

to small entities and large entities equally. At this time, small entities are not treated differently and might not be impacted differently, but we seek comment.

o. Federal Rules Which Duplicate, Overlap, or Conflict with the Commission's Proposals. None.

61. Pursuant to section 1008 of the Satellite Home Viewer Improvement Act of 1999, *notice is hereby given* of the proposals described in this NPRM.

62. The Consumer Information Bureau, Reference Information Center, shall send a copy of this NPRM, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

Federal Communications Commission.

**Magalie Roman Salas,**

*Secretary.*

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## DEPARTMENT OF THE INTERIOR

### Fish and Wildlife Service

#### 50 CFR Part 17

RIN 1018-AG12

#### Endangered and Threatened Wildlife and Plants; Proposed Designation of Critical Habitat for the Arkansas River Basin Population of the Arkansas River Shiner

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Proposed rule; availability of supplementary information.

**SUMMARY:** We, the U.S. Fish and Wildlife Service (Service), propose designation of critical habitat pursuant to the Endangered Species Act of 1973, as amended (Act), for the Arkansas River Basin population of the Arkansas River shiner (*Notropis girardi*). This proposal is made in response to a court settlement in *Center for Biological Diversity v. Bruce Babbitt, et al.* C99-3202 SC, directing us to submit for publication in the **Federal Register** a proposal to withdraw the existing "not prudent" critical habitat determination together with a new proposed critical habitat determination for the Arkansas River Basin population of the Arkansas River shiner by June 23, 2000, and to invite public comment for 60 days. We are proposing as critical habitat a total of approximately 1,866 kilometers (1,160 miles) of rivers and 91.4 meters (300 feet) of their adjacent riparian zones. Proposed critical habitat includes

portions of the Arkansas River in Kansas, the Cimarron River in Kansas and Oklahoma, the Beaver/North Canadian River in Oklahoma, and the Canadian/South Canadian River in New Mexico, Texas, and Oklahoma. If this proposed rule is finalized, Federal agencies proposing actions that may affect the areas designated as critical habitat must consult with us on the effects of the proposed actions, pursuant to section 7(a)(2) of the Act.

**DATES:** We will consider all comments on the proposed rule and the draft environmental assessment received from interested parties by August 29, 2000. We will hold public hearings in Amarillo, Texas, on August 7, 2000; in Oklahoma City, Oklahoma, on August 9, 2000; and in Pratt, Kansas, on August 11, 2000. We will start all hearings promptly at 3:00 p.m. and end them no later than 5:30 p.m. We must publish a final determination on this proposal by March 14, 2001, provided we determine that we do not need to prepare an Environmental Impact Statement to comply with NEPA.

**ADDRESSES:** 1. Send your comments on the proposed rule and draft environmental assessment to the U.S. Fish and Wildlife Service, Oklahoma Ecological Services Office, 222 S. Houston, Suite A, Tulsa, Oklahoma 74127-8909.

2. The complete file for this proposed rule will be available for public inspection, by appointment, during normal business hours at the above address. The draft environmental assessment is available by writing to the above address, or by connecting to our web site at <http://ifw2es.fws.gov/oklahoma/>. The draft economic analysis will be available during the public comment period. We will specify its availability in local newspapers and through a notice in the Federal Register.

3. We will hold the Amarillo hearing at Texas A&M University Agricultural Research and Extension Center, 6500 Amarillo Boulevard West, Amarillo, Texas. We will hold the Oklahoma City hearing at the Conservation Education Center Auditorium, Oklahoma City Zoo, 2101 NE 50th, Oklahoma City, Oklahoma. We will hold the Pratt hearing at the Carpenter Auditorium, Pratt Community College, 348 NE State Road 61, Pratt, Kansas.

**FOR FURTHER INFORMATION CONTACT:** Ken Collins, Oklahoma Ecological Services Office, at the above address; telephone 918/581-7458, facsimile 918/581-7467.

**SUPPLEMENTARY INFORMATION:**

### Background

The Arkansas River shiner is a small, robust minnow with a small, dorsally flattened head, rounded snout, and small subterminal mouth (located near the head end of the body but not at the extreme end) (Miller and Robison 1973, Robison and Buchanan 1988). Dorsal (back) coloration tends to be light tan, with silvery sides gradually grading to white on the belly. Adults attain a maximum length of 51 millimeters (2 inches). Dorsal, anal, and pelvic fins all have eight rays, and there is a small, black chevron usually present at the base of the caudal fin.

The Arkansas River shiner was first described based on fish collection in 1926 from the Cimarron River northwest of Kenton, Cimarron County, Oklahoma (Hubbs and Ortenburger 1929). Historically, the Arkansas River shiner was widespread and abundant throughout the western portion of the Arkansas River basin in Kansas (KS), New Mexico (NM), Oklahoma (OK), and Texas (TX). This species has disappeared from more than 80 percent of its historical range and is now almost entirely restricted to about 820 kilometers (km) (508 miles (mi)) of the Canadian River in OK, TX, and NM (Larson *et al.* 1991; Pigg 1991). An extremely small population may still persist in the Cimarron River in OK and KS, based on the collection of only nine individuals since 1985. A remnant population also may persist in the Beaver/North Canadian River of OK, based on collection of only four individuals since 1990 (Larson *et al.* 1991; Jimmie Pigg, Oklahoma Department of Environmental Quality, pers. comm., 1993).

In 1999, six Arkansas River shiner were collected from the Arkansas River in Wichita, KS, at two locations—four from near the 47th Street South bridge and two near the Kansas State Highway 96 crossing (Vernon Tabor, U.S. Fish and Wildlife Service, Manhattan, KS, pers. comm., 2000). Prior to this collection, the Arkansas River shiner was believed to be extirpated from the Arkansas River. An accurate assessment of Arkansas River shiner populations in the Arkansas, Cimarron, and Beaver/North Canadian rivers is difficult because the populations may be so small that individuals may escape detection during routine surveys. The small size of Arkansas River shiner aggregations in these three rivers significantly reduces the likelihood that these populations will persist over evolutionarily significant timescales in the absence of intensive conservation efforts.

The decline of this species throughout its historical range is primarily the result of modification of the duration and timing of stream flows and inundation by impoundments, channel desiccation by water diversion and groundwater mining, stream channelization, and introduction of non indigenous species. Additional information on the biology and status of this species can be found in the November 23, 1998, final listing determination (63 FR 64772). Biological factors relevant to the species' habitat needs are discussed in the Primary Constituent Elements portion of this proposed rule.

#### Previous Federal Action

We included the Arkansas River shiner in our September 18, 1985, Review of Vertebrate Wildlife (50 FR 37958) as a category 2 candidate for listing. Category 2 included those taxa for which information indicated that a proposal to list as endangered or threatened was possibly appropriate, but for which conclusive data on biological vulnerability and threats were not currently available to support a proposed rule. Our January 6, 1989, revised Animal Notice of Review (54 FR 554) retained this status for the Arkansas River shiner.

We first received detailed information on the status of the species in 1989 (Pigg 1989). A partial status survey by Larson *et al.* (1990) was a source of additional information. We subsequently prepared a status report on this species (U.S. Fish and Wildlife Service 1990). Following this report, Larson *et al.* (1991) and Pigg (1991) provided comprehensive status survey information. In our November 21, 1991, Animal Candidate Review for Listing as Endangered or Threatened Species (56 FR 58804), we reclassified the Arkansas River shiner as a category 1 candidate. At that time, category 1 (now referred to as candidates) included those taxa for which we had substantial information on biological vulnerability and threats to support proposals to list the taxa as endangered or threatened. In our February 28, 1996, candidate Notice of Review (61 FR 7596), we discontinued the designation of category 2 candidates.

We published a proposed rule to list the Arkansas River basin population of the Arkansas River shiner as endangered and invited public comment on August 3, 1994 (59 FR 39532). A nonnative population of the Arkansas River shiner that has become established in the Pecos River was not included in that proposal. We reopened the comment period from January 6, 1995, to February 3, 1995, (60 FR 2070) to accommodate three public

hearings. Following lifting of a moratorium on issuing final listings or critical habitat designations on April 26, 1996, we again reopened the comment period on the proposal on December 5, 1997 (62 FR 64337). We published the final rule listing the Arkansas River basin population of the Arkansas River shiner as a threatened species on November 23, 1998 (63 FR 64772).

#### Critical Habitat

Critical habitat is defined in section 3(5)(A) 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 area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. The term “conservation,” as defined in section 3(3) of the Act, means “to use and the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this Act are no longer necessary” (*i.e.*, the species is recovered and removed from the list of endangered and threatened species).

Section 4(a)(3) of the Act requires that, to the maximum extent prudent and determinable, we designate critical habitat at the time a species is determined to be endangered or threatened. Our regulations (50 CFR 424.12(a)(1)) state that critical habitat is not prudent if one or both of the following situations exist—(i) the species is threatened by taking or other human activity and identification of critical habitat can be expected to increase the degree of this threat, or (ii) designation of critical habitat would not be beneficial to the species. In the final rule listing the Arkansas River Basin population of the Arkansas River shiner (63 FR 64772), we found that designation of critical habitat was not prudent because we believed critical habitat would not provide any additional benefit beyond that provided through listing as threatened.

In the last few years, a series of court decisions have overturned several of our determinations made for different species that designation of critical habitat would not be prudent (for example, *Natural Resources Defense Council v. U.S. Department of the Interior* 113 F. 3d 1121 (9th Cir. 1997);

*Conservation Council for Hawaii v. Babbitt*, 2 F. Supp. 2d 1280 (D. Hawaii 1998)). Based on the standards applied in those judicial opinions, we have reexamined the question of whether designation of critical habitat for the Arkansas River Basin population of the Arkansas River shiner is prudent.

As part of a settlement order of February 16, 2000, in *Center for Biological Diversity v. Bruce Babbitt, et al.* C99–3202 SC, we agreed to reconsider the question of whether critical habitat would be prudent; and, if designation of critical habitat is prudent, we agreed to subsequently propose designation of critical habitat for the Arkansas River Basin population of the Arkansas River shiner by June 23, 2000.

Upon further consideration, we believe designation of critical habitat for the Arkansas River shiner may be of some benefit. A critical habitat designation benefits species conservation primarily by identifying important areas and by describing the features within those areas that are essential to conservation of the species, alerting public and private entities to the areas' importance. Although the designation of critical habitat does not, in and of itself, restrict human activities within an area or mandate any specific management or recovery actions, it does help focus Federal, tribal, State, and private conservation and management efforts in such areas. Designating critical habitat may also provide some educational or informational benefits.

The primary regulatory impact of a critical habitat designation is through the provisions of section 7 of the Act, which applies only to actions with Federal involvement (*e.g.*, actions authorized, funded, or conducted by a Federal agency) and does not affect exclusively State or private activities. Critical habitat designation assists Federal agencies in planning future actions, because the designation establishes, in advance, those habitats that will be given special consideration in section 7 consultations. With a designation of critical habitat, potential conflicts between Federal actions and endangered or threatened species can be identified and possibly avoided early in the agency's planning process.

Conservation benefits can occur when critical habitat is designated in historically inhabited areas outside the species' current range, particularly where the importance of the area would have been overlooked had critical habitat not been designated. For example, initiation of section 7 consultation may not be required for a Federal action in unoccupied habitat,

but would be required if that area had been designated critical habitat. The designation of currently unoccupied areas as critical habitat is allowed under section 3(5)(A)(I) of the Act, which provides that areas outside the geographical area occupied by the species at the time it was listed as endangered or threatened may be designated critical habitat upon a determination that such areas are essential for the conservation (*i.e.*, recovery) of the species. We find that all areas proposed in this rule are essential for the conservation of the Arkansas River Basin population of the Arkansas River shiner.

Given the above, we believe that designation of critical habitat will likely provide some conservation benefit to the Arkansas River Basin population of the Arkansas River shiner, and can foresee no detrimental conservation effects of designation. We therefore find that critical habitat designation is prudent.

Section 4(b)(2) of the Act requires that we base critical habitat proposals upon the best scientific and commercial data available, taking into consideration the economic impact, and any other relevant impact, of specifying any particular area as critical habitat. We can exclude areas from critical habitat designation if we determine that the benefits of exclusion outweigh the benefits of including the areas as critical habitat, provided the exclusion will not result in the extinction of the species.

In proposing critical habitat for the Arkansas River shiner, we reviewed the overall approach to the conservation of the species undertaken by local, State, tribal, and Federal agencies and private individuals and organizations since the species' listing in 1998. We also solicited information from knowledgeable biologists and reviewed the available information pertaining to habitat requirements of the species. The proposed critical habitat described below constitutes our best assessment of areas essential for the conservation of the Arkansas River shiner and is based on the best scientific and commercial information available. The areas proposed either currently support populations of the Arkansas River shiner, or they currently have, or have the potential for developing, the necessary requirements for survival, growth, and reproduction of the Arkansas River shiner. All of the proposed areas require special management consideration and protection to ensure their contribution to the species' recovery.

