DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[**Docket No. FWS–R3–ES–2012–0087**]

[**FXES11130900000C3–123–FF09E30000**]

RIN 1018–AY45

Endangered and Threatened Wildlife and Plants; Establishment of a Nonessential Experimental Population of Topeka Shiner in Northern Missouri

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), propose to establish a nonessential experimental population (NEP) of the Topeka shiner (*Notropis topeka*), a federally endangered fish, under the authority of section 10(j) of the Endangered Species Act of 1973, as amended (Act). This proposed rule provides a plan for reintroducing

Topeka shiners into portions of the species' historical range in Adair, Gentry, Harrison, Putnam, Sullivan, and Worth Counties, Missouri and provides for allowable legal incidental taking of the Topeka shiner within the defined NEP area. Topeka shiners will not be reintroduced into the NEP area until after we issue a final regulation that establishes the NEP.

DATES: *Written comments:* We will accept comments received or postmarked on or before [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. Please note that if you are using the Federal eRulemaking Portal (see **ADDRESSES**), the deadline for submitting an electronic comment is 11:59 p.m. Eastern Standard Time on this date. We must receive requests for public hearings, in writing, at the address shown in the **FOR FURTHER INFORMATION CONTACT** section by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

Public meetings: We will hold a public meeting on February 19, 2013, from 6:00 p.m. to 8:30 p.m. (Central Standard Time), in Eagleville, Missouri, and on February 21, 2013, from 6:00 p.m. to 8:30 p.m. (Central Standard Time), in Green City, Missouri (see **ADDRESSES**).

ADDRESSES: *Written comments:* You may submit comments by one of the following methods:

(1) *Electronically*: Go to the Federal eRulemaking Portal: *http://www.regulations.gov*. In the Search field, enter FWS–R3–ES–2012–0087, which is the docket number for this rulemaking. On the search results page, under the Comment Period heading in the menu on the left side of your screen, check the box next to "Open" to locate this document. Please ensure you have found the correct document before submitting your comments. If your comments will fit in the provided comment box, please use this feature of *http://www.regulations.gov*, as it is most compatible with our comment review procedures. If you attach your comments as a separate document, our preferred file format is Microsoft Word. If you attach multiple comments (such as form letters), our preferred format is a spreadsheet in Microsoft Excel.

(2) *By hard copy*: Submit by U.S. mail or hand-delivery to: Public Comments Processing, Attn: FWS–R3–ES–2012–0087; Division of Policy and Directives Management; U.S. Fish and Wildlife Service; 4401 N. Fairfax Drive, MS 2042-PDM; Arlington, VA 22203.

We request that you send comments **only** by the methods described above. We will post all comments on *http://www.regulations.gov*. This generally means that we will post any personal information you provide us (see the **Public Comments** section below for more information).

Copies of documents: The proposed rule is available on *http://www.regulations.gov* and available from our website at *http://www.fws.gov/midwest/endangered.* In addition, the supporting file for this proposed rule will be available for public inspection, by

appointment, during normal business hours, at the Columbia, Missouri, Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

Public Meetings: We will hold a public meeting on February 19, 2013, from 6:00 p.m. to 8:30 p.m. (Central Standard Time), at the Eagleville Community Center, 10028 10th St., Eagleville, Missouri 64442, and on February 21, 2013, from 6:00 p.m. to 8:30 p.m. (Central Standard Time), at the Green City City Hall, 4 South Green St., Green City, Missouri 63545.

FOR FURTHER INFORMATION CONTACT: Dr. Paul McKenzie, Fish and Wildlife Biologist, telephone: 573–234–2132; facsimile: 573–234–2181. Direct all questions or requests for additional information to: TOPEKA SHINER QUESTIONS, U.S. Fish and Wildlife Service, Ecological Services Field Office, 101 Park DeVille Dr., Suite B, Columbia, MO 65203. Persons who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Services (FIRS) at 800–877–8339.

SUPPLEMENTARY INFORMATION:

Public Comments

We intend any final rule resulting from this proposal to be as effective as possible. Therefore, we invite tribal and governmental agencies, the scientific community,

industry, and other interested parties to submit comments or recommendations concerning any aspect of this proposed rule. Comments should be as specific as possible.

Prior to issuing a final rule to implement this proposed action, we will take into consideration all comments and any additional information we receive. Such communications may lead to a final rule that differs from this proposal. All comments, including commenters' names and addresses, if provided to us, will become part of the supporting record.

You may submit your comments and materials concerning the proposed rule by one of the methods listed in the **ADDRESSES** section. Comments must be submitted to *http://www.regulations.gov* before 11:59 p.m. (Eastern Time) on the date specified in the **DATES** section. We will not consider hand-delivered comments that we do not receive, or mailed comments that are not postmarked, by the date specified in the **DATES** section.

We will post your entire comment—including your personal identifying information—on *http://www.regulations.gov*. If you provide personal identifying information in your comment, you may request at the top of your document that we withhold this information from public review. However, we cannot guarantee that we will be able to do so.

Comments and materials we receive, as well as supporting documentation we used in preparing this proposed rule, will be available for public inspection on *http://www.regulations.gov*, or by appointment, during normal business hours at the U.S. Fish and Wildlife Service, Columbia, Missouri, Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

Public Meetings

We will hold two public meetings on the dates listed in the **DATES** section at the addresses listed in the **ADDRESSES** section. Persons needing reasonable accommodations in order to attend and participate in a public meeting should contact the Columbia, Missouri, Ecological Services Field Office, at the address or phone number listed in the **FOR FURTHER INFORMATION CONTACT** section as soon as possible. In order to allow sufficient time to process requests, please call no later than one week before the meeting. Information regarding this proposal is available in alternative formats upon request.

Peer Review

In accordance with our policy, "Notice of Interagency Cooperative Policy for Peer Review in Endangered Species Act Activities," which was published on July 1, 1994 (59 FR 34270), we will seek the expert opinion of at least three appropriate and independent specialists regarding scientific data and interpretations contained in this proposed rule. We will send copies of this proposed rule to the peer reviewers immediately following publication in the **Federal Register**. The purpose of such review is to ensure that our decisions are based on scientifically sound data, assumptions, and analysis. Accordingly, the final decision may differ from this proposal.

Background

Statutory and Regulatory Framework

The Topeka shiner was listed as endangered throughout its range on December 15, 1998 (63 FR 69008), and critical habitat was designated in Iowa, Minnesota, and Nebraska on July 27, 2004 (69 FR 44736), under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*). The Act provides that species listed as endangered are afforded protection primarily through the prohibitions of section 9 and the requirements of section 7. Section 9 of the Act, among other things, prohibits the take of endangered wildlife. "Take" is defined by the Act as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct. Section 7 of the Act outlines the procedures for Federal interagency cooperation to conserve federally listed species and protect designated critical habitat. It mandates that all Federal agencies use their existing authorities to further the purposes of the Act by carrying out programs for the conservation of listed species. It also states that Federal agencies must, in consultation with the Service, ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. Section 7 of the Act does not affect activities undertaken on private land unless they are authorized, funded, or carried out by a Federal agency.

The 1982 amendments to the Act included the addition of section 10(j), which allows for the designation of reintroduced populations of listed species as "experimental populations." Under section 10(j) of the Act and our regulations at 50 CFR 17.81, the Service may designate as an experimental population, a population of an endangered or threatened species that has been or will be released into suitable habitat outside the species' current range (but within its probable historical range, absent a finding by the Director of the Service in the extreme case that the primary habitat of the species has been unsuitably and irreversibly altered or destroyed). With the experimental population designation, the relevant population is treated as threatened for purposes of section 9 of the Act, regardless of the species' designation elsewhere in its range. Section 4(d) of the Act allows us to adopt whatever regulations are necessary and advisable to provide for the conservation of a threatened species so the treatment of an NEP as a threatened species allows us broad discretion in devising management programs and special regulations for such a population. In these situations, the general regulations that extend most section 9 prohibitions to threatened species (50 CFR 17.31(a)) do not apply to the NEP, and the 10(j) rule contains the prohibitions and exemptions necessary and advisable to conserve the NEP.

Before authorizing the release as an experimental population of any population (including eggs, propagules, or individuals) of an endangered or threatened species, and before authorizing any necessary transportation to conduct the release, the Service must find, by regulation, that such release will further the conservation of the species. In making such a finding, the Service uses the best scientific and commercial data available

to consider: (1) Any possible adverse effects on extant populations of a species as a result of removal of individuals, eggs, or propagules for introduction elsewhere; (2) the likelihood that any such experimental population will become established and survive in the foreseeable future; (3) the relative effects that establishment of an experimental population will have on the recovery of the species; and (4) the extent to which the introduced population may be affected by existing or anticipated Federal or State actions or private activities within or adjacent to the experimental population area.

Furthermore, as set forth in 50 CFR 17.81(c), all regulations designating experimental populations under section 10(j) must provide: (1) Appropriate means to identify the experimental population, including, but not limited to, its actual or proposed location, actual or anticipated migration, number of specimens released or to be released, and other criteria appropriate to identify the experimental population(s); (2) a finding, based solely on the best scientific and commercial data available, and the supporting factual basis, on whether the experimental population is, or is not, essential to the continued existence of the species in the wild; (3) management restrictions, protective measures, or other special management concerns of that population, which may include but are not limited to, measures to isolate or contain the experimental population designated in the regulation from natural populations; and (4) a process for periodic review and evaluation of the success or failure of the release and the effect of the release on the conservation and recovery of the species.

Under 50 CFR 17.81(d), the Service must consult with appropriate State fish and wildlife agencies, local governmental entities, affected Federal agencies, and affected

private landowners in developing and implementing experimental population rules. To the maximum extent practicable, section 10(j) rules represent an agreement between the Service, the affected State and Federal agencies, and persons holding any interest in land that may be affected by the establishment of an experimental population.

