DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[Docket No. FWS–R2–ES–2013–0008; 4500030113]

RIN 1018–AZ34

Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Sharpnose Shiner and Smalleye Shiner

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), propose to designate critical habitat for the sharpnose shiner (*Notropis oxyrhynchus*) and smalleye shiner (*N. buccula*) under the Endangered Species Act of 1973, as amended (Act). In total, approximately 1,002 river kilometers (623 river miles) of river segments occupied by the species in Baylor, Crosby, Fisher, Garza, Haskell, Kent, King, Knox, Stonewall, Throckmorton, and Young Counties in the upper Brazos River basin of Texas fall within

the boundaries of the proposed critical habitat. If we finalize this rule as proposed, it would extend the Act's protections to these species' critical habitat.

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]. Comments submitted electronically using the Federal eRulemaking Portal (see **ADDRESSES**, below) must be received by 11:59 p.m. Eastern Time on the closing date.

Public informational session and public hearing: We will hold a public hearing on September 4, 2013. The public information session will begin at 5:00 p.m., and the public hearing will begin at 6:30 p.m. and end at 8:00 p.m. Central Time.

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 Docket No. FWS–R2–ES–2013–0008, which is the docket number for this rulemaking. Then, in the Search panel on the left side of the screen, under the Document Type heading, click on the Proposed Rules link to locate this document. You may submit a comment by clicking on "Comment Now!"

(2) *By hard copy*: Submit by U.S. mail or hand-delivery to: Public Comments Processing, Attn: FWS–R2–ES–2013–0008; 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* under Docket Number FWS–R2–ES–2013–0008. This generally means that we will post any personal information you provide us (see the **Information Requested** section below for more information).

Coordinates or plot points: The coordinates or plot points or both from which the proposed critical habitat maps are generated and are available at *http://www.fws.gov/southwest/es/ArlingtonTexas/*, at *http://www.regulations.gov* at Docket No. FWS–R2–ES–2013–0008, and at the Arlington, Texas Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**). Any additional tools or supporting information that we may develop for this rulemaking will also be available at the Fish and Wildlife Service website and Field Office set out above, and may also be included in the preamble or at *http://www.regulations.gov*.

Public informational session and public hearing: The public informational session and hearing will be held in the Upstairs Conference Room at the Abilene Civic Center, 1100 North 6th Street, Abilene, Texas.

FOR FURTHER INFORMATION CONTACT: Erik Orsak, Acting Field Supervisor, U.S. Fish and Wildlife Service, Arlington, Texas, Ecological Services Field Office, 2005 NE Green Oaks Blvd., Suite 140, Arlington, TX 76006; by telephone 817-277-1100; or

by facsimile 817-277-1129. Persons who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 800–877–8339.

SUPPLEMENTARY INFORMATION:

Executive Summary

Why we need to publish a rule. Under the Endangered Species Act (Act), any species that is determined to be endangered or threatened requires critical habitat to be designated, to the maximum extent prudent and determinable. Designations and revisions of critical habitat can only be completed by issuing a rule. Elsewhere in today's **Federal Register**, we propose to list the sharpnose shiner and smalleye shiner as endangered species under the Act.

This rule consists of a proposed rule to designate critical habitat for the sharpnose shiner and smalleye shiner. The sharpnose shiner and smalleye shiner are proposed for listing under the Act. This rule proposes designation of critical habitat necessary for the conservation of the species.

The basis for our action. Under the Endangered Species Act, any species that is determined to be an endangered or threatened species shall, to the maximum extent prudent and determinable, have habitat designated that is considered to be critical habitat. Section 4(b)(2) of the Endangered Species Act states that the Secretary shall designate and make revisions to critical habitat on the basis of the best available scientific data after

taking into consideration the economic impact, national security impact, and any other relevant impact of specifying any particular area as critical habitat. The Secretary may exclude an area from critical habitat if he determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless he determines, based on the best scientific data available, that the failure to designate such area as critical habitat will result in the extinction of the species. The species are proposed for listing as endangered, and we also propose to designate approximately 1,002 river kilometers (km) (623 miles (mi)) of the upper Brazos River basin and the upland areas extending beyond the bankfull river channel by 30 meters (m) (98 feet (ft)) on each side as critical habitat in the following Texas counties: Baylor, Crosby, Fisher, Garza, Haskell, Kent, King, Knox, Stonewall, Throckmorton, and Young.

We are preparing an economic analysis of the proposed designations of critical habitat. In order to consider economic impacts, we are preparing a new analysis of the economic impacts of the proposed critical habitat designations and related factors. We will announce the availability of the draft economic analysis as soon as it is completed, at which time we will seek additional public review and comment.

We will seek peer review. We are seeking comments from knowledgeable individuals with scientific expertise to review our analysis of the best available science and application of that science and to provide any additional scientific information to improve this proposed rule. Because we will consider all comments and information we receive during the comment period, our final determinations may differ from this proposal.