Important considerations in selection of areas proposed in this rule include

factors specific to each river system, such as size, connectivity, and habitat diversity, as well as range-wide recovery considerations, such as genetic diversity and representation of all major portions of the species' historical range. Each area contains stream reaches with interconnected waters so that individual Arkansas River shiner can move between areas, at least during certain flows or seasons. The ability of the fish to repopulate areas where they have been depleted or extirpated is vital to recovery. Some areas include stream reaches that do not have optimum Arkansas River shiner habitat, but provide migration corridors.

Additionally, these reaches play a vital role in the overall health of the aquatic ecosystem and, therefore, the integrity of upstream and downstream Arkansas River shiner habitats. The critical habitat proposed reflects the need for areas of sufficient stream length to provide habitat for Arkansas River shiner populations large enough to be self-sustaining over time, despite fluctuations in local conditions.

In considering this designation, we took into account that preferred habitat for the Arkansas River shiner is the mainstems of larger plains rivers. The best scientific information available indicates that recovery of this species will depend on conservation of relatively long stretches of large rivers. Historically, the species has been documented from several smaller tributaries (*e.g.* Skeleton Creek, Wildhorse Creek, and others) to these rivers (Larson *et al.* 1991). Examination of the collection records provided in Larson *et al.* (1991) shows that about 53 percent of the reported capture dates for Arkansas River shiner in these smaller tributaries occurred during the months of June and July. Another 18 percent occurred during the months of May and August. Consequently, we believe that these tributaries are occupied only during certain seasons during higher flows and do not represent optimum habitat. We note, however, that all tributaries, no matter their size, are important in contributing flows to the proposed critical habitat reaches and that actions substantially reducing those flows may adversely affect critical habitat. Additionally, newly hatched Arkansas River shiner seek mouths of tributaries where food is more abundant (Moore 1944). This proposed designation (see Lateral Extent of Critical Habitat) would include small sections of the tributaries near their confluence, which are important rearing areas for larval Arkansas River shiner.

Stabilization of the Arkansas River shiner at its present population level

and distribution will not achieve conservation. The overall trend in the status of the Arkansas River shiner has been characterized by dramatic declines in numbers and range despite the fact that this species evolved in rapidly fluctuating, harsh environments. None of the threats affecting the Arkansas River shiner have been eliminated since the fish was listed; consequently, known Arkansas River shiner aggregations remain vulnerable to those natural or manmade factors that might further reduce population size. If recovery actions fail to reverse Arkansas River shiner declines in the Canadian/South Canadian River, the species' vulnerability to catastrophic events, such as the introduction of the Red River shiner (*Notropis bairdi*), or a prolonged period of low or no flow, would increase. The remaining self-sustaining aggregations are fragmented and isolated to essentially one river system. Recovery through protection and enhancement of the existing populations, plus reestablishment of populations in suitable areas of historical range, are necessary for the species' survival and recovery.

The inclusion of both occupied and currently unoccupied areas in the proposed critical habitat for Arkansas River shiner is in accordance with the Act. Restoration of Arkansas River shiner populations to additional portions of their historical range significantly reduces the likelihood of extinction due to any natural or manmade factors that might otherwise further reduce population size. We anticipate that a vital recovery component for this species will involve establishment of secure, self-sustaining populations in habitats from which the species has been extirpated. We believe excluding areas outside the currently occupied range of the Arkansas River shiner from the critical habitat designation would be inadequate to ensure the conservation of the species. Therefore, we determine that the unoccupied areas proposed as critical habitat are essential for the conservation of the species.

#### *Proposed Critical Habitat Designation*

Table 1 shows approximate river lengths of occupied and unoccupied habitat in each county in which critical habitat is proposed. The proposed designation encompasses approximately 1,866 km (1,160 mi) of stream channels and adjacent areas (see Lateral Extent of Critical Habitat, below). However, the amount of stream channel actually proposed for critical habitat in Oklahoma is less than this amount because these figures were derived from

adding county totals, and where the river forms a county boundary, that length is included in both county totals.

The proposed designation is divided among five reaches found within portions of four river systems. The areas we selected for proposed critical habitat designation contain most, if not all, of the remaining genetic diversity within

the Arkansas River Basin and include a representation of each major subbasin within the historical range of the species. The proposed designation incorporates more than 95 percent of the currently known aggregations of Arkansas River shiner in the Arkansas River basin, including the remnant populations that may still persist in the

Arkansas, Cimarron, and Beaver/North Canadian rivers. The proposed designation also includes currently unoccupied areas in the Arkansas, Cimarron, and Beaver/North Canadian rivers that are considered essential for future restoration and recovery of the species.

TABLE 1.—RIVER DISTANCES, BY COUNTY, FOR OCCUPIED AND UNOCCUPIED PROPOSED CRITICAL HABITAT FOR THE ARKANSAS RIVER SHINER

[Information derived from USGS National Atlas 1:2,000,000 scale hydrography data sets]

County	Occupied		Unoccupied		Total	
	Kilometers	Miles	Kilometers	Miles	Kilometers	Miles
<b>Kansas:</b>						
Barton .....	27.3	16.9	17.1	10.6	44.4	27.5
Clark .....	20.7	12.8	9.2	5.7	29.9	18.5
Comanche .....		0.0	9.8	6.1	9.8	6.1
Cowley .....	45.4	28.1		0.0	45.4	28.1
Edwards .....		0.0	38.4	23.8	38.4	23.8
Finney .....		0.0	42.5	26.4	42.5	26.4
Ford .....		0.0	67	41.5	67	41.5
Gray .....		0.0	41.6	25.8	41.6	25.8
Hamilton .....		0.0	20.5	12.7	20.5	12.7
Kearney .....		0.0	44.3	27.5	44.3	27.5
Meade .....	28.6	17.7		0.0	28.6	17.7
Pawnee .....		0.0	48.1	29.8	48.1	29.8
Reno .....	54.3	33.7		0.0	54.3	33.7
Rice .....	32.3	20.0		0.0	32.3	20.0
Sedgwick .....	73.3	45.4		0.0	73.3	45.4
Seward .....	15	9.3		0.0	15	9.3
Sumner .....	32.1	19.9		0.0	32.1	19.9
Subtotal .....	329	204.0	338.5	209.9	667.5	413.9
<b>New Mexico:</b>						
Quay .....	51.8	32.1			51.8	32.1
Subtotal .....	51.8	32.1			51.8	32.1
<b>Oklahoma:</b>						
Beaver .....	137.7	85.4		0.0	137.7	85.4
Blaine .....	40.3	25.0		0.0	40.3	25.0
Caddo .....	0.8	0.5		0.0	0.8	0.5
Canadian .....	71.4	44.3		0.0	71.4	44.3
Cleveland .....	81.2	50.3		0.0	81.2	50.3
Custer .....	9.6	6.0		0.0	9.6	6.0
Dewey .....	98.3	60.9		0.0	98.3	60.9
Ellis .....	84.3	52.3		0.0	86.1	53.4
Grady .....	37	22.9		0.0	37	22.9
Harper .....	61.9	38.4	26.3	16.3	88.2	54.7
Hughes .....	70	43.4		0.0	70	43.4
Major .....		0.0	3.4	2.1	3.4	2.1
McClain .....	104.1	64.5		0.0	104.1	64.5
McIntosh .....	8.2	5.1		0.0	8.2	5.1
Pittsburg .....	27	16.7		0.0	27	16.7
Pontotoc .....	80.4	49.8		0.0	80.4	49.8
Pottawatomie .....	44.5	27.6		0.0	44.5	27.6
Roger Mills .....	84.3	52.3		0.0	84.3	52.3
Seminole .....	48.5	30.1		0.0	48.5	30.1
Texas .....	16.1	10.0		0.0	16.1	10.0
Woods .....		0.0	214.9	133.2	214.9	133.2
Woodward .....	1.9	1.2	127.6	79.1	129.5	80.3
Subtotal* .....	1,107.5	686.7	372.2	230.8	1,481.5	918.5
<b>Texas:</b>						
Hemphill .....	35.8	22.2			35.8	22.2
Oldham .....	115.7	71.7			115.7	71.7
Potter .....	47	29.1			47	29.1

TABLE 1.—RIVER DISTANCES, BY COUNTY, FOR OCCUPIED AND UNOCCUPIED PROPOSED CRITICAL HABITAT FOR THE ARKANSAS RIVER SHINER—Continued

[Information derived from USGS National Atlas 1:2,000,000 scale hydrography data sets]

County	Occupied		Unoccupied		Total	
	Kilometers	Miles	Kilometers	Miles	Kilometers	Miles
Subtotal .....	198.5	123.0	.....	.....	198.5	123.0
Total .....	1,686.8	1,045.9	710.7	440.6	2,399.3	1,487.6

\* NOTE: Totals and subtotals are higher for Oklahoma than the actual lengths proposed as critical habitat because, where the river forms a county boundary, that length is included in the table more than once.

For each stream reach proposed for designation, the up- and downstream boundaries are described below. The distances below are approximate due to the meandering and dynamic nature of the proposed river reaches. Uncertainty on upstream and downstream distributional limits of some Arkansas River shiner populations may result in small areas of occupied habitat being excluded from the designation. Similarly, the need to identify sufficient reference points that define the specific limits of the designation also may result in small areas of occupied habitat being excluded from the designation. Finally, as described previously, this critical habitat proposal is focused on mainstem rivers, so some smaller tributaries that may at least seasonally support Arkansas River shiner are not included in this proposal.

In some instances, areas outside of critical habitat that contain one or more of the primary constituent elements may still be important to the conservation of the Arkansas River shiner even if they are not designated as critical habitat. These areas may be of value in maintaining ecosystem integrity and supporting other organisms indirectly contributing to recovery of the species. Additionally, these areas may have those missing elements restored in the future. We have decided that including these areas in the critical habitat designation it is not essential to the conservation of the species. However, we anticipate that these areas can be adequately protected under the Act through section 7 consultation, the section 9 prohibition against taking listed species, and the section 10 habitat conservation planning process, and through other appropriate State and Federal statutes and regulations.

We propose the following areas as critical habitat for the Arkansas River Basin population of the Arkansas River shiner (see the Regulation Promulgation section of this rule for exact descriptions of boundaries).

1. Canadian/South Canadian River, NM, TX, and OK. The Canadian/South

Canadian River from near Ute Dam in NM to the upper reaches of Eufaula Reservoir in OK, except for those areas rendered unsuitable for Arkansas River shiner by Meredith Reservoir in TX, is currently occupied by the Arkansas River shiner. These are the largest, perhaps only, remaining viable aggregations of Arkansas River shiner, and are considered to represent the “core” of what remains of the species. Smaller tributary streams, with the exception of Revuelto Creek in NM and small sections of the tributaries near their confluence, which may be seasonally occupied, are believed to be currently unoccupied by the Arkansas River shiner.

a. Canadian River, Quay County, NM, and Oldham and Potter Counties, TX—215 km (134 mi) of river extending from U.S. Highway 54 bridge near Logan, NM, downstream to confluence with Coetas Creek, TX. Seepage from Ute Reservoir, inflow from Revuelto Creek, and several springs help sustain perennial flow in most years. There are occasional periods of no flow, and low flows in the lower section were historically maintained by effluent from the Amarillo, TX, wastewater treatment plant. This segment of the Canadian River, despite flows having been modified by Conchas and Ute reservoirs, still supports a largely intact plains river fish fauna. Arkansas River shiners still occur in portions of the 3.2 km (2 mi) reach between the U.S. Highway 54 bridge and Ute Dam, above the reach proposed for designation. Upstream of Ute Reservoir, the Canadian River was substantially modified following the construction of Conchas Reservoir and likely provides little suitable habitat. A small portion of Arkansas River shiner historical range occurs upstream of Conchas Reservoir, but the suitability of that reach for Arkansas River shiner is unknown. No extant aggregations of Arkansas River shiner are known from that reach.

b. Canadian/South Canadian River, Hemphill County, TX, and Blaine, Caddo, Canadian, Cleveland, Custer,

Dewey, Ellis, Grady, Hughes, McClain, McIntosh, Pittsburg, Pontotoc, Pottawatomie, Roger Mills, and Seminole Counties, OK—593 km (368 mi) of river extending from the U.S. Highway 60/83 bridge near Canadian, TX, downstream to the Indian Nation Turnpike bridge northwest of McAlester, OK. This segment of the Canadian/South Canadian River is the longest unfragmented reach in the Arkansas River basin that still supports the Arkansas River shiner. Here, Arkansas River shiner range from rare to common, with the species becoming more abundant in a downstream direction. The Canadian River upstream of the community of Canadian, TX, to Sanford Dam at Lake Meredith, supported Arkansas River shiner prior to the construction of Lake Meredith. However, habitat in this segment is degraded and generally unsuitable. Some aggregations of Arkansas River shiner may still persist upstream of Canadian, TX, in extremely small numbers. Altered flow regimes will continue to affect habitat quality in this reach.