Based on the best scientific and commercial data available, we must determine whether the experimental population is *essential* or *nonessential* to the continued existence of the species. The regulations (50 CFR 17.80(b)) state that an experimental population is considered essential if its loss would be likely to appreciably reduce the likelihood of survival of that species in the wild. All other populations are considered nonessential. We have determined that this proposed experimental population would not be essential to the continued existence of the species in the wild. This determination has been made because populations of Topeka shiner in the northern part of the species' range in Minnesota and South Dakota are considered secure and some have concluded that the fish is resilient to many threats identified at the time of listing (Service 2009, pp. 32–33). Therefore, the Service proposes to designate a nonessential experimental population for the species located in three areas in northern Missouri.

For the purposes of section 7 of the Act, we treat an NEP as a threatened species when the NEP is located within a National Wildlife Refuge or unit of the National Park Service, and section 7(a)(1) and the Federal agency conservation requirements of section 7(a)(2) of the Act apply. Section 7(a)(1) requires all Federal agencies to use their authorities to carry out programs for the conservation of listed species. Section 7(a)(2) requires that Federal agencies, in consultation with the Service, ensure that any action

authorized, funded, or carried out is not likely to jeopardize the continued existence of a listed species or adversely modify its critical habitat. When NEPs are located outside a National Wildlife Refuge or National Park Service unit, then, for the purposes of section 7, we treat the population as proposed for listing and only section 7(a)(1) and section 7(a)(4) apply. In these instances, NEPs provide additional flexibility because Federal agencies are not required to consult with us under section 7(a)(2). Section 7(a)(4) requires Federal agencies to confer (rather than consult) with the Service on actions that are likely to jeopardize the continued existence of a species proposed to be listed. The results of a conference are in the form of conservation recommendations that are optional as the agencies carry out, fund, or authorize activities. Because the NEP is, by definition, not essential to the continued existence of the species, the effects of proposed actions on the NEP will generally not rise to the level of jeopardizing the continued existence of the species. As a result, a formal conference will likely never be required for Topeka shiners established within the NEP area. Nonetheless, some agencies voluntarily confer with the Service on actions that may affect a proposed species. Activities that are not carried out, funded, or authorized by Federal agencies are not subject to provisions or requirements in section 7.

Section 10(j)(2)(C)(ii) of the Act states that critical habitat shall not be designated for any experimental population that is determined to be nonessential. Accordingly, we cannot designate critical habitat in areas where we establish an NEP.

Biological Information

The Topeka shiner is a small, stout minnow. This shiner species averages 1.5 to 2.5 inches (in.) (3.81–6.35 centimeters (cm)) in length at maturity, with a maximum size around 3 in. (7.62 cm) (Service 1993, p. 4; Service 1998, p. 69008; Missouri Department of Conservation (MDC) 2010, p. 9). The head is short, and the mouth does not extend beyond the front of the eye. The eye diameter is equal to or slightly longer than the snout. All fins are plain except for the tail fin, which has a chevron-shaped black spot at its base. Dorsal and pelvic fins each contain 8 rays (Service 1993, p. 4; Service 1998, p. 69008; MDC 2010, p. 9). The anal and pectoral fins contain 7 and 13 rays respectively, and there are 32 to 37 lateral line scales. Dorsally, the body is olive with a distinct dark stripe preceding the dorsal fin. A dusky stripe runs along the entire length of the lateral line (Service 1993, p. 4; Service 1998, p. 69008; MDC 2010, p. 9). The scales above this line are darkly outlined with pigment, appearing cross-hatched. Below the lateral line, the body lacks pigment, appearing silvery-white (Pflieger 1975, pp. 161–162; Pflieger 1997, p. 154; Service 1993, p. 4; Service 1998, p. 69008). Males in breeding condition have orange-red fins and "cheeks," and the dark lateral stripe diffuses. A distinct chevron-like spot exists at the base of the caudal fin (Pflieger 1975, pp. 161–162; Pflieger 1997, p. 154; Service 1993, p. 4; Service 1998, p. 69008).

Topeka shiners spawn in pool habitats over green sunfish (*Lepomis cyanellus*) and orangespotted sunfish (*L. humilis*) nests from late May through July in Missouri and Kansas (Pflieger 1975, p. 162; Pflieger 1997, p. 154; Kerns 1983, pp. 8–9; Kerns and Bonneau 2002, p. 139; Stark *et al.* 2002, pp. 147–149). Males establish small territories

on the periphery of these nests. It is unclear to what extent Topeka shiners are obligated to spawn over sunfish nests, or whether they can successfully utilize other silt-free areas as spawning sites. In a fish hatchery pond environment, Topeka shiner production was greatly enhanced by the introduction of orangespotted sunfish (Cook 2011, pers. comm.). Topeka shiners feed primarily on insects, such as midges (chironomids), true flies (dipterans), and mayflies (ephemeropterans), but they also are known to feed on zooplankton such as cladocera and copepoda (Kerns and Bonneau 2002, p. 138). Studies from Minnesota found Topeka shiners to be omnivorous, ingesting a significant amount of plant material and detritus along with animal matter (Dahle 2001, pp. 30–32; Hatch and Besaw 2001, pp. 229–230).

Topeka shiners are a schooling species found in mixed species schools consisting primarily of redfin (*Lythrurus umbratilis*), sand (*Notropis stramineus*), common (*Luxilus cornutus*), and red shiners (*Cyprinella lutrensis*), and central stonerollers (*Campostoma anomalum*) (Pflieger 1997, p. 155; Kerns and Bonneau 2002, p. 139). Topeka shiners live a maximum of 3 years, although few survive to their third summer (Kerns 1983, p. 16; Dahle 2001, pp. 30–31; Kerns and Bonneau 2002, p. 138). Topeka shiner populations appear to be more tolerant than other native fish species to drought conditions in Kansas (Minckley and Cross 1959, p. 215; Barber 1986, pp. 70–71; Kerns and Bonneau 2002, p. 138). The Topeka shiner is tolerant of high water temperatures and low dissolved oxygen levels (Koehle 2006, p. 26), which may in part account for the Topeka shiner's apparent drought condition tolerance. Topeka shiners are typically found in small, low order, prairie streams with good water quality and cool temperatures.

These streams generally flow all year; however, some may become intermittent during late summer and fall. Pool water levels and cool temperatures are maintained by percolation through the stream bed, spring flow, or groundwater seepage when surface water flow ceases in these stream reaches (Minckley and Cross 1959, p. 212; Pflieger 1975, p. 162; Service 1993, p. 5; Service 1998, p. 69008). Topeka shiners generally inhabit streams with clean gravel, cobble, or sand bottoms. However, bedrock and clay hardpan covered by a thin layer of silt are not uncommon (Minckley and Cross 1959, p. 212).

Topeka shiners are found in pools and runs, and only rarely in riffles. In the northern portion of its range (Iowa, Minnesota, and South Dakota), the Topeka shiner is frequently found in off-channel aquatic habitat (Clark 2000, p. 7; Dahle 2001, p. 8; Berg *et al*. 2004, p. 1). These habitats are characterized by lack of flow, moderate depth, and substrate composed of a thick silt and detritus layer (Dahle 2001, p. 9; Hatch 2001, p. 41). However, such off-channel habitat is rarely found along prairie headwater streams in Missouri. Occasionally, Topeka shiners have been found in larger streams, downstream of known populations, presumably as migrants (Pflieger 1975, p. 162; Service 1993, pp. 5–9; Service 1998, p. 69008). Dahle (2001, p. 39) noted that the Topeka shiner is a multiple clutch spawner and reported that relative abundance was higher in off-channel habitat than instream habitat.

The Topeka shiner was once widespread and abundant in headwater streams throughout the Central Prairie Region of the United States. The species' range historically included much of Missouri, Iowa, and Kansas, as well as portions of

Nebraska, South Dakota, and Minnesota (Bailey and Allum 1962, pp. 68–70; Cross 1970, p. 254; Gilbert 1988, p. 317). In Missouri, Topeka shiners historically occurred in most of the prairie and Ozark border portions of north and central Missouri. With the exception of a population known from Cedar Creek, a tributary of the Des Moines River in Clark County (Mississippi River basin), all Topeka shiner populations in Missouri are known from the Missouri River basin. The species once occupied portions of the Missouri, Grand, Lamine, Chariton, Crooked, Des Moines, Loutre, Middle, Hundred and Two, and Little Blue river basins (MDC 2010, p. 10). Since 1940, the species has been extirpated from many Missouri River tributaries, including Perche Creek, Petite Saline Creek, Tavern Creek, Auxvasse Creek, Middle River, Moreau River, Splice Creek, Slate Creek, Crooked River, Fishing River, Shoal Creek, Hundred and Two River, and Little Blue River watersheds (Bailey and Allum 1962, pp. 69–70; Pflieger 1971, p. 360; MDC 2010, p. 10). Topeka shiners were last observed in the following Missouri streams: Moniteau Creek headwaters in Cooper and Moniteau Counties (2008), Clear Creek (1992) and a tributary of Heath's Creek (1995) in Cooper and Pettis Counties, Bonne Femme Creek watershed in Boone County (1997), Sugar Creek and tributaries in Daviess and Harrison Counties (2008), Dog Branch in Putnam County (1990), and Cedar Creek in Clark County (1987) (MDC 2010, p. 10; Novinger 2011, pers. comm.). It is presumed Topeka shiners are extirpated from the Bonne Femme Creek watershed (MDC 2010, p. 10).

The Topeka shiner in Missouri exists in highly disjunct populations in a small fraction of its historical range. Sampling specifically for Topeka shiners during the early

1990s found this species at only 19 percent (14 of 72) of historical sites, and at only 15 percent (20 of 136) of the total sites sampled in Missouri (Gelwicks and Bruenderman 1996, p. 5). Additionally, the remaining populations were found to be smaller than they had been recorded historically. For example, over 300 Topeka shiners were recorded among 7 locations in Bonne Femme Creek from 1961 to 1983. However, during comparable surveys within the same watershed, in the 1990s, only six Topeka shiners were identified at two locations (Wiechman, MDC 2012, pers. comm.). The isolation and small size of the remaining populations makes them highly vulnerable to extirpation. Currently, remaining viable populations of Topeka shiners can be consistently found in only two Missouri stream systems: Moniteau Creek headwaters in Cooper and Moniteau Counties, and Sugar Creek headwaters in Daviess and Harrison Counties. Several other streams have produced samples of a few individuals in the past 25 years, but these occurrences are based on a very limited number of fish (MDC 2010, p. 10).