Information Requested

Public Comments

We intend that any final action resulting from this proposed rule will be based on the best scientific and commercial data available and be as accurate and as effective as possible. Therefore, we request comments or information from other concerned governmental agencies, Native American tribes, the scientific community, industry, or any other interested parties concerning this proposed rule. We particularly seek comments concerning:

(1) The reasons why we should or should not designate habitat as "critical habitat" under section 4 of the Act (16 U.S.C. 1531 *et seq*.), including whether there are threats to the species from human activity, the degree of which can be expected to increase due to the designation, and whether that increase in threats outweighs the benefit of designation such that the designation of critical habitat may not be prudent.

(2) Specific information on:

(a) The amount and distribution of the sharpnose shiner and smalleye shiner and their habitat;

(b) What areas, that were occupied at the time of listing (or are currently occupied) and that contain features essential to the conservation of the species, should be included in the designation and why;

(c) Special management considerations or protection that may be needed in

critical habitat areas we are proposing, including managing for the potential effects of climate change; and

(d) What areas not occupied at the time of listing are essential for the conservation of the species and why.

(3) Land use designations and current or planned activities in the subject areas and their possible impacts of these activities on these species and proposed critical habitat.

(4) Information on the projected and reasonably likely impacts of climate change on the sharpnose shiner and smalleye shiner and proposed critical habitat.

(5) Any probable economic, national security, or other relevant impacts of designating any area that may be included in the final designation; in particular, we seek information on any impacts on small entities or families, and the benefits of including or excluding areas that exhibit these impacts.

(6) Whether any specific areas we are proposing for critical habitat designation should be considered for exclusion under section 4(b)(2) of the Act, and whether the benefits of potentially excluding any specific area outweigh the benefits of including that area under section 4(b)(2) of the Act.

(7) Whether we could improve or modify our approach to designating critical habitat in any way to provide for greater public participation and understanding or to

better accommodate public concerns and comments.

Please include sufficient information with your submission (such as scientific journal articles or other publications) to allow us to verify any scientific or commercial information you include.

You may submit your comments and materials concerning this proposed rule by one of the methods listed in the **ADDRESSES** section. We request that you send comments **only** by the methods described in the **ADDRESSES** section.

If you submit information via *http://www.regulations.gov*, your entire submission—including any personal identifying information—will be posted on the website. If your submission is made via a hardcopy that includes personal identifying information, 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. We will post all hardcopy submissions on *http://www.regulations.gov*.

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* at Docket No. FWS–R2–ES–2013–0008, or by appointment, during normal business hours, at the U.S. Fish and Wildlife Service, Arlington, Texas, Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

Public Hearing

Section 4(b)(5) of the Act provides for one or more public hearings on this proposal, if requested. We will hold a public hearing on Wednesday, September 4, 2013. The public information session will begin at 5:00 p.m., and the public hearing will begin at 6:30 p.m. and end at 8:00 p.m. Central Time. The public informational session and hearing will be held in the Upstairs Conference Room at the Abilene Civic Center, 1100 North 6th Street, Abilene, Texas. People needing reasonable accommodation in order to attend and participate in the public hearing should contact Erik Orsak, Field Supervisor, Arlington, Texas, Ecological Services Office, as soon as possible (see **FOR FURTHER INFORMATION CONTACT**).

Peer Review

In accordance with our joint policy on peer review published in the **Federal Register** 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 peer review is to ensure that our critical habitat designations are based on scientifically sound data, assumptions, and analyses. We will invite these peer reviewers to comment during this public comment period.

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

Previous Federal Actions

All previous Federal actions are described in the proposal to list the sharpnose shiner and smalleye shiner as endangered species under the Act, which is published elsewhere in today's **Federal Register**.

Critical Habitat

Background

It is our intent to discuss below only those topics directly relevant to the proposed designation of critical habitat for the sharpnose shiner and smalleye shiner. For a thorough assessment of the species' biology and natural history, including limiting factors and species resource needs, please refer to the June 2013 version of the Status Assessment Report for the Sharpnose Shiner and Smalleye Shiner (SSA Report; Service 2013, entire, available online at *www.regulations.gov* under Docket No. FWS–R2–ES–2013–0008).

Critical habitat is defined in section 3 of the Act as:

(1) The specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the Act, on which are found those physical or biological features:

(a) Essential to the conservation of the species and

(b) Which may require special management considerations or protection; and

(2) Specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

Conservation, as defined under section 3 of the Act, means to use and the use of all methods and procedures that are necessary to bring an endangered or threatened species to the point at which the measures provided pursuant to the Act are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, and transplantation, and, in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved, may include regulated taking.

Critical habitat receives protection under section 7 of the Act through the requirement that Federal agencies ensure, in consultation with the Service, that any action they authorize, fund, or carry out is not likely to result in the destruction or adverse modification of critical habitat. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. Such designation does not allow the government or public to access private lands. Such designation does not require implementation of restoration, recovery, or enhancement measures by non-Federal landowners. Where a landowner requests Federal agency funding or authorization for an action that may affect a listed species or critical habitat, the consultation requirements of section 7(a)(2) of the Act would apply, but even in the

event of a destruction or adverse modification finding, the obligation of the Federal action agency and the landowner is not to restore or recover the species, but to implement reasonable and prudent alternatives to avoid destruction or adverse modification of critical habitat.