Aggregations of Arkansas River shiner also persist in the 49 km (30 mi) section of the South Canadian River from the Indian Nation Turnpike bridge downstream to the upper limits of Eufaula Reservoir. However, the downstream distributional limit of these populations frequently fluctuates. Management of water surface elevations in Eufaula Reservoir for flood control and the resultant backwater effects routinely alter stream morphology at the downstream extent of the population. Under elevated surface water conditions, the lower reaches of this segment are degraded or may be entirely unsuitable for Arkansas River shiner.

2. Beaver/North Canadian River, Beaver, Ellis, Harper, Major, Texas, and Woodward Counties, OK—259 km (161 mi) of river extending from Optima Dam in Texas County, OK, downstream to U.S. Highway 60/281 bridge in Major County, OK. Almost the entire Beaver/North Canadian River mainstem and at

least one of the major tributaries (Deep Fork River) in OK was historically known to support Arkansas River shiner aggregations. A small population may still persist between Optima Dam and the upper reaches of Canton Reservoir, based on the collection of four individuals since 1990. At present, habitat in large areas of the drainage are degraded or unsuitable, either because of reservoirs, reduced stream flow, or water quality impairment. The segment between Optima Dam and the upper reaches of Canton Reservoir offers the best opportunity for restoration of the Arkansas River shiner in the Beaver/North Canadian River. Habitat in this reach appears suitable although detailed studies have not yet been conducted. Recovery activities will include augmenting existing aggregations of the Arkansas River shiner and reestablishing additional populations in this system. Above Optima Reservoir, pumping from the High Plains aquifer has considerably reduced streamflow in the Beaver River (Luckey and Becker 1998), and the habitat is no longer suitable for Arkansas River shiner.

3. Cimarron River, Clark, Comanche, Meade, and Seward Counties, KS, and Beaver, Harper, Woods, and Woodward, Counties, OK—215 km (134 mi) of river extending from U.S. Highway 54 bridge in Seward County, KS, downstream to U.S. Highway 281 bridge in Woods County, OK. Historically, almost the entire Cimarron River mainstem and several of the major tributaries were inhabited by the Arkansas River shiner, including the type locality for the species (the area from which the specimens that were used to first describe the species were taken). A small population of Arkansas River shiner could still persist in the Cimarron River in OK and KS, based on the collection of nine individuals since 1985. Arkansas River shiners were last reported from the Cimarron River in 1990. At present, habitat appears suitable throughout most of the system, but detailed studies have not yet been conducted. Recovery activities for Arkansas River shiner will likely include augmenting existing populations and reestablishing additional aggregations in this system or the Arkansas River in KS. Lack of adequate streamflow in both systems and the presence of Red River shiners in the Cimarron River will hinder recovery efforts. The introduction of the Red River shiner, in combination with habitat loss and degradation, was responsible for the diminished distribution and abundance of the Arkansas River shiner in the Cimarron

River. The Red River shiner, a small minnow endemic to the Red River, was first recorded from the Cimarron River in Kansas in 1972 (Cross *et al.* 1985) and from the Cimarron River in Oklahoma in 1976 (Marshall 1978). Since that time, the non indigenous Red River shiner has essentially replaced the Arkansas River shiner in this system.

4. Arkansas River, Barton, Cowley, Edwards, Finney, Ford, Gray, Hamilton, Kearney, Kiowa, Pawnee, Reno, Rice, Sedgwick, and Sumner Counties, KS—584 km (363 mi) of river extending from Kansas State Highway 27 bridge in Hamilton County, KS, downstream to KS/OK State line in Cowley County, KS. The Arkansas River in Kansas contains a significant portion of the species' historical range and was not known to support Arkansas River shiner until recently. The Arkansas River shiner historically inhabited the entire mainstem of the Arkansas River, but had begun to decline by 1952 due to the construction of John Martin Reservoir 10 years earlier on the Arkansas River in Bent County, Colorado (Cross *et al.* 1985).

Typically, releases from John Martin Reservoir and irrigation return flows from eastern Colorado maintain streamflow in the Arkansas River as far east as Syracuse, KS (Kansas Geologic Survey 1996). Between Syracuse and Garden City, KS, the river often ceases to flow due to surface and groundwater withdrawals. Surface flow then resumes near Great Bend, KS. At present, insufficient streamflow and water quality degradation renders much of the Arkansas River west of Great Bend unsuitable for Arkansas River shiner. However, in early 1995, the U.S. Supreme Court ruled that Colorado had violated the Arkansas River Compact by depleting usable flows of the Arkansas River in Kansas (*Kansas v. Colorado*, No. 105, Orig., US Supreme Ct, 1995). If Colorado provides additional water to Kansas, habitat conditions in the Arkansas River west of Great Bend could improve.

Recovery for Arkansas River shiner will include reestablishing additional populations in this system or the Cimarron River. Downstream of the KS/OK State line, large areas of the basin are unsuitable for Arkansas River shiner, either because of reservoirs (*i.e.*, Kaw and Keystone) and the associated streamflow alterations, or because of stream channel alteration for navigation and are not included in the proposed designation. Even if modifications of releases from these reservoirs become feasible in the future, we suspect that the reaches below Kaw and Keystone reservoirs would never provide suitable

habitat. The distance between Kaw Dam and the upper reaches of Keystone Reservoir is only 139 river km (86 river mi), and the distance between Keystone Dam and the McClellan-Kerr Navigation System is only about 130 river km (81 river mi). These distances are likely insufficient to sustain reproducing populations (see "Primary Constituent Elements" below).

The 1998 listing rule for the Arkansas River shiner estimated that at least 3,900 km (2,450 mi) of habitat within the species' range was occupied historically. This proposal involves approximately half that amount. However, the estimate for the listing rule was likely conservative, in that it did not take into account probable occupancy of smaller tributaries in the Arkansas River Basin. Considering the amount of historically occupied habitat that occurred in the smaller tributaries, the amount being considered for critical habitat designation is much less than one-half. Although amount of habitat proposed for designation is less than one-half the historical range of the species, we believe that conservation of the Arkansas River shiner within the proposed areas can secure the long-term survival and recovery of this species.

#### *Lateral Extent of Critical Habitat*

This proposal takes into account the naturally dynamic nature of riverine systems and recognizes that floodplains are an integral part of the stream ecosystem. Habitat quality within the mainstem river channels in the historical range of the Arkansas River shiner is intrinsically related to the character of the floodplain and the associated tributaries, side channels, and backwater habitats that contribute to the key habitat features (*e.g.*, substrate, water quality, and water quantity) in these reaches. Among other things, the floodplain provides space for natural flooding patterns and latitude for necessary natural channel adjustments to maintain appropriate channel morphology and geometry. A relatively intact riparian zone, along with periodic flooding in a relatively natural pattern, are important in maintaining the stream conditions necessary for long-term survival and recovery of the Arkansas River shiner.

Human activities that occur outside the river channel can have a demonstrable effect on physical and biological features of aquatic habitats. However, not all of the activities that occur within a floodplain will have an adverse impact on the Arkansas River shiner or its habitat. Thus, in determining the lateral extent of critical habitat along riverine systems, we must

consider the definition of critical habitat under the Act. That is, critical habitat must contain the elements essential to a species' conservation and must be in need of special management considerations or protection. We see no need for special management considerations or protection for the entire floodplain, and we are not proposing to designate the whole floodplain as critical habitat. However, conservation of the river channel alone is not sufficient to ensure the survival and recovery of the Arkansas River shiner. We believe the riparian corridors adjacent to the river channel provide a reasonable lateral extent for critical habitat designation.

Riparian areas are seasonally flooded habitats (*i.e.*, wetlands) that are major contributors to a variety of vital functions within the associated stream channel (Federal Interagency Stream Restoration Working Group 1998, Brinson *et al.* 1981). They are responsible for energy and nutrient cycling, filtering runoff, absorbing and gradually releasing floodwaters, recharging groundwater, maintaining streamflows, protecting stream banks from erosion, and providing shade and cover for fish and other aquatic species. Healthy riparian corridors help ensure water courses maintain the primary constituent elements essential to stream fishes, including the Arkansas River shiner.

The lateral extent (width) of riparian corridors fluctuates considerably between a stream's headwaters and its mouth. The appropriate width for riparian buffer strips has been the subject of several studies (Castelle *et al.* 1994). Most Federal and State agencies generally consider a zone 23–46 meters (m) (75.4–150.9 feet (ft)) wide on each side of a stream to be adequate (NRCS 1998, Moring *et al.* 1993, Lynch *et al.* 1985), although buffer widths as wide as 152 m (500 ft) have been recommended for achieving flood attenuation benefits (Corps 1999). In most instances, however, riparian buffer zones are primarily intended to reduce detrimental impacts to the stream from sources outside the river channel. Consequently, a buffer width of 23–46 m (75.4–150.9 ft) may be inadequate to preserve the natural processes that provide Arkansas River shiner constituent elements.

Generally, we consider a lateral distance of 91.4 m (300 ft) on each side of the stream beyond the bankfull width to be an appropriate riparian corridor width for the preservation of Arkansas River shiner constituent elements. The bankfull width is the width of the stream or river at bankfull discharge,

*i.e.*, the flow at which water begins to leave the channel and move into the floodplain (Rosgen 1996); this activity generally occurs every 1 to 2 years (Leopold *et al.* 1992). Bankfull discharge, while a function of the size of the stream, is a fairly consistent feature related to the formation, maintenance, and dimensions of the stream channel (Rosgen 1996).

#### Primary Constituent Elements

In identifying areas as critical habitat, 50 CFR 424.12 provides that we consider those physical and biological features that are essential to conservation of the species and that may require special management considerations or protection. These physical and biological features, as outlined in 50 CFR 424.12, include, but are not limited to, the following:

- Space for individual and population growth, and for normal behavior;

- Food, water, or other nutritional or physiological requirements;

- Cover or shelter;

- Sites for breeding, reproduction, or rearing of offspring; and

- Habitats that are protected from disturbance or are representative of the historical geographical and ecological distributions of a species.

The important habitat features that provide for the physiological, behavioral, and ecological requirements of the Arkansas River shiner include adequate spawning flows; habitat for food organisms; appropriate water quality; a natural flow regime; rearing and juvenile habitat appropriate for growth and development to adulthood; and flows sufficient to allow Arkansas River shiner to recolonize upstream habitats. Given the large geographic range the species historically occupied, and the diverse habitats used by the various life-history stages, describing specific values or conditions for each of these habitat features is not always possible. However, the following discussion summarizes the biological requirements of the Arkansas River shiner relevant to identifying the primary constituent elements of its critical habitat.

The Arkansas River shiner historically inhabited the main channels of wide, shallow, sandy-bottomed rivers and larger streams of the Arkansas River basin (Gilbert 1980). Adults are uncommon in quiet pools or backwaters lacking streamflow, and almost never occurred in habitats having deep water and bottoms of mud or stone (Cross 1967). Cross (1967) believed that adults prefer to orient into the current on the "lee" sides of large transverse sand

ridges and prey upon food organisms washed downstream in the current.

The Arkansas River shiner is believed to be a generalized forager and feeds upon both items suspended in the water column and items lying on the substrate (Jimenez 1999, Bonner *et al.* 1997). In the South Canadian River of central OK, Polivka and Matthews (1997) found that gut contents were dominated by sand/sediment and detritus (decaying organic material) with invertebrate prey being an incidental component of the diet. In the Canadian River of NM and TX, the diet of Arkansas River shiner was dominated by detritus, invertebrates, grass seeds, and sand and silt (Jimenez 1999). Invertebrates were the most important food item, followed by detrital material.

Terrestrial and semiaquatic invertebrates were consumed at higher levels than were aquatic invertebrates (Jimenez 1999). With the exception of the winter season, when larval flies were consumed much more frequently than other aquatic invertebrates, no particular invertebrate taxa dominated the diet (Bonner *et al.* 1997). Fly larvae, copepods, immature mayflies, insect eggs, and seeds were the dominant items in the diet of the nonnative population of the Arkansas River shiner inhabiting the Pecos River in NM (Keith Gido, University of Oklahoma, *in litt.* 1997).

Most plains streams are highly variable environments. Water temperatures, flow regimes, and overall physicochemical conditions (*e.g.*, quantity of dissolved oxygen) typically fluctuate so drastically that fishes native to these systems often exhibit life-history strategies and microhabitat preferences that enable them to cope with these conditions. Matthews (1987) classified several species of fishes, including the Arkansas River shiner, based on their tolerance for adverse conditions and selectivity for physicochemical gradients. The Arkansas River shiner was described as having a high thermal and oxygen tolerance, indicating a high capacity to tolerate elevated temperatures and low dissolved oxygen concentrations (Matthews 1987). Observations from the Canadian River in NM and TX revealed that dissolved oxygen concentrations, conductivity, and pH rarely influenced habitat selection by the Arkansas River shiner (Wilde *et al.* 2000). Arkansas River shiners were collected over a wide range of conditions—water temperatures from 0.4 to 36.8 °Celsius (32.7 to 98.2 °Fahrenheit), dissolved oxygen from 3.4 to 16.3 parts per million, conductivity from 0.7 to 14.4 millisiemens per centimeter, and pH from 5.6 to 9.0.