Effects of Establishing the Proposed Nonessential Experimental Population on Recovery of the Species

Restoring an endangered or threatened species to the point where it is recovered is a primary goal of the Service's endangered species program. Although a Service recovery plan has not been issued for the Topeka shiner, the MDC devised State-specific recovery criteria for the species in their 10-year Strategic Plan for the Recovery of the Topeka Shiner in Missouri (MDC 2010, p. 8). The recovery goal of this plan is to

stabilize and enhance Topeka shiner numbers in Missouri by securing populations in seven streams. Seven populations would be equivalent to one half of the known populations sampled in Missouri since 1960. Two main criteria were established to accomplish the goal: (1) Reduce or eliminate major threats and restore suitable habitat in Moniteau Creek and Sugar Creek watersheds, and (2) introduce (or reintroduce) and establish secure populations in five additional streams (MDC 2010, p. 8). According to fisheries experts with the Missouri Department of Conservation and as outlined in MDC's strategic plan, the designation of a Topeka shiner NEP in Missouri is necessary to establish new populations in the State (MDC 2010, p. 26).

The MDC (2011a, pp. 1–2; 2011b, pp. 2–3; 2011c, p. 3) established six criteria for identifying possible reintroduction sites in Missouri: (1) Propagation and release sites are to be under public ownership; (2) ownership involves a partner committed to conservation; (3) proposed release sites are within relatively close proximity to existing Topeka shiner populations; (4) proposed release sites are within the overall historical range of the species in Missouri; (5) the overall condition of the stream (e.g., land use, environmental parameters, stream bank and channel stability, ecological and biological integrity) and watershed is suitable; and (6) the perceived likelihood of success of the reintroduction is high because there are no physical barriers that will prevent the species from inhabiting these sites. We have selected high quality streams for proposed reintroduction that will support growth, survival, and natural reproduction. Sites selected are also deemed to be adequate to facilitate expansion of reintroduced populations.

Location of the Proposed Nonessential Experimental Population

Based on criteria outlined above for reintroduction sites, Little Creek headwaters in Harrison County; East Fork Big Muddy Creek in Gentry, Harrison, and Worth Counties; and tributaries of Spring Creek in Adair, Putnam, and Sullivan Counties have been identified for initial release efforts (MDC 2010, pp. 27–31). Although no historical records exist of Topeka shiner in the selected reintroduction sites, it is likely that the species once inhabited these waters. Our conclusion is based on the following: (1) The species was historically known from adjacent watersheds—Little Creek and Big Muddy Creek are located approximately 16–19 air miles (mi.) (25.75–30.58 air kilometers (km)) from extant sites in Harrison County, Missouri (Wiechman 2012, pers. comm.), and the Spring Creek watershed in Adair, Putnam, and Sullivan Counties is located approximately 11 air mi. (17.7 air km) (Novinger 2012, pers. comm.) from a historical location in Putnam County, Missouri; (2) habitat is identical or similar to currently occupied sites in Harrison County, Missouri; and (3) the proposed reintroduction sites have suitable habitat necessary for the successful establishment of the species (MDC 2011a, pp. 1–2).

The reintroduction areas would include both pond (similar to off-channel habitats used by the species elsewhere within its range) and stream habitats. Initial donor populations of Topeka shiner would originate from extant sites in Sugar Creek, Harrison County, and be propagated at MDC's Lost Valley Hatchery in Warsaw, Missouri. Future captive-breeding of the Topeka shiner would occur in pond habitats, and the progeny

would be used to stock the NEP streams rather than continual use of the Lost Valley Hatchery (Novinger 2012, pers. comm.). The subsequent use of pond fish for ongoing reintroduction efforts would be dependent upon the success of propagation efforts at The Nature Conservancy's Dunn Ranch, MDC's Pawnee Prairie Natural Area (NA), and MDC's Union Ridge Conservation Area (CA) (see below) (Novinger 2012, pers. comm.).

Little Creek

Little Creek is a tributary to West Fork Big Creek in the greater Grand River drainage. The proposed NEP portion of the watershed is located in the headwaters of Little Creek and is estimated at 7,600 acres (ac) (3075 hectares (ha)). The area extends from the backwaters of Harrison County Lake, upstream to the headwaters of Little Creek, and includes all tributaries in this reach from the reservoir to headwaters. Specific reintroduction sites would be located in select ponds (greater than 8 feet (2.44 m) deep) and in headwater stream reaches on Dunn Ranch, which is owned and operated by The Nature Conservancy (TNC). Dunn Ranch comprises the upper half of the watershed, and it has several characteristics that promote a successful reintroduction program (e.g., land management within the watershed is excellent) (MDC 2011a, p. 2). Harrison County Lake (280 ac) (113.1 ha) is identified as the downstream extent of the proposed NEP because it supports a popular sport fishery with abundant predator fishes (largemouth bass, crappie, channel catfish), which greatly limit the potential for downstream migration of cyprinid species (MDC 2011a, p. 2). Little Creek is approximately 16 air miles (mi.) (25.75 air kilometers (km)) from extant sites in Harrison County, Missouri

(Wiechman 2012, pers. comm.). A physical barrier in Harrison County Lake downstream of the proposed reintroduction site would prevent the mixing of wild and reintroduced populations of Topeka shiners (MDC 2011a, p. 7).

Big Muddy Creek

Big Muddy Creek is a tributary to the East Fork Grand River drainage and its watershed covers 44,339 ac. Land use is predominately grassland (60 percent), containing minor components of cropland (16 percent) and deciduous forest (15 percent). Cropland is concentrated in the bottomland along the mainstem of Big Muddy Creek. Grassed uplands are mostly used for cattle grazing and hay production. Headwaters of Big Muddy Creek (upper 33 percent of watershed) lie within the Grand River Grasslands Conservation Opportunity Area (GRGCOA). Two notable properties within the GRGCOA portion of Big Muddy Creek include MDC's Pawnee Prairie Natural Area (NA) (476 ac) (192 ha) and TNC's Pawnee Prairie (500 ac) (202 ha), which are cooperatively managed for native prairie and associated wildlife (MDC 2011b, pp. 1–2).

The 10-year-old GRGCOA covers approximately 70,000 ac (28,327 ha) in northern Missouri and southern Iowa, with approximately 14,800 ac (5,989 ha) (21 percent) located within the Big Muddy Creek basin. In northern Missouri, GRGCOA is believed to have the greatest potential to restore a functioning tallgrass prairie ecosystem on a landscape scale. The MDC, TNC, the Iowa Department of Natural Resources, the Natural Resources Conservation Service, the Service, and interested private landowners are working cooperatively to restore prairie, promote soil conservation practices, and

enhance habitat for prairie chickens in this area. Prescribed burning is commonly used to help meet these objectives. Experimental patch-burn grazing on Pawnee Prairie NA is also being evaluated by MDC and Iowa State University (MDC 2011b, p. 2).

The eastern side of MDC's Emmet and Leah Seat Memorial (Seat) Conservation Area (CA) (2,030 ac) (821 ha) is located within the Little Muddy Creek basin, a lower sub-basin to Big Muddy Creek. Little Muddy Creek basin is located outside the GRGCOA. Seat CA is a mixture of old field, grasslands, cropland, and woodland habitats. The area features public hunting (deer, turkey, quail, small game), primitive camping, an archery range, 16 fishable ponds (totaling 13 ac), and a permanent stream. The area is managed primarily for upland game hunting (MDC 2011b, p. 2).

The Big Muddy Creek watershed, from its confluence with East Fork Grand River upstream through all headwaters, is included in the proposed NEP area for the following reasons: (1) There are no known fish barriers; (2) there are no reservoirs (except small farm ponds) with abundant predator fishes; and (3) stream size remains relatively small with habitat conditions comparable to those found in reaches of Sugar Creek where Topeka shiners occur. Big Muddy Creek is approximately 19 air miles (mi.) (30.58 air kilometers (km)) from extant sites in Harrison County, Missouri (Wiechman 2012, pers. comm.). East Fork Grand River is believed to effectively limit the potential for downstream migration of cyprinids given its higher densities of predator fishes (predominantly channel catfish) and minimal cover for small fish (MDC 2011b, p. 2). A physical barrier in the East Fork of the Grand River downstream of the proposed

reintroduction site would prevent mixing of wild and reintroduced populations of Topeka shiners (MDC 2011b, p. 9).

Spring Creek

Spring Creek is a tributary to the Chariton River, and its watershed covers 60,869 ac (24,632 ha). Land use is essentially limited to deciduous woodlands (41 percent) and grassland (39 percent), with only 10 percent cropland. Cropland is concentrated in the bottomland along the mainstem of Spring Creek and in the upper watershed in the Unionville Plains. Grassed uplands are mostly used for cattle grazing and hay production. The Union Ridge Conservation Opportunity Area (URCOA) and the Spring Creek Priority Watershed (SCPW) encompass roughly 75 percent of the Spring Creek watershed. MDC ownership within the watershed includes Morris Prairie CA (167 ac) (67 ha), Dark Hollow NA (315 ac) (127 ha), Union Ridge CA (8,110 ac) (3,282 ha), and Shoemaker CA (259 ac) (104 ha). Morris Prairie NA (47 ac) (19 ha) and Spring Creek Ranch NA (1,769 ac) (716 ha) are located within the boundaries of Morris Prairie CA and Union Ridge CA, respectively. These properties are managed for native prairie-savanna-woodland and associated wildlife (MDC 2011c, p. 1).

