260

[Docket No. 981023266–8266–01; I.D. 091598A]

Inspection and Certification Fees and Charges

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notification of inspection fees.

SUMMARY: NMFS announces changes in its fees and charges for voluntary fishery products inspection, grading, and certification services. NMFS increased the basic fee for full-time in-plant inspection services by $1.95, making the hourly rate $46.35. The fees for NMFS laboratory services and inspection services conducted by the State of Alaska remain unchanged. It also includes a 3.6-percent base salary increase and varying locality pay increases effective January 1999. NMFS is continuing its separate fee structure for facilities with less than full-time contract services. This fee reflects increases in salary, general operating, and overhead costs that are charged by NMFS and NOAA.

DATES: These fee changes were effective on October 1, 1998.

FOR FURTHER INFORMATION CONTACT: Richard V. Cano, Chief, Seafood Inspection Division, 301–713–2355.

SUPPLEMENTARY INFORMATION: The Agricultural Marketing Act of 1946 (7 U.S.C. 1621–1627) authorizes the voluntary fishery products inspection, grading, and certification program, as well as assessment and collection of such fees as will be reasonable and as nearly as may be to cover the cost of the service rendered. Reorganization Plan No. 4 of 1970 delegated these authorities to NMFS. Regulations at 50 CFR 260.70 authorize the Secretary of Commerce to review and revise annually the rates for voluntary fishery products inspection, grading, and certification services by publishing a notice of fee changes in the **Federal Register**. NMFS' annual review