In the South Canadian River of central OK, Polivka and Matthews (1997) found that Arkansas River shiner exhibited only a weak relationship between the environmental variables they measured and the occurrence of the species within the stream channel. Water depth, current, dissolved oxygen, and sand ridge and midchannel habitats were the environmental variables most strongly associated with the distribution of Arkansas River shiner within the channel. Similarly, microhabitat selection by Arkansas River shiner in the Canadian River of NM and TX was influenced by water depth, current velocity, and, to a lesser extent, water temperature (Wilde *et al.* 2000). Arkansas River shiners generally occurred at mean water depths between 17 and 21 centimeters (6.6–8.3 in.) and current velocities between 30 and 42 centimeters (11.7 and 16.4 in.) per second. Juvenile Arkansas River shiner associated most strongly with current, conductivity (total dissolved solids), and backwater and island habitat types (Polivka and Matthews 1997).

Wilde *et al.* (2000) found no obvious selection for or avoidance of any particular habitat type (*i.e.*, main channel, side channel, backwaters, and pools) by Arkansas River shiner. Arkansas River shiners did tend to select side channels and backwaters slightly more than expected based on the availability of these habitats (Wilde *et al.* 2000). Likewise, they appeared to make no obvious selection for or avoidance of any particular substrate type. Substrates in the Canadian River in NM and TX were predominantly sand; however, Arkansas River shiner were observed to occur over silt slightly more than expected based on the availability of this substrate (Wilde *et al.* 2000).

Successful reproduction by Arkansas River shiner appears to be strongly correlated with streamflow. Moore (1944) believed the Arkansas River shiner spawned in July, usually coinciding with elevated flows following heavy rains associated with summertime thunderstorms. Bestgen *et al.* (1989) found that spawning in the nonnative population of Arkansas River shiner in the Pecos River of New Mexico generally occurred in conjunction with releases from Sumner Reservoir. However, recent studies by Polivka and Matthews (1997) and Wilde *et al.* (2000) neither confirmed nor rejected the hypothesis that elevated streamflow triggered spawning in the Arkansas River shiner.

Arkansas River shiners are open-water, broadcast spawners that release their eggs and sperm over an

unprepared substrate (Platania and Altenbach 1998, Johnston 1999). Examination of Arkansas River shiner gonadal development between 1996 and 1998 in the Canadian River of NM and TX demonstrated that the species undergoes multiple, asynchronous (not happening at the same time) spawns in a single season (Wilde *et al.* 2000). The Arkansas River shiner appears to be in peak reproductive condition throughout the months of May, June, and July (Wilde *et al.* 2000, Polivka and Matthews 1997); however, spawning may occur as early as April and as late as September. Arkansas River shiners may, on occasion, spawn in standing waters (Wilde *et al.* 2000), but it is unlikely that such events are successful.

Both Moore (1944) and Platania and Altenbach (1998) described egg behavior in the Arkansas River shiner. The fertilized eggs are nonadhesive and semibuoyant. Platania and Altenbach (1998) found that spawned eggs settled to the bottom of the aquaria where they quickly absorbed water and expanded. Upon absorbing water, the eggs became more buoyant, rose with the water current, and remained in suspension. The eggs would sink when water current was not maintained in the aquaria. This led Platania and Altenbach (1998) to conclude that the Arkansas River shiner and other plains fishes likely spawn in the upper to mid-water column during elevated flows. Spawning under these conditions would allow the eggs to remain suspended during the 10- to 30-minute period the eggs were non-buoyant. Once the egg became buoyant, it would remain suspended in the water column as long as current was present.

In the absence of sufficient streamflows, the eggs would likely settle to the channel bottom, where silt and shifting substrates would smother the eggs, hindering oxygen uptake and causing mortality of the embryos. Spawning during elevated flows appears to be an adaptation that likely increases survival of the embryo and facilitates dispersal of the young. Assuming a conservative drift rate of 3 km/hour, Platania and Altenbach (1998) estimated that the fertilized eggs could be transported 72–144 km (45–89 mi) before hatching. Developing larvae would then be transported an additional 216 km (134 mi). Bonner and Wilde (2000) speculate that 218 km (135 mi) may be the minimum length of unimpounded river that allows for the successful completion of the life-history for the Arkansas River shiner, based on their observations in the Canadian River in New Mexico and Texas.

Rapid hatching and development of the young is likely another adaptation in plains fishes that enhances survival in the harsh environments of plains streams. Arkansas River shiner eggs hatch in 24–48 hours after spawning, depending upon water temperature (Moore 1944, Platania and Altenbach 1998). The larvae are capable of swimming within 3–4 days; they then seek out low-velocity habitats, such as backwater pools and quiet water at the mouths of tributaries where food is more abundant (Moore 1944).

Evidence from Wilde *et al.* (2000) indirectly supports the speculation by Cross *et al.* (1985) that the Arkansas River shiner initiate an upstream spawning migration. Whether this represents a true spawning migration or just a general tendency in these fish to orient into the current and move upstream, perhaps in search of more favorable environmental conditions, is unknown (Wilde *et al.* 2000). Regardless, strong evidence suggested the presence of a directed, upstream movement by the Arkansas River shiner over the course of a year.

As previously discussed, introductions of nonindigenous species can have a significant adverse impact on Arkansas River shiner populations under certain conditions. The morphological characteristics, population size, and ecological preferences exhibited by the Red River shiner, a species endemic to the Red River drainage, suggest that it competes with the Arkansas River shiner for food and other essential life requisites (Cross *et al.* 1983, Felley and Cothran 1981). Since its introduction, the Red River shiner has colonized much of the Cimarron River and frequently may be a dominant component of the fish community (Cross *et al.* 1983, Felley and Cothran 1981). The intentional or unintentional release of Red River shiners, or other potential competitors, into other reaches of the Arkansas River drainage by anglers or the commercial bait industry is a potentially serious threat that could drastically alter habitat quality in these reaches.

We determined the primary constituent elements for Arkansas River shiner from studies on their habitat requirements and population biology, as outlined above. These primary constituent elements are the following:

1. A natural, unregulated hydrologic regime complete with episodes of flood and drought or, if flows are modified or regulated, a hydrologic regime characterized by the duration, magnitude, and frequency of flow events capable of forming and maintaining channel and instream



habitat necessary for particular Arkansas River shiner life-stages in appropriate seasons;

2. A complex, braided channel with pool, riffle (shallow area in a streambed causing ripples), run, and backwater components that provide a suitable variety of depths and current velocities in appropriate seasons;

3. A suitable unimpounded stretch of flowing water of sufficient length to allow hatching and development of the larvae;

4. Substrates of predominantly sand, with some patches of silt, gravel, and cobble;

5. Water quality characterized by low concentrations of contaminants and natural, daily and seasonally variable temperature, turbidity, conductivity, dissolved oxygen, and pH;

6. Abundant terrestrial, semiaquatic, and aquatic invertebrate food base; and

7. Few or no predatory or competitive nonnative species present.

The areas we are proposing for designation as critical habitat for Arkansas River shiner provide the above primary constituent elements or will be capable, with restoration, of providing them. All of the proposed areas require special management considerations or protection to ensure their contribution to the species' recovery.

#### *Land Ownership*

The vast majority (about 98 percent) of proposed critical habitat is in private ownership, with relatively small, scattered tracts of State, and Federal lands. Private lands are primarily used for grazing and agriculture, but also include towns, small-lot residences, and industrial areas. A general description of land ownership in each complex follows:

1a. Canadian River—This reach is predominantly in private ownership. The State of New Mexico owns scattered tracts. The reach in Texas is in private ownership, except for a small segment that is owned by the National Park Service as part of the Lake Meredith National Recreation Area.

1b. Canadian/South Canadian River—This reach is predominantly in private ownership, with limited areas of State and tribal ownership. The Texas Parks and Wildlife Department owns a small segment downstream of the town of Canadian, TX (Gene Howe Wildlife Management Area (WMA)). The Oklahoma Department of Wildlife Conservation owns a small section near Roll, OK (Packsaddle WMA). Small tracts of tribal lands are near Oklahoma City.

2. Beaver/North Canadian River—The ownership is predominantly private,

with limited areas of State-owned lands. The Oklahoma Department of Wildlife Conservation owns small sections near Beaver, OK (Beaver River WMA) and near Fort Supply, OK (Cooper WMA). The Oklahoma Department of Parks and Tourism owns a small section near Woodward, OK (Boiling Springs State Park).

3. Cimarron River—Land here is entirely in private ownership.

4. Arkansas River—This area is entirely in private ownership except for a small area near the Kansas/Oklahoma State line owned by the U.S. Army Corps of Engineers (Kaw Wildlife Area). This area is managed by the State of Kansas (Kansas Department of Wildlife and Parks).

#### *Effect of Critical Habitat Designation*

Section 7(a) of the Act requires Federal agencies to ensure that actions they fund, authorize, or carry out do not destroy or adversely modify critical habitat to the extent that the action appreciably diminishes the value of the critical habitat for the survival and recovery of the species. Individuals, organizations, States, local and tribal governments, and other non-Federal entities are affected by the designation of critical habitat only if their actions occur on Federal lands, require a Federal permit, license, or other authorization, or involve Federal funding. Thus, activities on Federal lands that may affect the Arkansas River shiner or its critical habitat, if designated, will require section 7 consultation. Actions on private or State lands receiving funding or requiring a permit from a Federal agency also will be subject to the section 7 consultation process if the action may affect critical habitat. Federal actions not affecting the species or its critical habitat, as well as actions on non-Federal lands that are not federally funded or permitted, will not require section 7 consultation.

Federal agencies are required to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened and with respect to its proposed or designated critical habitat. Regulations implementing these interagency cooperation provisions of the Act are codified at 50 CFR part 402. Section 7(a)(4) of the Act and regulations at 50 CFR 402.10 require Federal agencies to confer with us on any action that is likely to jeopardize the continued existence of a proposed species or to result in destruction or adverse modification of proposed critical habitat. A section 7 conference on proposed critical habitat results in a report that may provide conservation

recommendations to assist the action agency in eliminating or minimizing adverse effects to the proposed critical habitat that may be caused by the proposed agency action. The conservation recommendations in a conference report are advisory. We may issue a formal conference report, if requested by a Federal agency. Formal conference reports on proposed critical habitat contain a conference opinion as to whether the proposed action is likely to destroy or adversely modify proposed critical habitat. This biological opinion is prepared as if critical habitat were designated as final, in accordance with 50 CFR 402.13.

If we subsequently finalize the proposed critical habitat designation, then section 7(a)(2) will require Federal agencies to enter into consultation with us on agency actions that may affect critical habitat. Consultations on agency actions that will likely adversely affect critical habitat will result in issuance of a biological opinion. We may adopt a formal conference report as the biological opinion if no significant new information or changes in the action alter the content of the opinion (see 50 CFR 402.10(d)).

If we find a proposed agency action is likely to destroy or adversely modify the critical habitat, our biological opinion may include reasonable and prudent alternatives to the action that are designed to avoid destruction or adverse modification of critical habitat. Reasonable and prudent alternatives are defined at 50 CFR 402.02 as alternative actions that can be implemented in a manner consistent with the intended purpose of the action, that are consistent with the scope of the Federal agency's legal authority and jurisdiction, that are economically and technologically feasible, and that we believe would avoid destruction or adverse modification of critical habitat. Reasonable and prudent alternatives can vary from slight project modifications to extensive redesign or relocation of the project. Costs associated with implementing a reasonable and prudent alternative vary accordingly.

Regulations at 50 CFR 402.16 also require Federal agencies to reinstate consultation in instances where we have already reviewed an action for its effects on a listed species if critical habitat is subsequently designated and the Federal agency has retained discretionary involvement or control over the action or such discretionary involvement or control is authorized by law. Consequently, some Federal agencies may request reinitiation of consultation if their actions may affect designated critical habitat, or

conferencing with us on actions likely to destroy or adversely modify proposed critical habitat.