The Spring Creek watershed, from its confluence with the Chariton River upstream through all headwaters is included in the proposed NEP area for the following reasons: (1) There are no known fish barriers; (2) there are no reservoirs (except small farm ponds) with abundant predator fishes; and (3) stream size remains relatively small, with habitat conditions comparable to those found in reaches of Sugar Creek where

Topeka shiners occur. The Spring Creek watershed in Adair, Putnam, and Sullivan Counties is located approximately 47 air mi. (75.64 air km) (Wiechman 2012, pers. comm.) from extant sites in Harrison County, and the Spring Creek locations are not in any watershed where there are extant records of Topeka shiner (MDC 2011c, pp. 8–11). The Chariton River is believed to effectively limit the potential for downstream migration of Topeka shiners given its higher densities of predator fishes (predominantly channel catfish) and minimal cover for small fish (MDC 2011c, p. 2).

Initial reintroduction sites for Topeka shiners would be in at least six ponds and all suitable stream reaches on MDC's Union Ridge CA. Subsequent monitoring of Topeka shiners would be restricted to the middle-Spring Creek sub-basin of the Spring Creek watershed. Within Spring Creek, this sub-basin is believed to offer the greatest potential to establish a self-sustaining population of Topeka shiners, and the smaller size of the middle-Spring Creek sub-basin also allows for regional Fisheries staff to reasonably complete monitoring efforts and evaluate success (MDC 2011c, p. 2).

Likelihood of Population Establishment and Survival

A subset of the ponds on Dunn Ranch, Pawnee Prairie, and Union Ridge CA determined to be suitable for the propagation of Topeka shiners would be treated with rotenone to remove potential predators prior to stocking (MDC 2011a, p. 2; MDC 20011b, p. 2; MDC 2011c, p. 3). Spawning gravel would also be added to littoral areas (0–1 meter deep). The success of reproduction in these ponds would be compared to

ponds with bare soil bottom types that did not receive spawning gravel. Reducing predators and increasing spawning success should increase the likelihood of population establishment and survival.

Addressing Causes of Extirpation

There are apparently numerous reasons for the decline of the Topeka shiner throughout its range. Reductions and disappearance of many Topeka shiner populations appear to be related to a combination of physical degradation of habitat and species interactions (MDC 2010, p. 11). Physical degradation of habitat is primarily related to patterns of land use including destruction, modification and fragmentation of habitat resulting from siltation, reduced water quality, tributary impoundment, and reduction of water levels (MDC 2010, p. 11). These habitat alterations may have been caused by intensive agriculture, urbanization, and highway construction (Minckley and Cross 1959, p. 216; Cross and Moss 1987, p. 165; Pflieger 1997, p. 199; Tabor 1992, pp. 38–39; MDC 2010, p. 11). Bayless *et al.* (2003, p. 47) found that generally good water quality and habitat prevailed in the Moniteau Creek watershed, where the largest remaining populations of the Topeka shiner persist. No overall pattern relating Topeka shiner distribution and water quality was detectable; however, the Topeka shiner has never been observed in sub-basins of the watershed characterized by chronically extreme levels of urbanization, nutrient additions, and turbidity. Construction of watershed impoundments that limit sediment-flushing flows and provide a source of piscivorous predators, low-

water crossings that obstruct animal and particle passage, and reduction of groundwater levels resulting from irrigation may have also contributed to the Topeka shiner's decline (Layher 1993, pp. 15–17; Tabor 1992, p. 39; Pflieger 1997, p. 155; Schrank *et al*. 2001, p. 419; Mammoliti 2002, p. 2; MDC 2010, p. 11). Species interactions, such as predation and competition with other fishes, have likely played a role in the decline of the Topeka shiner in portions of its range. Stocking piscivores such as largemouth bass (*Micropterus salmoides*), crappie (*Pomoxis* spp.), and bluegill (*Lepomis macrochirus*) in ponds constructed in watersheds containing the Topeka shiner has probably accelerated the decline of the Topeka shiner through predation (MDC 2010, p. 11). Additionally, Pflieger (1997, p. 155) suggested that the introduced blackstripe topminnow (*Fundulus notatus*) and western mosquitofish (*Gambusia affinis*) likely compete with the Topeka shiner for food.

The Topeka shiner in Missouri has declined in the presence of largemouth bass, bluegill, and blackstripe topminnow, and this decline coincided with the decline of other fishes considered generally tolerant of poor physical and chemical conditions but intolerant of species interactions (Winston 2002, p. 249). Schrank *et al.* (2001, p. 413) noted that sites where the Topeka shiner had been extirpated in Kansas had a greater number of small impoundments in the watershed, longer pools, higher catch per effort of largemouth bass, and higher species diversity by trophic guild and richness compared to sites where the Topeka shiner was extant. Dahle and Hatch (2002, p. 3) determined the threat of predation of Topeka shiners by piscivorous fish (including largemouth bass) in southwest Minnesota streams was low due to the rarity of such predators.

Other unidentified factors may be responsible for the loss of the Topeka shiner from some streams and for localized undocumented fish kills. Further study is needed to determine the relative significance of habitat degradation versus species interactions as causes for the decline of the Topeka shiner. Koehle (2006, p. 26) found Topeka shiners to be tolerant of high water temperatures and low dissolved oxygen levels. Additional experimental studies would be particularly useful to elucidate the physiological tolerances and behavior of the Topeka shiner in addition to comparisons of the hydrology, water chemistry, physical habitat, land use practices, and fish communities in areas where the species persists and where it has been extirpated (MDC 2010, p. 11).

All proposed reintroduction sites are on public land, and are properly managed to prevent potential causes of extirpation (Pflieger 1997, pp. 154–155). In addition to implementing management techniques that will sustain headwater prairie stream habitat, efforts have been undertaken to eliminate potential predation by nonnative piscivorous fish (MDC 2010, pp. 26–31). Ponds on Dunn Ranch, Pawnee Prairie NA, and Union Ridge CA determined to be suitable for the propagation of Topeka shiners were treated with rotenone during the summer of 2011, to remove potential piscivorous predators prior to stocking (MDC 2011a, p. 2; MDC 20011b, p. 2; MDC 2011c, p. 3). Ponds would be regularly monitored to assess success of removal operations. Additional treatments would be provided if needed to ensure ponds are free of fish predators before any stocking takes place. Such actions should improve the probability of success of reintroduction efforts. Ponds on proposed reintroduction areas used in propagation efforts would likely duplicate off-channel habitats occupied by Topeka shiners elsewhere

within the species' range (MDC 2010, p. 26). The use of such ponds in propagation efforts would serve as refugia for Topeka shiners during extreme drought and may provide excellent sources of intra-basin transfers to promote population expansion (MDC 2011a, p. 2).

Release Procedures

Initial donor populations of Topeka shiner would originate from extant sites in Sugar Creek, Harrison County, and from fish propagated at MDC's Lost Valley Hatchery in Warsaw, Missouri. Proposed NEP reintroductions would include pond and stream habitats within the Little Creek, Big Muddy Creek, and Spring Creek watersheds. Captive-reared fish would be stocked into stream and pond habitats by MDC fisheries personnel. Cooperators include MDC, TNC, and the Service. Topeka shiners that are subsequently and successfully reared in ponds on Dunn Ranch, Pawnee Prairie NA, and the Union Ridge CA would be placed into proposed stream habitats following established stocking protocols described in the reintroduction plans (MDC 2011a, 2011b, and 2011c). We do not anticipate that the removal of fish would have a deleterious effect on the genetics of the species, because only a sample of Topeka shiners in Sugar Creek would be collected.

Parameters to Assess the Success of the Reintroduction

Sampling Sites

Information on fish species composition and simple stream habitat conditions would be collected at sites throughout the proposed NEP portion of the Little Creek, Big Muddy Creek, and Spring Creek watersheds prior to initial stockings. Twenty-five sites with 3 pools per site that are at least 200 meters (m) in length would be selected using a Generalized Random Tessellation Stratified (GRTS) design (http://www.epa.gov/nheerl/arm/designing/design_intro.htm).

Fish Sampling

Each pool would be sampled once with a 15-foot (ft) (4.57-m) x 6-ft (1.83-m), one-eighth-inch (0.32-centimeters (cm)) mesh drag seine to collect fish. To be more effective in narrow pools (width less than 6 m), the net may be shortened to facilitate sampling. Two nets hauled side-by-side would be used for wide pools between 10 and 20 m in width. All species present in a catch would be identified and categorized by apparent relative abundance: "low" is defined by low approximate number (fewer than 10 fish) and low approximate percent of total catch (less than 5 percent); "medium" (10–50 fish, less than 25 percent); or "high" (greater than 50 fish, greater than 25 percent). Presence of juvenile Topeka shiners (less than 40 millimeters (mm) total length) would be noted as an indication of spawning at each site.

Habitat—Habitat variables to be measured in the field in each pool include: Global Positioning System (GPS) coordinates at the downstream edge of the pool using Universal Transverse Mercator North American Datum of 1983 (UTM NAD83); water

temperature and conductivity (measured with a handheld meter, indicates ion concentration and relative degree of water replenishment); pool length and representative pool width (measured with rangefinder or meter stick), and maximum depth (via meter stick or similar); visual assessments of the relative amount of silt or organic debris covering the stream bottom (1=almost none, 2=thin layer, 3=thick layer) and overall substrate type/coarseness (1=clay or bedrock, 2=small rock less than 128 mm diameter/cobble, 3= large rock greater than 128 mm); degree of pool isolation (1=intermittent or isolated, 2=continuous or interconnected by flowing water habitat); and overall level of seining difficulty (1=not difficult, 2=difficult). Visual assessments and level of difficulty would be based on consensus of the sampling crew. An adaptive monitoring approach would be used to assess the NEP population numbers and habitat variables; adjustments would be made, if necessary, after assessing the monitoring techniques.

Initial Stocking

Ponds—Topeka shiners would be stocked at a rate of 500 fish per acre in designated ponds at proposed reintroduction sites on public properties. All fish would come from either Sugar Creek (Harrison County) or those propagated at MDC's Lost Valley Hatchery. Additionally, orangespotted sunfish would be stocked in each pond at a rate of 25 to 50 fish per acre. The source of the sunfish would preferably be from Sugar Creek broodstock propagated at MDC's Lost Valley Hatchery or another local basin within the greater Grand River watershed. Green sunfish (also from local basins) may be

substituted to meet desired stocking rates for sunfish if adequate numbers of orangespotted sunfish cannot be reasonably collected.

Stream Reaches—Topeka shiners would also be stocked in suitable stream reaches within the NEP area on public properties at a minimum rate of 5,000 fish per mile. Based on monitoring data, a need for stocking sunfish would be determined for selected stream reaches on public properties. Sources of Topeka shiners and sunfish would be the same as described above for the ponds.

Supplemental Stocking

Supplemental stockings of Topeka shiners or sunfish would be conducted for ponds or selected stream reaches on public properties within the greater NEP portion of Little, Big Muddy, and Spring creeks, if necessary. Criteria for such stockings would be determined by MDC fisheries personnel as needed and necessary to meet reintroduction goals outlined in MDC's 10-year Action Plan for the Topeka Shiner (MDC 2010, pp. 29–35). Supplemental stocking rates in ponds and streams would occur at the same rates described for initial stockings above.

Effects on Extant Populations

Individual Topeka shiners used to establish an experimental population would be supplied by MDC's Lost Valley Hatchery in Warsaw, MO, propagated under the Federal Fish and Wildlife Permit #TE71730A. The donor population for the Lost Valley

Hatchery is from sites in Sugar Creek, Harrison County, Missouri. Sugar Creek's Topeka shiner population is closest to the proposed reintroduction sites. Typical gear used for small cyprinids would be used to collect Topeka shiners, and they would be held at Lost Valley Hatchery until they could be stocked into pond and stream habitats at proposed reintroduction sites.

The 10-year Strategic Plan for the Recovery of the Topeka Shiner in Missouri (MDC 2010, pp. 29–35) and reintroduction plans for Topeka shiner in the Little Creek, Big Muddy Creek, and Spring Creek watersheds (MDC 2011a, pp. 1–9; MDC 2011b, pp. 1–11; MDC 2011c, pp. 1–11) contain additional information on the release procedures and monitoring protocols (see **FOR FURTHER INFORMATION CONTACT** for copies of this document or go to *http://www.regulations.gov*).

Status of Proposed Population

We would ensure, through our section 10 permitting authority and the section 7 consultation process, that the use of Topeka shiner from the donor population within the Sugar Creek Basin for releases into Little Creek, Big Muddy Creek, and Spring Creek is not likely to jeopardize the continued existence of the species in the wild.

The proposed special rule that accompanies this section 10(j) proposed rule is designed to broadly exempt, from the section 9 take prohibitions, any take of Topeka shiners that is incidental to otherwise lawful activities. We propose to provide this exemption because we believe that such incidental take of members of the NEP

associated with otherwise lawful activities is necessary and advisable for the conservation of the species.

This designation is justified because no adverse effects to extant wild or captive Topeka shiner populations would result from release of progeny from the Sugar Creek population. There is no possibility of any transfer of disease or mixing of wild and reintroduced populations due to the distances involved between the donor population and proposed reintroductions, the watersheds involved, and the physical barriers associated with the Little Creek and Big Muddy Creek watersheds. The majority of the reintroductions would occur on managed public land, and exemptions from prohibition for activities on private land are not likely to result in the loss of the proposed NEP. Successful propagation of Topeka shiners in ponds at Dunn Ranch, Pawnee Prairie NA, and Union Ridge CA would provide a continual reservoir of Topeka shiners for supplemental stocking as needed. We expect that the reintroduction effort into Little, Big Muddy, and Spring creeks would result in the successful establishment of a self-sustaining population of Topeka shiners, which would contribute to the recovery of the species.

Extent to Which the Reintroduced Population May be Affected by Land Management within the Proposed NEP Watersheds

We conclude that the effects of Federal, State, or private actions and activities would not pose a substantial threat to Topeka shiner establishment and persistence in the

Little Creek, Big Muddy Creek, and Spring Creek watersheds, because most activities currently occurring in the proposed NEP area are compatible with Topeka shiner recovery, and there is no information to suggest that future activities would be incompatible with Topeka shiner recovery. Most of the area containing suitable release sites with high potential for Topeka shiner establishment is managed by MDC or TNC through the following mechanisms:

(1) There are existing best management practices (BMPs) for Topeka shiners that are followed by MDC and TNC; these practices include recommendations to maintain the water quality and headwater stream habitat (MDC 2000, p. 1).

(2) Reintroduction plans have been developed for all proposed NEP sites (MDC 2011a, pp. 1–9; MDC 2011b, pp. 1–11; MDC 2011c, pp. 1–9).

(3) All proposed reintroduction sites are managed to maintain Topeka shiner habitat (MDC 2011a, pp. 1–9; MDC 2011b, pp. 1–11; MDC 2011c, pp. 1–9).

Management issues related to the proposed Topeka shiner NEP that have been considered include:

(a) *Incidental take*: The regulations implementing the Act define "incidental take" as take that is incidental to, and not the purpose of, carrying out an otherwise lawful activity (50 CFR 17.3), such as agricultural activities and other rural development, and other activities that are in accordance with Federal, Tribal, State, and local laws and regulations. Experimental population special rules contain specific prohibitions and exceptions regarding the taking of individual animals. If this 10(j) rule is finalized,

incidental take of Topeka shiners within the NEP area would not be prohibited, provided that the take is unintentional and is in accordance with the special rule that is a part of this 10(j) rule. However, if there is evidence of intentional take of an individual Topeka shiner within the NEP that is not authorized by the special rule, we would refer the matter to the appropriate law enforcement entities for investigation.

(b) *Special handling*: In accordance with 50 CFR 17.21(c)(3), any employee or agent of the Service, any other Federal land management agency, or State personnel, designated for such purposes, may in the course of their official duties, handle individual Topeka shiners to aid sick or injured individual Topeka shiners, or to salvage dead individual Topeka shiners. Other persons would need to acquire permits from the Service for these activities.

(c) *Coordination with landowners and land managers*: The Service and our cooperators have identified issues and concerns associated with the proposed Topeka shiner nonessential experimental population establishment. The proposed NEP establishment was discussed with potentially affected State agencies, Tribal entities, local governments, businesses, and landowners within the proposed reestablishment area. Affected State agencies, landowners, and land managers have either indicated support for, or no opposition to, the proposed NEP establishment, provided an NEP is designated and a special rule is promulgated to exempt incidental take from the prohibitions under section 9.

(d) *Public awareness and cooperation*: We will inform the general public of the importance of this reintroduction project in the overall recovery of the Topeka shiner in

Missouri. We will host public meetings after the publication of this proposed rule and inform the public of the purpose of the reintroduction, while emphasizing that the proposed NEP would not impact activities on private property (see **Public Meetings**). Additionally, MDC fisheries and private land biologists and the Service will highlight the same issues while working with private landowners on various landowner incentive programs or when providing technical assistance within the proposed NEP watersheds. The designation of the NEP within Little Creek, Big Muddy Creek, and Spring Creek would provide greater flexibility in the management of the reintroduced Topeka shiner individuals.

(e) *Potential impacts to other federally listed species:* No other federally listed species are present within streams where the NEP is proposed; therefore, Topeka shiner reintroductions would not impact any other federally listed species.

(f) *Monitoring and evaluation*: Monitoring of changes in the distribution of Topeka shiners would be undertaken using occupancy modeling or a similar approach following procedural guidelines described in MacKenzie *et al.* (2006, pp. 183–224). Monitoring would be undertaken annually by personnel of the MDC, and results would be communicated to the public during future public meetings and through the use of outreach documents. If monitoring of released individuals indicates that reintroductions have been successful, additional release areas may be identified in a proposed rule in the **Federal Register** at a future date, following guidelines outlined in MDC's 10-year Strategic Plan for Recovery of the Topeka Shiner in Missouri (MDC 2010, p. 8). We project that it will be necessary to establish Topeka shiners in seven reintroduced

populations to achieve recovery of the species in Missouri (MDC 2010, p. 26). However, this proposed rule covers only three of the seven reintroductions because the potential establishment of the remaining four populations will be contingent upon the success of initial propagation and release efforts. Reintroduction into the remaining sites would also follow the same protocols and guidelines conducted under this 10(j) rule, including the opportunity for the public to comment on such reintroductions in a possible future proposed rule.

Reintroduction Effectiveness Monitoring:

Evaluations of our reintroduction goal and objectives will require monitoring for at least 10 years following initial stockings. Initial success of the reintroduction efforts would be evaluated through annual sampling of ponds and selected stream reaches on public properties during the first 3 years following initial stockings. Pond sampling would include fall seining with at least five, one-fourth arc pulls around the shore. Catch rates (fish per pull) would be recorded for shiners and sunfish, and a subsample of up to 100 Topeka shiners would be used to evaluate natural reproduction. Topeka shiners that are less than 40 mm (1.6 inches) in length would be considered juveniles. Minnow traps may also be used as a comparison to seining data. Stream sampling would follow the methods described earlier for "Baseline Data" sampling. After the first 3 years, ponds stocked with Topeka shiners would be monitored biennially for 10 years. Stream monitoring would be continued annually for 10 years to measure changes in the distribution of Topeka shiners, other fishes in the watershed, and trends in stream habitat

conditions. Program Presence (Hines 2006) software to estimate patch occupancy and related parameters would be used to evaluate changes in occupancy and determine Topeka shiner use of Little Creek, Big Muddy, and Spring Creek watersheds.

Donor Population Monitoring:

The MDC would continue to monitor the donor population of Topeka shiners in Sugar Creek. Monitoring of the donor population would follow guidelines established in the 10-Year Strategic Plan for the Recovery of Topeka Shiner in Missouri (MDC 2010, pp. 55–60); however, occupancy modeling would follow the protocols and principles in MacKenzie *et al.* (2006, pp. 183–224) to assess the status of the species. If monitoring detects a significant decline in donor populations, appropriate management action would be taken.