Section 4(b)(8) of the Act requires us to describe in any proposed or final regulation that designates critical habitat, a description and evaluation of those activities involving a Federal action that may adversely modify such habitat or that may be affected by such designation. A wide range of Federal activities have the potential to destroy or adversely modify critical habitat for the Arkansas River shiner. These activities may include land and water management actions of Federal agencies (e.g., U.S. Army Corps of Engineers, Natural Resources Conservation Service, Bureau of Reclamation, and the Bureau of Indian Affairs) and related or similar actions of other federally regulated projects (e.g., road and bridge construction activities by the Federal Highway Administration; dredge and fill projects, sand and gravel mining, and bank stabilization activities conducted or authorized by the U.S. Army Corps of Engineers; and, National Pollutant Discharge Elimination System permits authorized by the Environmental Protection Agency). Specifically, activities that may destroy or adversely modify critical habitat are those that alter the primary constituent elements (defined above) to an extent that the value of critical habitat for both the survival and recovery of the Arkansas River shiner is appreciably reduced. Such activities include, but are not limited to:

(1) Significantly and detrimentally altering the minimum flow or the natural flow regime of any of the designated stream segments. Possible actions would include groundwater pumping, impoundment, water diversion, and hydropower generation. We note that such flow reductions that result from actions affecting tributaries of the proposed stream reaches may also destroy or adversely modify critical habitat.

(2) Significantly and detrimentally altering the characteristics of the riparian zone in any of the designated stream segments. Possible actions would include vegetation manipulation, timber harvest, road construction and maintenance, prescribed fire, livestock grazing, off-road vehicle use, powerline or pipeline construction and repair, mining, and urban and suburban development.

(3) Significantly and detrimentally altering the channel morphology of any of the stream segments listed above. Possible actions would include channelization, impoundment, road and bridge construction, deprivation of

substrate source, destruction and alteration of riparian vegetation, reduction of available floodplain, removal of gravel or floodplain terrace materials, reduction in stream flow, and excessive sedimentation from mining, livestock grazing, road construction, timber harvest, off-road vehicle use, and other watershed and floodplain disturbances.

(4) Significantly and detrimentally altering the water chemistry in any of the designated stream segments. Possible actions would include release of chemical or biological pollutants into the surface water or connected groundwater at a point source or by dispersed release (non-point).

(5) Introducing, spreading, or augmenting nonnative aquatic species in any of the designated stream segments. Possible actions would include fish stocking for sport, aesthetics, biological control, or other purposes; use of live bait fish; aquaculture; construction and operation of canals; and interbasin water transfers.

Not all of the identified activities are necessarily of current concern within the Arkansas River basin; however, they do indicate the potential types of activities that will require consultation in the future and, therefore, that may be affected by critical habitat designation. We do not expect that designation of critical habitat in areas occupied by the Arkansas River shiner will result in a regulatory burden above that already in place, due to the presence of the listed species. However, areas designated as critical habitat that are not currently occupied by the species may require protections similar to those provided to occupied areas under past consultations.

As discussed previously, Federal actions that are found likely to destroy or adversely modify critical habitat may often be modified, through development of reasonable and prudent alternatives, in ways that will remove the likelihood of destruction or adverse modification of critical habitat. Such project modifications may include such things as adjustment in timing of projects to avoid sensitive periods for the species and its habitat; replanting of riparian vegetation; minimization of work and vehicle use in the wetted channel; restriction of riparian and upland vegetation clearing; fencing to exclude livestock and limit recreational use; use of alternative livestock management techniques; avoidance of pollution; minimization of ground disturbance in the floodplain; use of alternative material sources; storage of equipment and staging of operations outside the floodplain; use of sediment barriers;

access restrictions; and use of best management practices to minimize erosion.

If you have questions regarding whether specific activities will likely constitute destruction or adverse modification of critical habitat, contact the Field Supervisor, Oklahoma Ecological Services Office (see **ADDRESSES** section). Requests for copies of the regulations on listed wildlife and inquiries about prohibitions and permits may be addressed to the U.S. Fish and Wildlife Service, Division of Endangered Species, P.O. Box 1306, Albuquerque, New Mexico 87103 (telephone 505-248-6920; facsimile 505-248-6788).

We are in the process of developing a recovery plan for the Arkansas River Basin population of the Arkansas River shiner. The recovery plan, when finalized, will provide recommendations on recovering this species, including recommendations on management of its critical habitat. Further, should the recovery plan recommend adding or deleting areas as critical habitat, we will consider whether a future revision of critical habitat is appropriate.

#### Economic Analysis

Section 4(b)(2) of the Act requires that we designate critical habitat on the basis of the best scientific and commercial information available and that we consider the economic and other relevant impacts of designating a particular area as critical habitat. The economic impacts to be considered in a critical habitat designation are the incremental effects of the designation over and above the economic impacts attributable to listing of the species. In general, these incremental impacts are more likely to result from management activities in areas outside the present distribution of the listed species.

We may exclude areas from critical habitat upon a determination that the benefits of such exclusions outweigh the benefits of specifying those areas as critical habitat; however, we cannot exclude areas from critical habitat when the exclusion will result in the extinction of the species. A draft economic analysis will be available for public review and comment (see **ADDRESSES** section). We will utilize the economic analysis, and take into consideration all comments and information submitted during the public hearing and comment period, to determine whether areas should be excluded from the final critical habitat designation.

### American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act

In accordance with the Presidential Memorandum of April 29, 1994, we believe that, to the maximum extent possible, tribes should be the governmental entities to manage their lands and tribal trust resources. To this end, we support tribal measures that preclude the need for conservation regulations, and we provide technical assistance to Indian tribes who wish assistance in developing and expanding tribal programs for the management of healthy ecosystems so that Federal conservation regulations, such as designation of critical habitat, on tribal lands are unnecessary.

The Presidential Memorandum of April 29, 1994, also requires us to consult with the tribes on matters that affect them, and section 4(b)(2) of the Act requires us to gather information regarding the designation of critical habitat and the effects thereof from all relevant sources, including the tribes. Recognizing a government-to-government relationship with tribes and our Federal trust responsibility, we consulted to the extent possible with the Indian tribes having tribal trust resources, tribally owned fee lands, or tribal rights that might be affected by the designation of critical habitat.

In our deliberations over this critical habitat proposal, we identified two categories of possible effects to tribes or tribal resources. These include: (1) Effects resulting from designation of critical habitat on Tribal lands; and (2) effects on tribal resources, such as water deliveries, resulting from designation of critical habitat on nontribal lands. We identified tribal lands belonging to the Choctaw and Chickasaw Nations as containing stream reaches that may be appropriate for designation of critical habitat. Additionally, several tribes may have lands located downstream from proposed critical habitat.

#### 1. Designation of Critical Habitat on Tribal Lands

We met with representatives of the Cherokee, Chickasaw, Creek, and Seminole Nations on April 6, 2000, to discuss the proposed designation. The Chickasaw and Choctaw Nations are the two tribes that have habitat for Arkansas River shiner on their lands. Given our obligations under the Presidential Memorandum, we are not proposing critical habitat on Tribal land. However, as provided under section 4(b)(2) of the Act, we are soliciting information during the comment period as to whether these areas should be

designated as critical habitat and will be continuing our discussions with the tribes to determine whether voluntary measures implemented by the tribes are adequate to achieve conservation of the Arkansas River shiner on tribal lands. We will consider this information in determining which, if any, tribal land should be included in the final designation as critical habitat for the Arkansas River shiner.

#### 2. Effects on Tribal Trust Resources From Critical Habitat Designation on Nontribal Lands

We do not anticipate that proposal of critical habitat on nontribal lands will result in any impact on tribal trust resources or the exercise of tribal rights. However, as stated above, some tribes may have lands located downstream from proposed critical habitat for the Arkansas River shiner.

In complying with our tribal trust responsibilities, we must communicate with all tribes potentially affected by the designation. Therefore, we are soliciting information during the comment period on potential effects to tribes or tribal resources that may result from critical habitat designation.

#### Public Comments Solicited

We intend for any final action resulting from this proposal to be as accurate and as effective as possible. Therefore, we are soliciting comments or suggestions from the public, other concerned governmental agencies, the scientific community, industry, or any other interested party concerning this proposed rule. We particularly seek comments concerning:

(1) The reasons why any habitat should or should not be determined to be critical habitat as provided by section 4 of the Act, including whether the benefits of excluding areas will outweigh the benefits of including areas as critical habitat;

(2) Specific information on the abundance of Arkansas River shiner and the amount and distribution of its habitat;

(3) Areas that are essential to the conservation of the species and that may require special management considerations or protection and why;

(4) Land use practices and current or planned activities in the subject areas and their possible impacts on proposed critical habitat;

(5) Any foreseeable economic or other impacts resulting from the proposed designation of critical habitat, in particular, any impacts on small entities or families; and

(6) Economic and other values associated with designating critical

habitat for the Arkansas River shiner, such as those derived from nonconsumptive uses (e.g., hiking, camping, birding, enhanced watershed protection, increased soil retention, "existence values," and reductions in administrative costs).

Executive Order 12866 requires each agency to write regulations and notices that are easy to understand. We invite your comments on how to make this proposed rule easier to understand including answers to questions such as the following—(1) Are the requirements in the document clearly stated? (2) Does the proposed rule contain technical language or jargon that interferes with the clarity? (3) Does the format of the proposed rule (grouping and order of sections, use of headings, paragraphing, etc.) aid or reduce its clarity? (4) Is the description of the proposed rule in the **SUPPLEMENTARY INFORMATION** section of the preamble helpful in understanding the document? (5) What else could we do to make the proposed rule easier to understand?

Our practice is to make comments that we receive on this rulemaking, including names and home addresses of respondents, available for public review during regular business hours. Individual respondents may request that we withhold their home address from the rulemaking record, which we will honor to the extent allowable by law. In some circumstances, we would withhold from the rulemaking record a respondent's identity, as allowable by law. If you wish for us to withhold your name and/or address, you must state this request prominently at the beginning of your comment. However, we will not consider anonymous comments. We will make all submissions from organizations or businesses, including the individuals identifying themselves as representatives or officials of organizations or businesses, available for public inspection in their entirety.

#### Peer Review

In accordance with our policy published on July 1, 1994 (59 FR 34270), we will seek the expert opinions of at least three appropriate and independent specialists regarding this proposed rule. The purpose of such review is to ensure listing decisions are based on scientifically sound data, assumptions, and analyses. We will send copies of this proposed rule immediately following publication in the **Federal Register** to these peer reviewers. We will invite these peer reviewers to comment, during the public comment period, on the specific assumptions and conclusions regarding

the proposed designation of critical habitat.

We will consider all comments and information received during the comment period on this proposed rule during preparation of a final rulemaking. Accordingly, the final decision may differ from this proposal.

#### Public Hearings

The Act provides for one or more public hearings on this proposal, if requested. Given the large geographic extent covered by this proposal, the high likelihood of multiple requests, and the need to publish a final determination by March 14, 2001, we have scheduled three public hearings (see **DATES** and **ADDRESSES** sections).

Written comments submitted during the comment period receive equal consideration with those comments presented at a public hearing.

#### Required Determinations

##### Regulatory Planning and Review

In accordance with the criteria in Executive Order 12866, this rule is a significant regulatory action and has been reviewed by the Office of Management and Budget (OMB). We will prepare a draft economic analysis of this proposed action to determine the economic consequences of designating the specific areas as critical habitat. The draft economic analysis will be available for public review and comment.

(a) This rule will not have an annual economic effect of \$100 million or adversely affect an economic sector, productivity, jobs, the environment, or other units of government. A cost-benefit analysis is not required for purposes of Executive Order 12866. The Arkansas River shiner was listed as a threatened species in 1998. Currently,

we have not conducted any formal section 7 consultation with other Federal agencies to ensure that their actions would not jeopardize the continued existence of the Arkansas River shiner.

Under the Act, critical habitat may not be adversely modified by a Federal agency action; critical habitat does not impose any restrictions on non-Federal persons unless they are conducting activities funded or otherwise sponsored or permitted by a Federal agency (see Table 2 below). Section 7 requires Federal agencies to ensure that they do not jeopardize the continued existence of the species. Based upon our experience with the species and its needs, we conclude that any Federal action or authorized action that could potentially cause an adverse modification of the proposed critical habitat would currently be considered as "jeopardy" to the species under the Act. Accordingly, the designation of currently occupied areas as critical habitat does not have any incremental impacts on what actions may or may not be conducted by Federal agencies or non-Federal persons that receive Federal authorization or funding. Non-Federal persons who do not have a Federal "sponsorship" of their actions are not restricted by the designation of critical habitat (however, they continue to be bound by the provisions of the Act concerning "take" of the species).

Designation of unoccupied areas as critical habitat may have impacts on what actions may or may not be conducted by Federal agencies or non-Federal persons that receive Federal authorization or funding. We will evaluate this impact through our economic analysis (under section 4 of the Act; see Economic Analysis section of this rule).

(b) This rule will not create inconsistencies with other agencies' actions. Federal agencies have been required to ensure that their actions do not jeopardize the continued existence of the Arkansas River shiner since its listing in 1998. The prohibition against adverse modification of critical habitat is not expected to impose any additional restrictions to those that currently exist in occupied areas of proposed critical habitat. Additional restrictions may be imposed in unoccupied areas proposed as critical habitat; we will evaluate this possibility through our economic analysis under section 4 of the Act. Because of the potential for impacts on other Federal agency activities, we will continue to review this proposed action for any inconsistencies with other Federal agency actions.