Monitoring Impacts to Other Listed Species:

No other federally listed species occur within ponds or streams proposed for reintroductions; therefore, this monitoring would not be necessary.

Findings

Our regulations at 50 CFR 17.81(b) specify four elements that should be considered and support this finding: (1) Any possible adverse effects on extant populations of a species as a result of removal of individuals, eggs, or propagules for

introduction elsewhere; (2) the likelihood that any such experimental population will become established and survive in the foreseeable future; (3) the relative effects that establishment of an experimental population will have on the recovery of the species; and (4) the extent to which the introduced population may be affected by existing or anticipated Federal or State actions or private activities within or adjacent to the experimental population area. The above analysis (see **Background**) addresses these required components.

Based on the above information, and using the best scientific and commercial data available (in accordance with 50 CFR 17.81), we find that releasing Topeka shiner into Little Creek, Big Muddy Creek, and Spring Creek would further the conservation of the species but that this population is not essential to the continued existence of the species in the wild.

Peer Review

In accordance with our policy on peer review, published on July 1, 1994 (59 FR 34270), we will provide copies of this proposed rule to three or more appropriate and independent specialists in order to solicit comments on the scientific data and assumptions relating to the supportive biological and ecological information for this proposed NEP designation. The purpose of such review is to ensure that the proposed NEP designation is based on the best scientific information available. We will invite these peer reviewers to comment during the public comment period and will consider

their comments and information on this proposed rule during preparation of a final determination.

Required Determinations

Regulatory Planning and Review (Executive Orders 12866 and 13563)

Executive Order 12866 provides that the Office of Information and Regulatory Affairs (OIRA) will review all significant rules. The Office of Information and Regulatory Affairs has determined that this rule is not significant.

Executive Order 13563 reaffirms the principles of E.O. 12866 while calling for improvements in the nation's regulatory system to promote predictability, to reduce uncertainty, and to use the best, most innovative, and least burdensome tools for achieving regulatory ends. The executive order directs agencies to consider regulatory approaches that reduce burdens and maintain flexibility and freedom of choice for the public where these approaches are relevant, feasible, and consistent with regulatory objectives. E.O. 13563 emphasizes further that regulations must be based on the best available science and that the rulemaking process must allow for public participation and an open exchange of ideas. We have developed this rule in a manner consistent with these requirements.

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

Under the Regulatory Flexibility Act (as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996; 5 U.S.C. 601 *et seq.*), whenever a Federal agency is required to publish a notice of rulemaking for any proposed or final rule, it must prepare, and make available for public comment, a regulatory flexibility analysis that describes the effect of the rule on small entities (small businesses, small organizations, and small government jurisdictions). However, no regulatory flexibility analysis is required if the head of an agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. SBREFA amended the Regulatory Flexibility Act to require Federal agencies to provide a statement of the factual basis for certifying that a rule will not have a significant economic impact on a substantial number of small entities. We are certifying that, if adopted as proposed, this rule will not have a significant economic effect on a substantial number of small entities. The following discussion explains our rationale.

The area that would be affected if this proposed rule is adopted includes the release areas in northern Missouri and adjacent areas into which Topeka shiners may disperse, which over time could include significant portions of the NEP. Because of the regulatory flexibility for Federal agency actions provided by the NEP designation and because of the exemption for incidental take in the proposed special rule, we do not expect this rule to have significant effects on any activities within Federal, State, or private lands within the NEP. In regard to section 7(a)(2), the population is treated as proposed for listing and Federal action agencies are not required to consult on their

activities. Section 7(a)(4) requires Federal agencies to confer (rather than consult) with the Service on actions that are likely to jeopardize the continued existence of a proposed species. Results of a conference are advisory in nature and do not restrict agencies from carrying out, funding, or authorizing activities. In addition, section 7(a)(1) requires Federal agencies to use their authorities to carry out programs to further the conservation of listed species, which would apply on any lands within the NEP area. As a result, and in accordance with these regulations, some modifications to proposed Federal actions within the NEP area may occur to benefit the Topeka shiner, but we do not expect projects would be halted or substantially modified as a result of these regulations.

If adopted, this proposal would broadly authorize incidental take of the Topeka shiner within the NEP area, when such take is incidental to an otherwise lawful activity, such as agricultural activities, animal husbandry, grazing, ranching, road and utility maintenance and construction, other rural development, camping, hiking, fishing, hunting, vehicle use of roads and highways, and other activities in the NEP area that are in accordance with Federal, Tribal, State, and local laws and regulations. Intentional take for purposes other than authorized data collection or recovery purposes would not be permitted. Intentional take for research or recovery purposes would require a section 10(a)(1)(A) recovery permit under the Act.

The principal activities on private property near the proposed NEP area are agriculture, rural development, and recreation. We conclude the presence of the Topeka shiner would not affect the use of lands for these purposes because there would be no new or additional economic or regulatory restrictions imposed upon States, non-Federal

entities, or members of the public due to the presence of the Topeka shiner, and Federal agencies would only have to comply with sections 7(a)(1) and 7(a)(4) of the Act in these areas. Therefore, if adopted as proposed, this rulemaking is not expected to have any significant adverse impacts to activities on private lands within the NEP area.

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

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501 *et seq*.):

(1) If adopted, this proposal will not "significantly or uniquely" affect small governments. We have determined and certify under the Unfunded Mandates Reform Act, 2 U.S.C. 1502 *et seq*., that this proposed rulemaking will not impose a cost of $100 million or more in any given year on local or State governments or private entities. A Small Government Agency Plan is not required. As explained above, small governments would not be affected because the proposed NEP designation will not place additional requirements on any city, county, or other local municipalities.

(2) This rule will not produce a Federal mandate of $100 million or greater in any year (i.e., it is not a "significant regulatory action" under the Unfunded Mandates Reform Act). This proposed NEP designation for the Topeka shiner would not impose any additional management or protection requirements on the States or other entities.

Takings (E.O. 12630)

In accordance with Executive Order 12630, the proposed rule does not have significant takings implications. This rule would allow for the take of reintroduced Topeka shiners when such take is incidental to an otherwise legal activity, such as agricultural activities and other rural development, camping, hiking, hunting, vehicle use of roads and highways, and other activities that are in accordance with Federal, State, Tribal, and local laws and regulations. Therefore, we do not believe that establishment of this NEP would conflict with existing or proposed human activities or hinder public use of the Little Creek, Big Muddy Creek, and Spring Creek or its tributaries.

A takings implication assessment is not required because this rule: (1) Would not effectively compel a property owner to suffer a physical invasion of property and (2) would not deny all economically beneficial or productive use of the land or aquatic resources. This rule would substantially advance a legitimate government interest (conservation and recovery of a listed species) and would not present a barrier to all reasonable and expected beneficial use of private property.

Federalism (E.O. 13132)

In accordance with Executive Order 13132, we have considered whether this proposed rule has significant Federalism effects and have determined that a federalism impact summary statement is not required. This rule would not have substantial direct effects on the States, on the relationship between the Federal Government and the States,

or on the distribution of power and responsibilities among the various levels of government. In keeping with Department of the Interior policy, we requested information from and coordinated development of this proposed rule with the affected resource agencies in Missouri. Achieving the recovery goals for this species in Missouri would contribute to its eventual delisting and its return to State management. No intrusion on State policy or administration is expected; roles or responsibilities of Federal or State governments would not change; and fiscal capacity would not be substantially directly affected. The special rule would operate to maintain the existing relationship between the State and the Federal Government and is being undertaken in coordination with the State of Missouri. Therefore, this rule does not have significant Federalism effects or implications to warrant the preparation of a federalism impact summary statement under the provisions of Executive Order 13132.

Civil Justice Reform (E.O. 12988)

In accordance with Executive Order 12988, the Office of the Solicitor has determined that this rule would not unduly burden the judicial system and would meet the requirements of sections (3)(a) and (3)(b)(2) of the Order.

Paperwork Reduction Act

Office of Management and Budget (OMB) regulations at 5 CFR 1320, which implement provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*), require that Federal agencies obtain approval from OMB before collecting information from the public. This proposed rule does not contain any new information collections that require approval. OMB has approved our collection of information associated with reporting the taking of experimental populations (50 CFR 17.84) and assigned control number 1018—0095, which expires on May 31, 2014. We may not collect or sponsor, and you are not required to respond to, a collection of information unless it displays a currently valid OMB control number.

National Environmental Policy Act

The reintroduction of native species into suitable habitat within their historical or established range is categorically excluded from NEPA documentation requirements consistent with 40 CFR 1508.4, 43 CFR 46.205, 43 CFR 46.210, and 516 DM 8.5 B(6).

Government-to-Government Relationship with Tribes

In accordance with the presidential memorandum of April 29, 1994, "Government-to-Government Relations with Native American Tribal Governments" (59 FR 22951), Executive Order 13175 (65 FR 67249), and the Department of Interior Manual Chapter 512 DM 2, we have considered possible effects on federally recognized

Indian tribes and have determined that there are no tribal lands within the areas proposed for reintroductions. Therefore, no tribal lands would be affected by this rule.

Energy Supply, Distribution or Use (E.O. 13211)

Executive Order 13211 requires agencies to prepare Statements of Energy Effects when undertaking certain actions. This rule is not expected to significantly affect energy supplies, distribution, and use. Because this action is not a significant energy action, no Statement of Energy Effects is required.

Clarity of This Rule (E.O. 12866)

We are required by E.O. 12866, E.O. 12988, and by the Presidential Memorandum of June 1, 1998, to write all rules in plain language. This means that each rule we publish must:

(1) Be logically organized;

(2) Use the active voice to address readers directly;

(3) Use clear language rather than jargon;

(4) Be divided into short sections and sentences; and

(5) Use lists and tables wherever possible.