(c) The proposed rule, if made final, will not significantly impact entitlements, grants, user fees, loan programs, or the rights and obligations of their recipients. Federal agencies are currently required to ensure that their activities do not jeopardize the continued existence of the species, and, as discussed above, we do not anticipate that the adverse modification prohibition (resulting from critical habitat designation) will have any incremental effects in areas of occupied habitat. However, we will review the effects of this proposed action on Federal agencies or non-Federal persons that receive Federal authorization or funding in unoccupied critical habitat areas.

(d) This rule will not raise novel legal or policy issues. The proposed rule follows the requirements for determining critical habitat contained in the Endangered Species Act.

TABLE 2.—IMPACTS OF DESIGNATING CRITICAL HABITAT FOR ARKANSAS RIVER SHINER

Categories of activities	Activities potentially affected by the designation of critical habitat in areas occupied by the Species (in addition to those affected from listing the species)	Activities potentially affected by the designation of critical habitat in unoccupied areas
Federal activities potentially affected <sup>1</sup> .	None .....	Activities such as those affecting waters of the United States by the U.S. Army Corps of Engineers under section 404 or by the Environmental Protection Agency under section 402 of the Clean Water Act; natural gas/petroleum pipeline and hydropower development/licensing by the Federal Energy Regulatory Commission; construction of communication sites licensed by the Federal Communications Commission; road construction and maintenance, vegetation manipulation, right-of-way designation, regulation of agricultural activities, and other activities funded by any Federal agency.

TABLE 2.—IMPACTS OF DESIGNATING CRITICAL HABITAT FOR ARKANSAS RIVER SHINER—Continued

Categories of activities	Activities potentially affected by the designation of critical habitat in areas occupied by the Species (in addition to those affected from listing the species)	Activities potentially affected by the designation of critical habitat in unoccupied areas
Private or other non-Federal Activities Potentially Affected <sup>2</sup> .	None .....	Activities that require a Federal action (permit, authorization, or funding) and that involve such activities as removing or destroying Arkansas River shiner habitat (as defined in the primary constituent elements discussion), whether by mechanical, chemical, or other means (e.g., channelization, flood control, water diversions, etc.), including indirect effects (e.g., edge effects, invasion of exotic plants or animals, or fragmentation); and that appreciably decrease habitat value or quality.

<sup>1</sup> Activities initiated by a Federal agency.

<sup>2</sup> Activities initiated by a private or other non-Federal entity that may need Federal authorization or funding.

#### *Regulatory Flexibility Act (5 U.S.C. 601 et seq.)*

In the draft economic analysis, we will determine if designation of critical habitat will have a significant effect on a substantial number of small entities. As discussed under Regulatory Planning and Review above, this rule is not expected to result in any restrictions in addition to those currently in existence for areas of occupied critical habitat. However, for areas of unoccupied habitat, we will review the effects of this proposed action on small entities.

#### *Small Business Regulatory Enforcement Fairness Act (5 U.S.C. 804(2))*

In our draft economic analysis, we will determine whether designation of critical habitat will cause: (a) Any effect on the economy of \$100 million or more, (b) any increases in costs or prices for consumers; individual industries; Federal, State, or local government agencies; or geographic regions, or (c) any significant adverse effects on competition, employment, investment, productivity, innovation, or the ability of U.S.-based enterprises to compete with foreign-based enterprises. As discussed above, we anticipate that the designation of critical habitat will not have any additional effects on these activities in areas of critical habitat occupied by the species. However, we will review the effects of this proposed action as there may be additional effects in areas of unoccupied habitat.

#### *Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.)*

In accordance with the Unfunded Mandates Reform Act:

a. This rule will not “significantly or uniquely” affect small governments. A Small Government Agency Plan is not required. Small governments will be affected only to the extent that any programs involving Federal funds, permits, or other authorized activities

must ensure that their actions will not destroy or adversely modify critical habitat. However, as discussed above, these actions are currently subject to equivalent restrictions through the listing protections of the species, and no further restrictions are anticipated in areas of occupied proposed critical habitat. However, we will review the effects of this proposed action as there may be additional effects in areas of unoccupied habitat.

b. This rule will not produce a Federal mandate on State, local or tribal governments or the private sector of more than \$100 million or greater in any year, i.e., it is not a “significant regulatory action” under the Unfunded Mandates Reform Act. The designation of critical habitat imposes no obligations on State or local governments.

#### *Takings*

In accordance with Executive Order 12630, this rule does not have significant takings implications, and a takings implication assessment is not required. This proposed rule, if made final, will not “take” private property. The designation of critical habitat affects only Federal agency actions. The rule will not increase or decrease the current restrictions on private property concerning take of the Arkansas River shiner. Additionally, critical habitat designation does not preclude development of habitat conservation plans and issuance of incidental take permits. Landowners in areas that are included in the designated critical habitat will continue to have opportunity to utilize their property in ways consistent with the survival of the Arkansas River shiner.

#### *Federalism*

In accordance with Executive Order 13132, the rule does not have significant Federalism effects. A Federalism assessment is not required. The

designation of critical habitat in areas currently occupied by the Arkansas River basin population of the Arkansas River shiner imposes no additional restrictions to those currently in place, and therefore has little incremental impact on State and local governments and their activities.

In keeping with Department of the Interior policy, we requested information from and coordinated development of this critical habitat designation with appropriate State resource agencies in Kansas, New Mexico, Oklahoma, and Texas. We also utilized information on critical habitat submitted by the States during the listing of the Arkansas River shiner. We anticipate that the affected States will have representatives on our recovery team for this species. Consequently, we will continue to coordinate this and any future designation of critical habitat for the Arkansas River shiner with the appropriate State agencies.

#### *Civil Justice Reform*

In accordance with Executive Order 12988, the Department of the Interior's Office of the Solicitor determined that this rule does not unduly burden the judicial system and meets the requirements of sections 3(a) and 3(b)(2) of the Order. The Office of the Solicitor will review the final determination for this proposal. We will make every effort to ensure that the final determination contains no drafting errors, provides clear standards, simplifies procedures, reduces burden, and is clearly written such that litigation risk is minimized.

#### *Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)*

This rule does not contain any information collection requirements for which OMB approval under the Paperwork Reduction Act is required.

*National Environmental Policy Act*

Our position is that, outside the Tenth Circuit, we do not need to prepare environmental analyses as defined by the NEPA in connection with designating critical habitat under the Endangered Species Act of 1973, as amended. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244). This assertion was upheld in the courts of the Ninth Circuit (*Douglas County v. Babbitt*, 48 F.3d 1495 (9th Cir. Ore. 1995), *cert. denied* 116 S. Ct. 698 (1996)). However, when the range of the species includes States within the Tenth Circuit (the States of CO, KS, NE, NM, OK, UT, and WY), such as that of the Arkansas River shiner, pursuant to the Tenth Circuit ruling in *Catron County Board of Commissioners v. U.S. Fish and Wildlife Service*, 75 F.3d 1429 (10th Cir. 1996),

we undertake a NEPA analysis for critical habitat designation. Send your requests for copies of the draft environmental assessment for this proposal to the Oklahoma Ecological Services Office or visit our web site (see **ADDRESSES** section).

**References Cited**

A complete list of all references cited in this proposed rule is available upon request from the Oklahoma Ecological Services Office (see **ADDRESSES** section).

**Author**

The primary author of this notice is Ken Collins (see **ADDRESSES** section).

**List of Subjects in 50 CFR Part 17**

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

**Proposed Regulation Promulgation**

Accordingly, we propose to amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations 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. Amend § 17.11(h), by revising the entry for “shiner, Arkansas River” under “FISHES” 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, Arkansas River.	* <i>Notropis girardi</i> .	U.S.A. (AR, KS, NM, OK, TX).	* Arkansas River Basin (AR, KS, NM, OK, TX).	T	*	653 § 17.95(e)	* NA
*	*		*	*	*	*	*

3. Amend section 17.95(e) by adding critical habitat for the Arkansas River shiner (*Notropis girardi*) in the same alphabetical order as this species occurs in 17.11(h).

**§ 17.95 Critical habitat—fish and wildlife.**

\* \* \* \* \*

(e) Fishes.

\* \* \* \* \*

**Arkansas River Shiner (*Notropis Girardi*)**

1. Critical habitat is depicted for Barton, Clark, Comanche, Cowley, Edwards, Finney, Ford, Gray, Hamilton, Kearny, Kiowa, Meade, Pawnee, Reno, Rice, Sedgwick, Seward, and Sumner counties, Kansas; Quay County, New Mexico; Beaver, Blaine, Caddo, Canadian, Cleveland, Custer, Dewey, Ellis, Grady, Harper, Hughes, Major, McClain, McIntosh, Pittsburg, Pontotoc, Pottawatomie, Roger Mills, Seminole, Texas, Woods and Woodward counties, Oklahoma; and Hemphill, Oldham, and

Potter counties, Texas on the maps and as described below.

2. Critical habitat includes the stream channels within the identified stream reaches indicated on the maps below, and includes a lateral distance of 91.4 m (300 ft) on each side of the stream width at bankfull discharge. Bankfull discharge is the flow at which water begins to leave the channel and move into the floodplain (Rosgen 1996) and generally occurs with a frequency of every 1 to 2 years (Leopold *et al.* 1992).

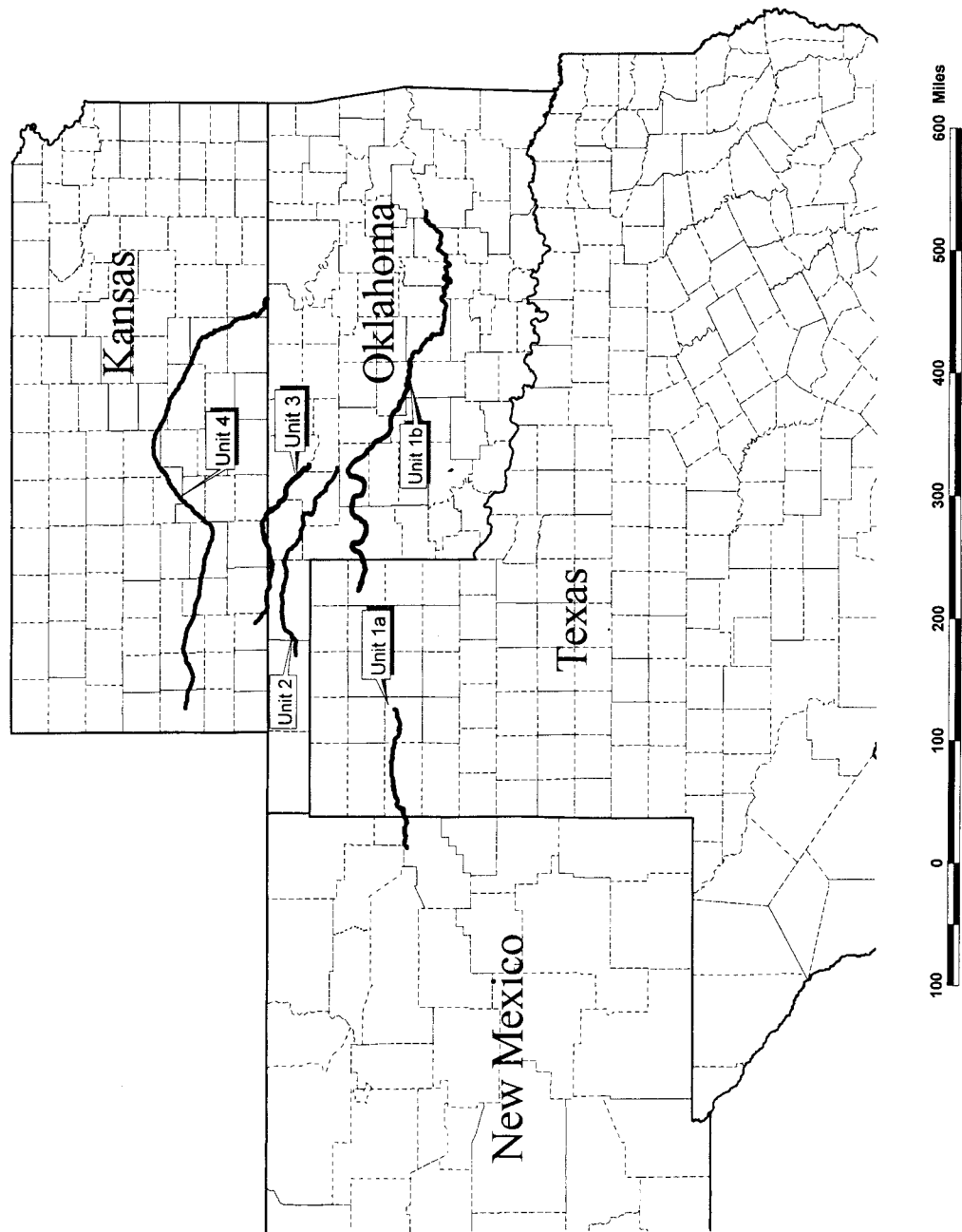
3. Within these areas, the primary constituent elements include, but are not limited to, those habitat components that are essential for the primary biological needs of foraging, sheltering, and reproduction. These elements include the following—(1) a natural, unregulated hydrologic regime complete with episodes of flood and drought or, if flows are modified or regulated, a hydrologic regime characterized by the duration, magnitude, and frequency of flow events capable of forming and

maintaining channel and instream habitat necessary for particular Arkansas River shiner life-stages in appropriate seasons; (2) a complex, braided channel with pool, riffle, run, and backwater components that provide a suitable variety of depths and current velocities in appropriate seasons; (3) a suitable unimpounded stretch of flowing water of sufficient length to allow hatching and development of the larvae; (4) substrates of predominantly sand, with some patches of gravel and cobble; (5) water quality characterized by low concentrations of contaminants and natural, daily and seasonally variable temperature, turbidity, conductivity, dissolved oxygen, and pH; (6) abundant terrestrial, semiaquatic, and aquatic invertebrate food base; and (7) few or no predatory or competitive nonnative species present.