If you feel that we have not met these requirements, send us comments by one of the methods listed in the **ADDRESSES** section. To better help us revise the rule, your comment should be as specific as possible. For example, you should tell us the numbers of the sections and paragraphs that are unclearly written, which sections or sentences are too long, or the sections where you feel lists and tables would be useful.

References Cited

A complete list of all references cited in this proposed rule is available at *http://www.regulations.gov* at Docket No. FWS–R3–ES–2012–0087 or upon request from the Columbia, Missouri, Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

Authors

The primary authors of this proposed rule are staff members of the Service's Columbia, Missouri, Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

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, Topeka" under "FISHES" in the List of Endangered and Threatened Wildlife to read as follows:

§17.11 Endangered and threatened wildlife.

* * * * *

(h) * * *

Species		Historic Range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
* * * * * * *							
FISHES							
* * * * * * *							
Shiner, Topeka	*Notropis topeka=tristis*	U.S.A. (IA, KS, MN, MO, NE, SD)	Entire, except where listed as an experimental population.	E	654	17.95(e)	NA
Shiner, Topeka	*Notropis topeka=tristis*	U.S.A. (IA, KS, MN, MO, NE, SD)	U.S.A. (MO—specified portions of Little Creek, Big Muddy Creek, and Spring Creek watersheds in Adair, Gentry, Harrison, Putnam, Sullivan, and Worth Counties; see 17.84(n)(1)(i)).	XN	___	NA	17.84(n)
* * * * * * *							

3. Amend §17.84 by adding paragraph (n) to read as follows:

§17.84 Special rules—vertebrates.

* * * * *

(n) Topeka shiner (*Notropis topeka*).

(1) *Where is the Topeka shiner designated as a nonessential experimental population (NEP)?*

(i) The NEP area for the Topeka shiner is within the species' historical range and includes those waters within the Missouri counties of Adair, Gentry, Harrison, Putnam, Sullivan, and Worth identified in paragraph (n)(5) of this section.

(ii) The Topeka shiner is not known to currently exist in Adair, Gentry, Putnam, Sullivan, and Worth Counties in Missouri, or in those portions of Harrison County, Missouri, where the NEP is proposed. Based on its habitat requirements and potential predation by other fish predators, we do not expect this species to become established outside this NEP area, although there is a remote chance it may.

(iii) We will not change the NEP designations to "essential experimental," "threatened," or "endangered" within the NEP area without a public rulemaking. Additionally, we will not designate critical habitat for this NEP, as provided by 16 U.S.C. 1539(j)(2)(C)(ii).

(2) *What activities are not allowed in the NEP area?*

(i) Except as expressly allowed in paragraph (n)(3) of this section, all the prohibitions of §17.21 apply to the Topeka shiner NEP.

(ii) Any manner of take not described under paragraph (n)(3) of this section is prohibited in the NEP area.

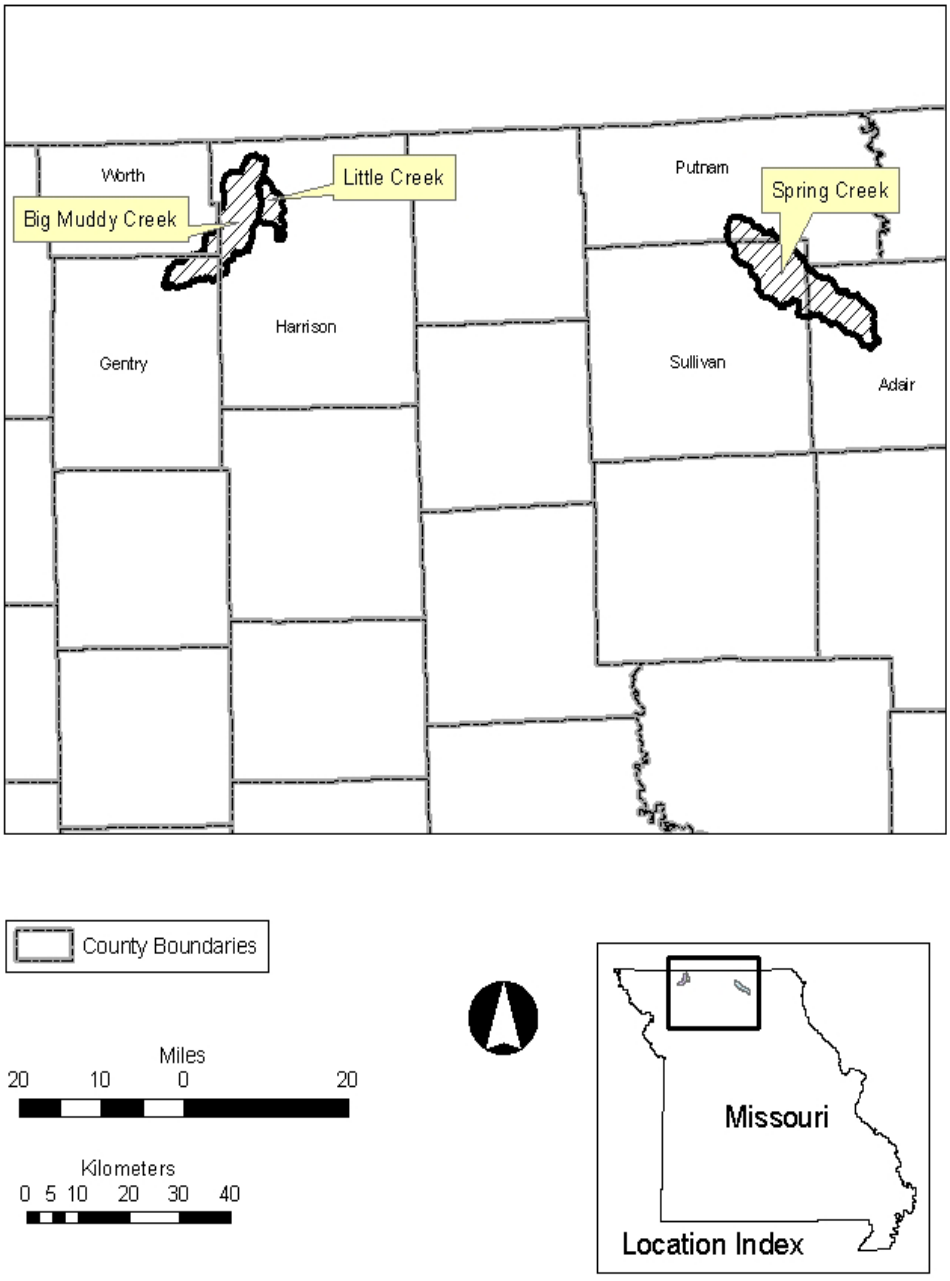
(iii) You may not possess, sell, deliver, carry, transport, ship, import, or export by any means, Topeka shiners, or parts thereof, that are taken or possessed in violation of paragraph (n)(3) of this section or in violation of the applicable State fish and wildlife laws or regulations or the Act.

(iv) You may not attempt to commit, solicit another to commit, or cause to be committed any offense defined in paragraph (n)(2)(iii) of this section.

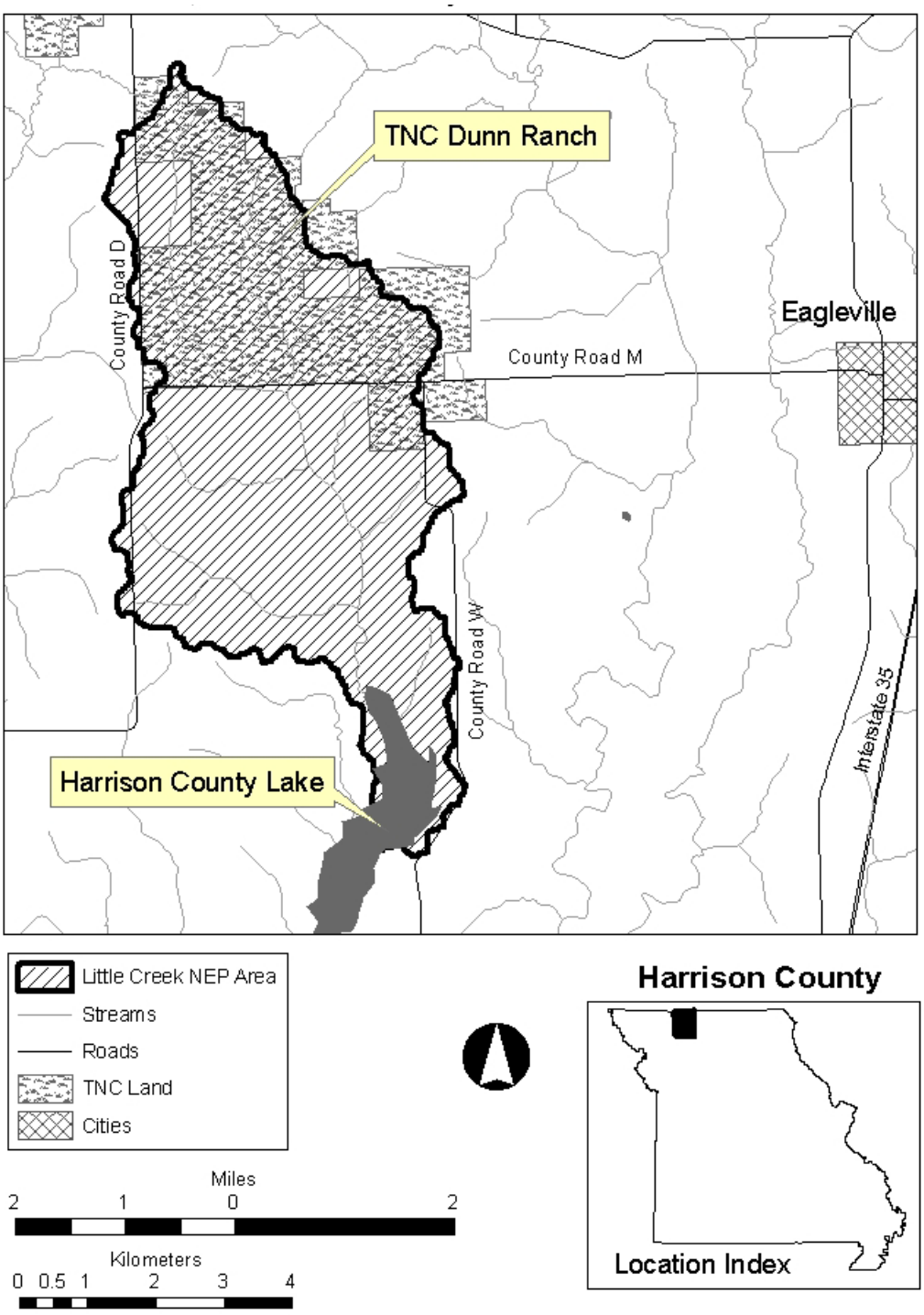
(3) *What take is allowed in the NEP area?* Take of this species that is incidental to an otherwise legal activity, such as agriculture, forestry and wildlife management, land development, recreation, and other activities, is allowed provided that the activity is not in violation of any applicable State fish and wildlife laws or regulations.