4. Kansas (Sixth Principal Meridian (SPM)), New Mexico (New Mexico Principal Meridian (NMPM)), Oklahoma (Cimarron Meridian (CM) and Indian

Meridian (IM)), and Texas (geographic coordinates): Areas of land and water as follows (physical features were	identified using USGS 7.5' quadrangle maps; river reach distances were derived from digital data obtained from	USGS National Atlas data set for river reaches, roads, and county boundaries. <b>BILLING CODE 4310-55-P</b>
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Map 1. General locations of the 5 units of proposed critical habitat for the Arkansas River Shiner.

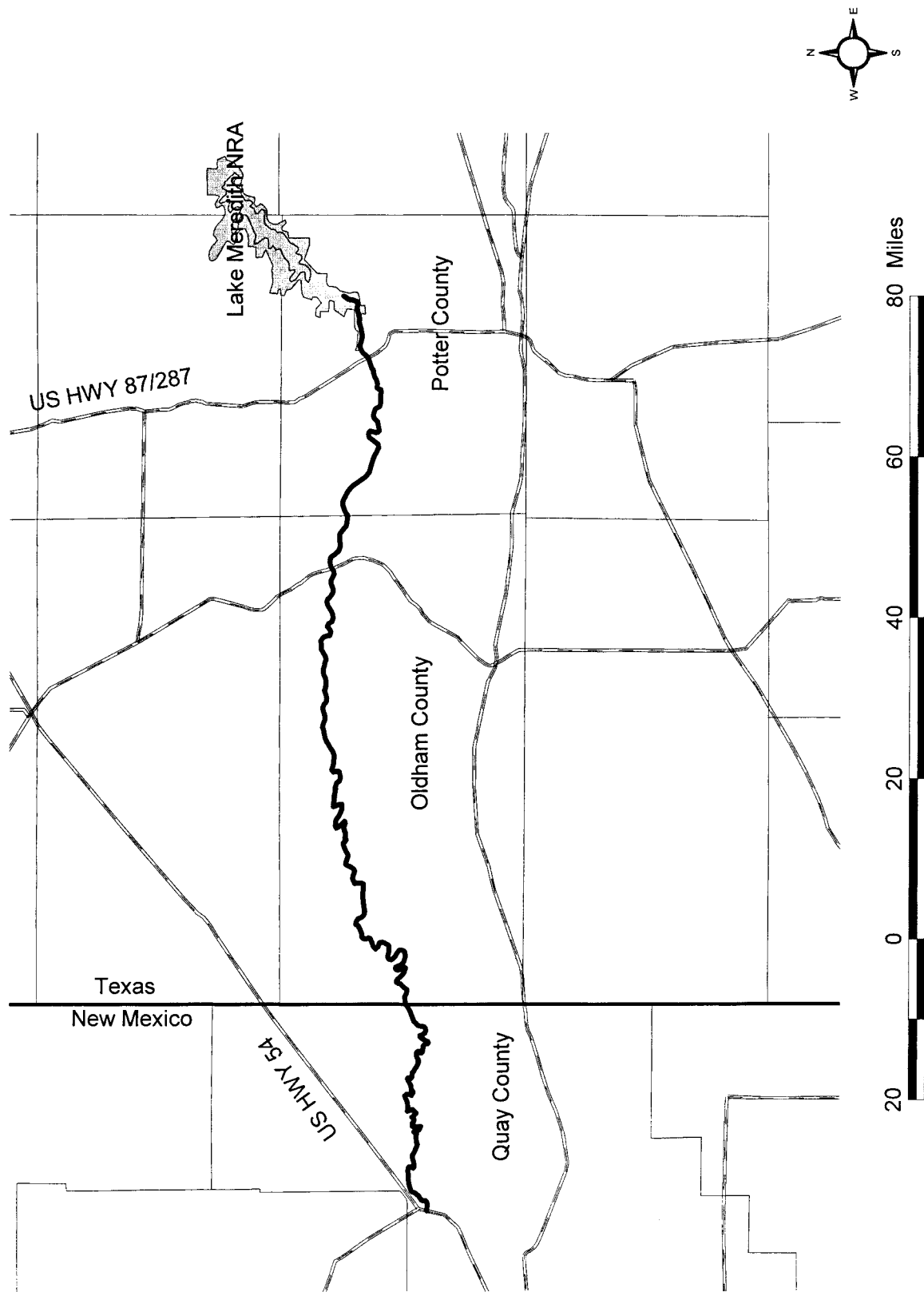




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[Arkansas River Shiner Map 1, General Map]	<b>Arkansas River Shiner (<i>Notropis Girardi</i>)</b> Reach 1. Canadian/South Canadian River, New Mexico, Texas, and Oklahoma. a. Canadian River-approximately 215 km (134 mi) from U.S. Highway 54	bridge near Logan, Quay County, New Mexico (NMPM, T.13N., R.33E., NW¼ Sec. 14) downstream to the confluence with Coetas Creek, Potter County, Texas (35°27'53" N, 101°52'46" W).
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## Unit 1a - Canadian River in New Mexico and Texas

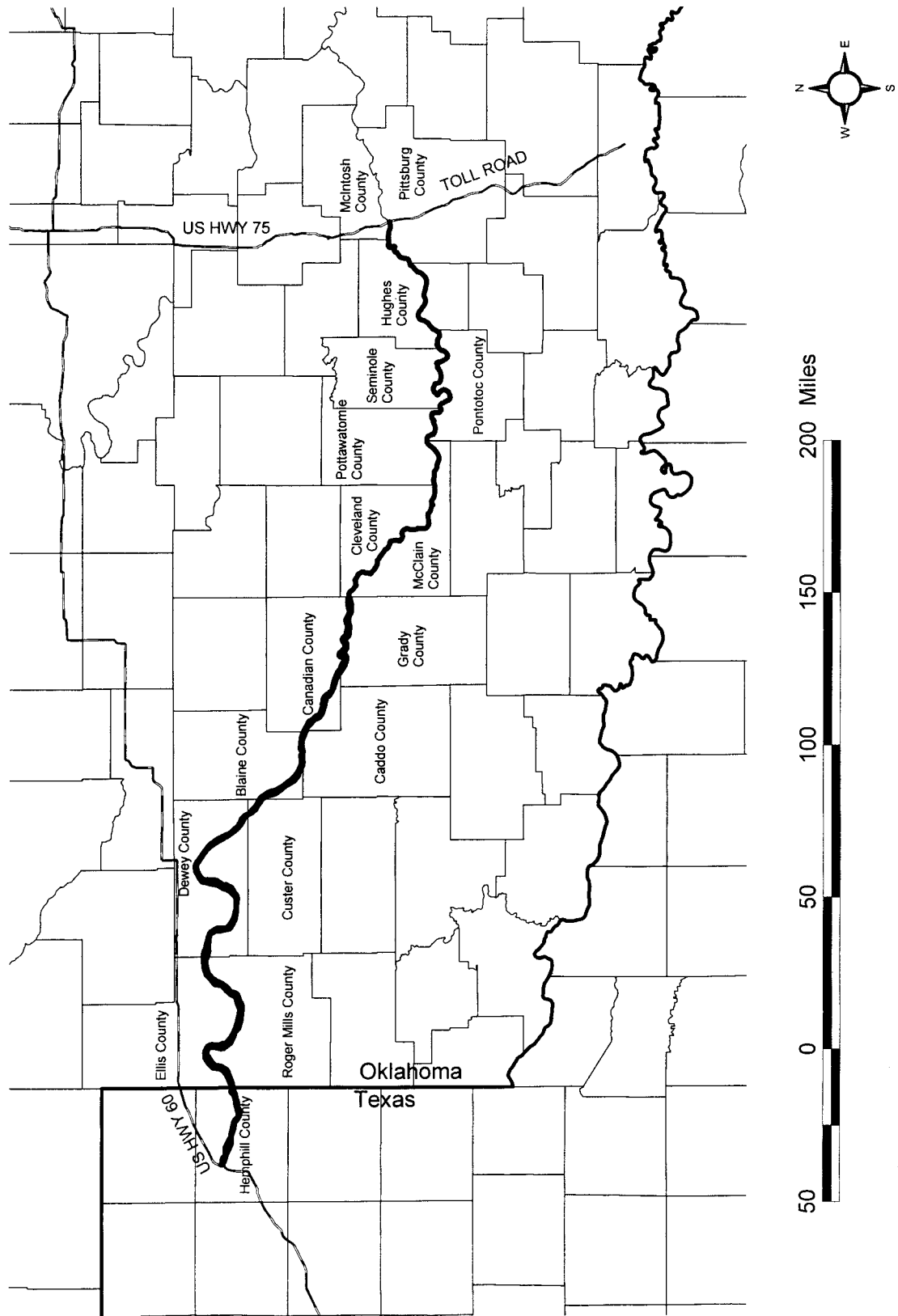


[Arkansas River Shiner Map 2, Unit  
1a]  
b. Canadian River—approximately  
593 km (368 mi), extending from U.S.

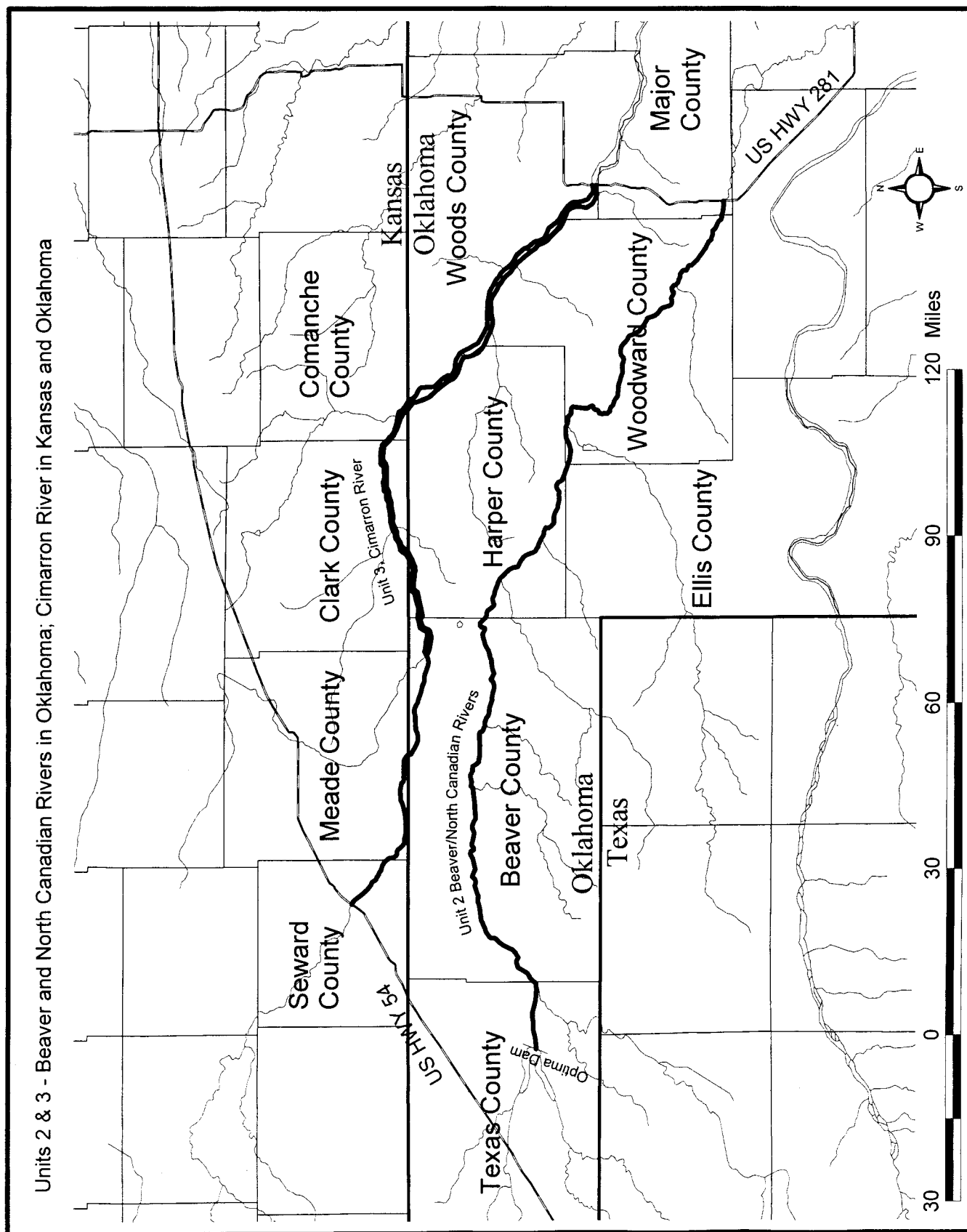
Highway 60/83 bridge near Canadian,  
County, Texas (35°56'02" N, 100°22'00"  
W) downstream to Indian Nation

Turnpike bridge northwest of  
McAlester, Oklahoma (IM T.8N., R.13E.,  
SE $\frac{1}{4}$  SW $\frac{1}{4}$  SE $\frac{1}{4}$  Sec. 23).

## Unit 1b - Canadian River/South Canadian River in Texas and Oklahoma



[Arkansas River Shiner Map 3, Unit 1b]	NW¼ SE¼ SE¼ Sec. 5) downstream to U.S. Highway 60/281 bridge in Major County, Oklahoma (IM, T.20N., R.16W., west boundary Sec. 28).	km (134 mi) of river extending from U.S. Highway 54 bridge in Seward County, Kansas (SPM, T. 33 S., R. 32 W., Sec. 25). downstream to U.S. Highway 281 bridge in Woods County, Oklahoma (IM, T.24N., R.16W., Sec. 35).
Reach 2. Beaver/North Canadian River, Texas, Beaver, Harper, Ellis, Woodward, and Major counties, Oklahoma—259 km (161 mi) of river extending from Optima Dam in Texas County, Oklahoma (CM,T.2N., R.18E.,	Reach 3. Cimarron River, Seward, Meade, Clark and Comanche counties, Kansas and Beaver, Harper, Woods, and Woodward, counties, Oklahoma—215	

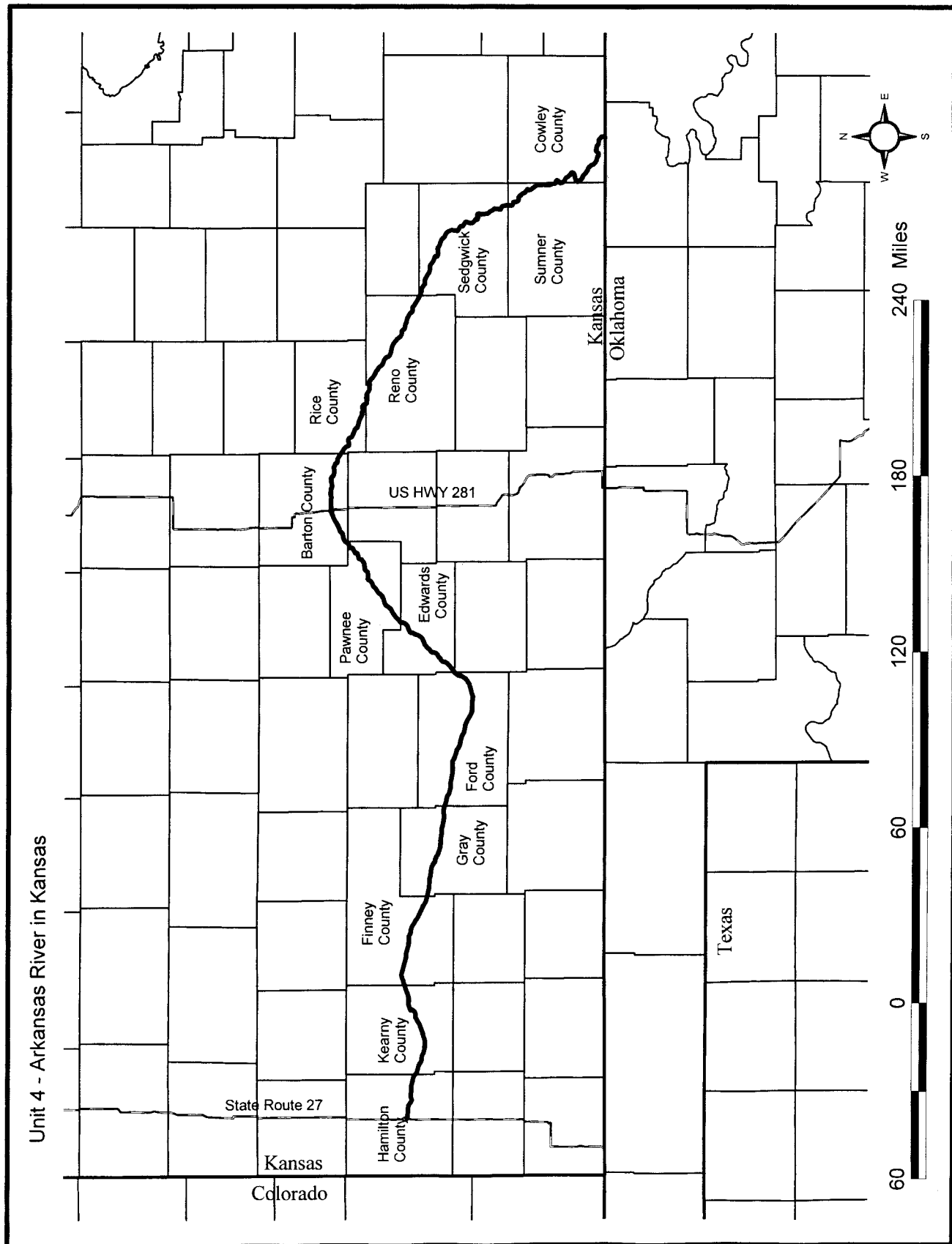


[Arkansas River Shiner Map 4, Units 2 and 3]

Reach 4. Arkansas River, Hamilton, Kearny, Finney, Gray, Ford, Edwards, Kiowa, Pawnee, Barton, Rice, Reno,

Sedgwick, Sumner, and Cowley counties, Kansas—584 km (363 mi) of river extending from Kansas State Highway 27 bridge in Hamilton County,

Kansas (SPM, T. 24 S., R. 40 W., Sec. 18). downstream to KS/OK State line in Cowley County, Kansas (SPM, T.35S., R.5E., southern boundary Sec. 18).





[Arkansas River shiner Map 5, Unit 4]

Dated: June 20, 2000.

**Donald J. Barry,**

*Assistant Secretary for Fish and Wildlife and Parks.*

[FR Doc. 00-16399 Filed 6-29-00; 8:45 am]

BILLING CODE 4310-55-C

## DEPARTMENT OF COMMERCE

### National Oceanic and Atmospheric Administration

#### 50 CFR Part 622

[I.D. 061900E]

#### Caribbean Fishery Management Council; Public Hearings

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

**ACTION:** Notice of public hearings.

**SUMMARY:** The Caribbean Fishery Management Council will hold a series of public hearings in Puerto Rico and the U.S. Virgin Islands on Draft Amendment 1 to the Fishery Management Plan for Queen Conch Resources of Puerto Rico and the U.S. Virgin Islands (FMP). The objectives of Amendment 1 are to address the issues of overfishing of the queen conch resource and apparent resource declines and to collect additional fishery information necessary for improved management.

**DATES:** The Council will accept written comments on the draft Amendment 1 through July 31, 2000. The public hearings will be held July 10–26, 2000. See **SUPPLEMENTARY INFORMATION** for specific dates, times, and locations of the public hearings.

**ADDRESSES:** Written comments should be sent to Miguel A. Rolon, Executive Director, Caribbean Fishery Management Council, 268 Munoz Rivera Avenue, Suite 1108, San Juan, Puerto Rico, 00918–2577. The Council's telephone number is (787) 766–5926. Copies of draft Amendment 1 and an executive summary will be available at the hearings or may be obtained from the Council at preceding address. See **SUPPLEMENTARY INFORMATION** for specific hearing locations.

**FOR FURTHER INFORMATION CONTACT:** Contact Miguel A. Rolon, Executive

Director, or Graciela Garcia-Moliner, FMP and Habitat Specialist, Caribbean Fishery Management Council, 268 Munoz Rivera Avenue, Suite 1108, San Juan, Puerto Rico, 00918–2577. The Council's telephone number is (787) 766–5926. E-mail addresses are Miguel.A.Rolon@noaa.gov or Graciela.Garcia-Moliner@noaa.gov.

#### SUPPLEMENTARY INFORMATION:

##### Management Measures

The Caribbean Fishery Management Council will hold a series of public hearings in Puerto Rico and the U.S. Virgin Islands to obtain input from fishers and the general public on the following draft Amendment 1 alternative management measures (corresponding draft Amendment 1 sections are referenced):

Alternative 1 (section 5.1 -Preferred Alternative): Prohibit the harvest and possession of queen conch in the exclusive economic zone (EEZ);

Alternative 2 (section 5.2): Prohibit the harvest and possession of queen conch by recreational fishers in the EEZ;

Alternative 3 (section 5.3): Prohibit the harvest of queen conch in the EEZ by all fishers using SCUBA gear;

Alternative 4 (section 5.4): Prohibit the harvest of queen conch in the EEZ by recreational fishers using SCUBA;

Alternative 5 (section 5.5): Establish a permit for queen conch for fishers and dealers.

Alternative 6 (section 5.6): Establish a limited entry system for queen conch fishers;

Alternative 7 (section 5.7): Establish a trip limit for commercial fishers of 100 pounds (45.4 kg) of queen conch meat per vessel per trip, and not more than 300 pounds (136.1 kg) per week for each vessel;

Alternative 8 (section 5.8): Establish a trip limit of 150 queen conch per commercial fisher per trip;

Alternative 9 (section 5.9): Change the dates for the annual closed harvest season for queen conch from July 1–September 30 to July 1–October 31 of each consecutive year;

Alternative 10 (section 5.10): Change the dates for the annual closed harvest season for queen conch from July 1–September 30 to June 1–September 30 of each consecutive year;

Alternative 11 (section 5.11): Change the current annual closed harvest season for queen conch from the 3-month

period of July 1–September 30 to a 4-month period (could be two separate sub-periods) other than those under Alternatives 9 and 10; and

Alternative 12 (section 5.12): No management action taken.

Time and Location for Public Hearings

Public hearings for the draft Amendment 1 will be held at the following dates, times, and locations:

1. Monday, July 10, 2000—Travelodge Hotel, Isla Verde Avenue, Isla Verde, Puerto Rico, from 7 p.m. to 10 p.m.;

2. Tuesday, July 11, 2000—Asociacion de Pescadores la Villa del Ojo, Bo. Borinquen, Sector Crash Boat, Aguadilla, Puerto Rico, from 7 p.m. to 10 p.m.;

3. Wednesday, July 12, 2000—Villa Parguera Hotel, Carr. 304, Km. 3.3, La Parguera, Lajas, Puerto Rico, from 7 p.m. to 10 p.m.;

4. Thursday, July 13, 2000—Reserva Estuarina Bahia de Jobos, Carr. 705, Km. 2.3, Main Street, Aguirre, Puerto Rico, from 2 p.m. to 5 p.m.;

5. Tuesday, July 18, 2000—Holiday Inn, Veterans Drive, Charlotte Amalie, St. Thomas, U.S.V.I., from 7 p.m. to 10 p.m.; 6. Wednesday, July 19, 2000—Legislature Building, Hilltop building, Cruz Bay, St. John, U.S.V.I., from 7 p.m. to 10 p.m.;

7. Thursday, July 20, 2000—Caravelle Hotel, 44A Queen Cross St., St. Croix, U.S.V.I., from 7 p.m. to 10 p.m.;

8. Wednesday, July 26, 2000—Maries Restaurant, Rd. #3, Km. 70.3, Punta Santiago, Humacao, Puerto Rico, from 7 p.m. to 10 p.m.;

#### Special Accommodations

These meetings are physically accessible to people with disabilities. For more information or request for sign language interpretation and other auxiliary aids, please contact Mr. Miguel A. Rolon, Executive Director, Caribbean Fishery Management Council, 268 Munoz Rivera Avenue, Suite 1108, San Juan, Puerto Rico, 00918–2577, telephone (787) 766–5926, at least 5 days prior to the meeting date.

Dated: June 26, 2000.

**Bruce Morehead,**

*Acting Director, Office of Sustainable Fisheries, National Marine Fisheries Service.*

[FR Doc. 00-16637 Filed 6-29-00; 8:45 am]

BILLING CODE 3510-22-F