(4) *How will the effectiveness of these reintroductions be monitored?* We will monitor reintroduction efforts to assess changes in distribution within each watershed by sampling ponds and streams where releases occur for 10 years after reintroduction. Streams will be sampled annually, and ponds will be sampled annually for the first 3 years and biennially thereafter.

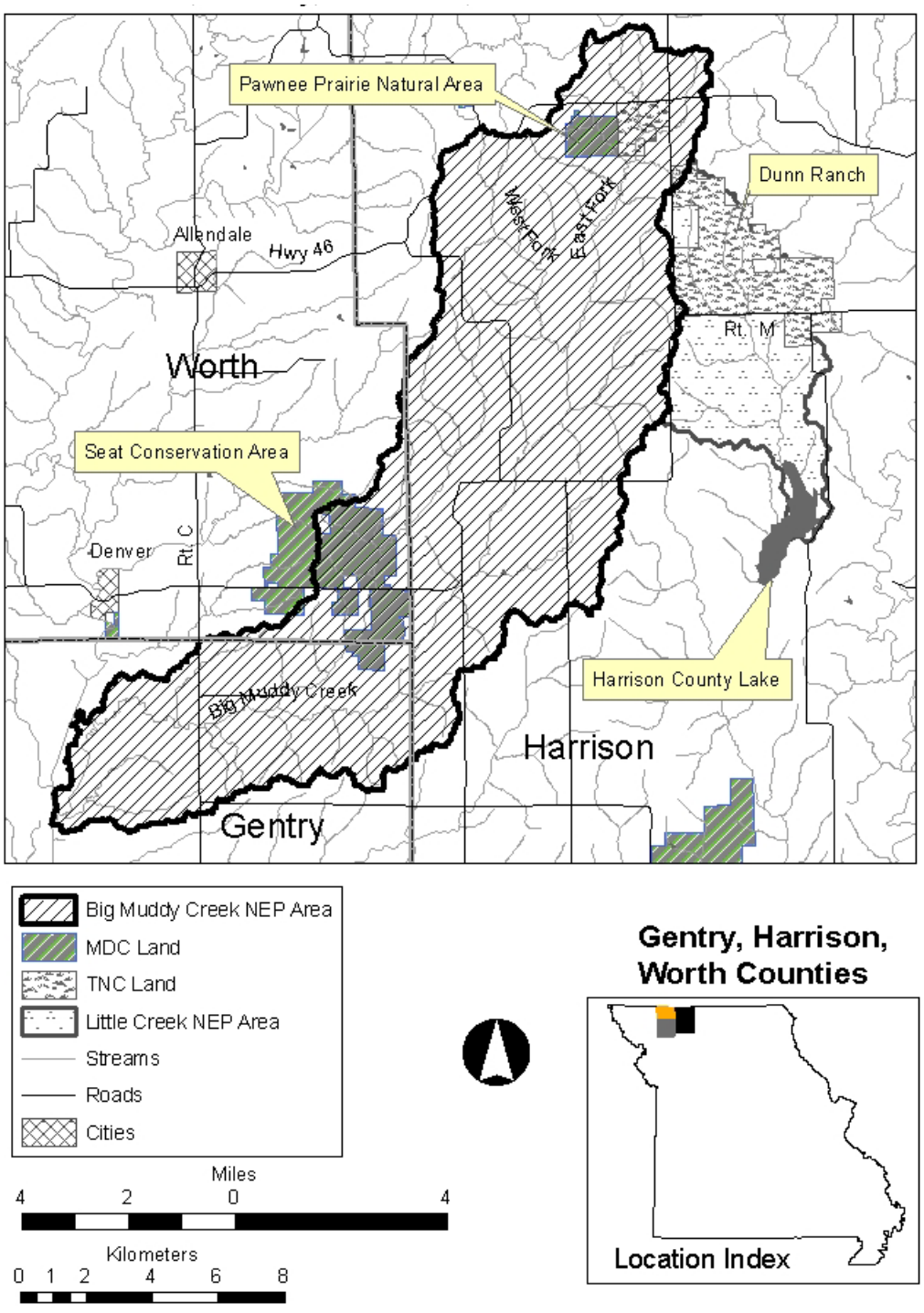
(5) *Note*: Map of the NEP areas [Big Muddy Creek (Gentry, Harrison, and Worth Counties), Little Creek (Harrison County), and Spring Creek (Adair, Putnam, and Sullivan Counties)] for the Topeka shiner, follows:



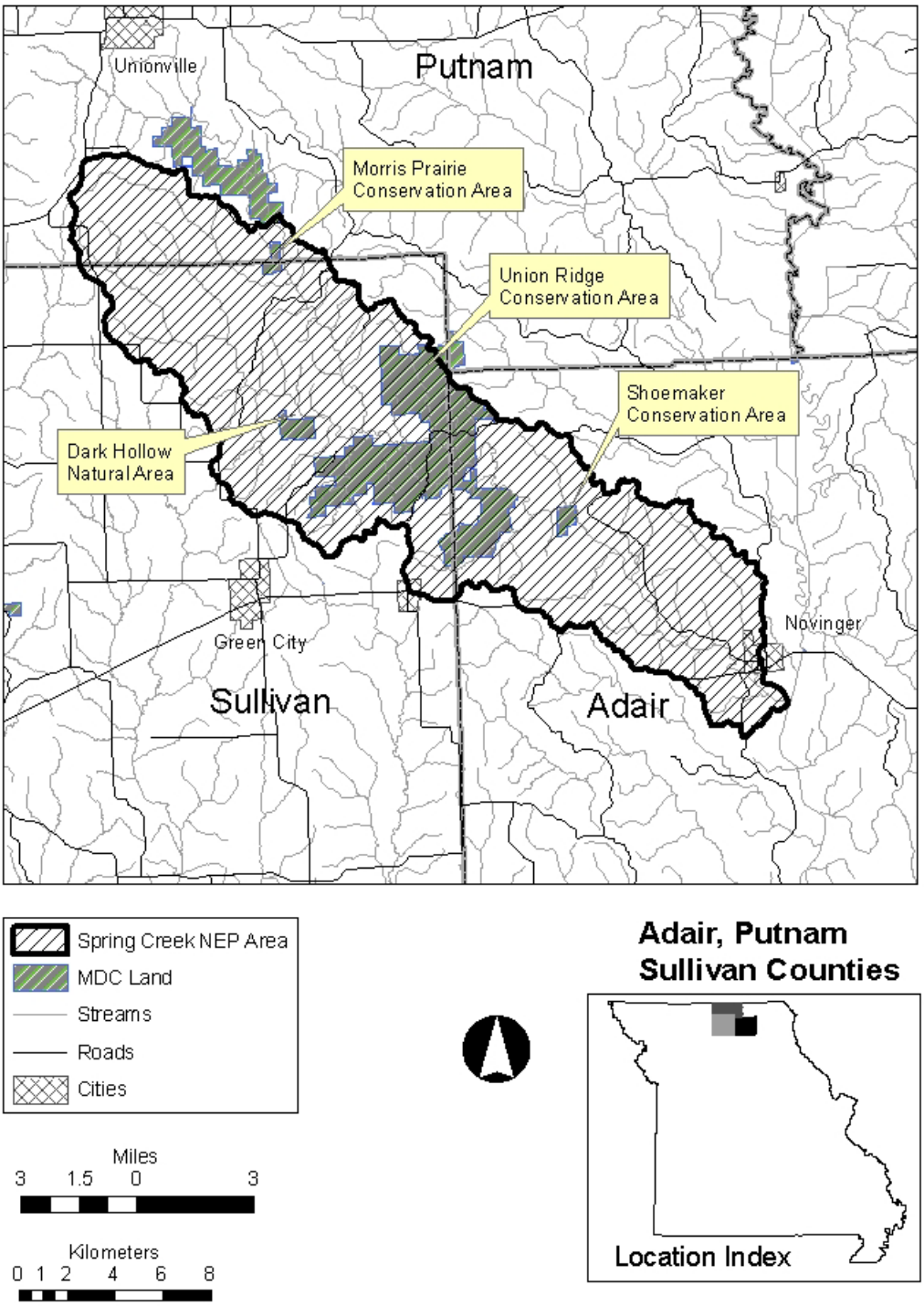
(6) *Note*: Map of the NEP area for the Topeka shiner in Little Creek watershed, Harrison County, follows:



(7) *Note*: Map of the NEP area for the Topeka shiner in Big Muddy Creek watershed, Gentry, Harrison, and Worth Counties, follows:



(8) *Note*: Map of the NEP area for the Topeka shiner in Spring Creek watershed, Adair, Putnam, and Sullivan Counties, follows:



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Dated: January 2, 2013

Michael Bean

Acting Deputy Assistant Secretary for Fish and Wildlife and Parks

Billing Code: 4310-55

[FR Doc. 2013-01153 Filed 01/22/2013 at 8:45 am; Publication Date: 01/23/2013]