Under the first prong of the Act's definition of critical habitat, areas within the geographical area occupied by the species at the time it was listed are included in a critical habitat designation if they contain physical or biological features (1) which are essential to the conservation of the species and (2) which may require special management considerations or protection. For these areas, critical habitat designations identify, to the extent known using the best scientific and commercial data available, those physical or biological features that are essential to the conservation of the species (such as space, food, cover, and protected habitat). In identifying those physical and biological features within an area, we focus on the principal biological or physical constituent elements (primary constituent elements such as roost sites, nesting grounds, seasonal wetlands, water quality, tide, soil type) that are essential to the conservation of the species. Primary constituent elements are those specific elements of the physical or biological features that provide for a species' life-history processes and are essential to the conservation of the species.

Under the second prong of the Act's definition of critical habitat, we can designate critical habitat in areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. For example, an area currently occupied by the species, but that was not

occupied at the time of listing, may be essential to the conservation of the species and may be included in the critical habitat designation. We designate critical habitat in areas outside the geographic area occupied by a species only when a designation limited to its range would be inadequate to ensure the conservation of the species.

Section 4 of the Act requires that we designate critical habitat on the basis of the best scientific data available. Further, our Policy on Information Standards Under the Endangered Species Act (published in the **Federal Register** on July 1, 1994 (59 FR 34271)), the Information Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Pub. L. 106–554; H.R. 5658)), and our associated Information Quality Guidelines, provide criteria, establish procedures, and provide guidance to ensure that our decisions are based on the best scientific data available. They require our biologists, to the extent consistent with the Act and with the use of the best scientific data available, to use primary and original sources of information as the basis for recommendations to designate critical habitat.

When we are determining which areas should be designated as critical habitat, our primary source of information is generally the information developed during the listing process for the species. For the sharpnose and smalleye shiners, we rely on the June 2013 SSA Report (Service 2013, entire) and the proposed rule to list the species as endangered, which appears elsewhere in today's **Federal Register**. Additional information sources may include articles in peer-reviewed journals, conservation plans developed by States and counties, scientific status surveys and studies, biological assessments, other unpublished materials, or experts' opinions or personal knowledge.

Habitat is dynamic, and species may move from one area to another over time. We recognize that critical habitat designated at a particular point in time may not include all of the habitat areas that we may later determine are necessary for the recovery of the species. For these reasons, a critical habitat designation does not signal that habitat outside the designated area is unimportant or may not be needed for recovery of the species. Areas that are important to the conservation of the species, both inside and outside the critical habitat designation, will be subject to: (1) Conservation actions implemented under section 7(a)(1) of the Act, (2) regulatory protections afforded by the requirement in section 7(a)(2) of the Act for Federal agencies to ensure their actions are not likely to jeopardize the continued existence of any endangered or threatened species, and (3) section 9 of the Act's prohibitions on taking any individual of the species, including taking caused by actions that affect habitat. Federally funded or permitted projects affecting listed species outside their designated critical habitat areas may result in jeopardy findings in some cases. These protections and conservation tools will contribute to recovery of this species. Similarly, critical habitat designations made on the basis of the best available information at the time of designation will not control the direction and substance of future recovery plans, habitat conservation plans (HCPs), or other species conservation planning efforts if new information available at the time of these planning efforts calls for a different outcome.

Prudency Determination

Section 4(a)(3) of the Act, as amended, and implementing regulations (50 CFR

424.12), require that, to the maximum extent prudent and determinable, the Secretary shall designate critical habitat at the time the species is determined to be an endangered or threatened species. Our regulations (50 CFR 424.12(a)(1)) state that the designation of critical habitat is not prudent when one or both of the following situations exist:

(1) The species is threatened by taking or other human activity, and identification of critical habitat can be expected to increase the degree of threat to the species, or

(2) Such designation of critical habitat would not be beneficial to the species.

There is currently no imminent threat of take attributed to noncommercial collection or vandalism for either of these species, and identification and mapping of critical habitat is not expected to initiate any such threat. In the absence of a finding that the designation of critical habitat would increase threats to a species, if there are any benefits to a critical habitat designation, then a prudent finding is warranted. The potential benefits include: (1) Triggering consultation under section 7 of the Act in new areas for actions in which there may be a Federal nexus where it would not otherwise occur because, for example, it has become unoccupied or the occupancy is in question; (2) focusing conservation activities on the most essential features and areas; (3) providing educational benefits to State or county governments or private entities; and (4) preventing people from causing inadvertent harm to the species. Therefore, because we have determined that the designation of critical habitat would not likely increase the degree of threat to the species, and may provide some measure of benefit, we find that designation of critical habitat is prudent for the sharpnose shiner and smalleye shiner.

Critical Habitat Determinability

Having determined that designation is prudent, under section 4(a)(3) of the Act, we must find whether critical habitat for the sharpnose shiner and smalleye shiner is determinable. Our regulations at 50 CFR 424.12(a)(2) state that critical habitat is not determinable when one or both of the following situations exist:

(1) Information sufficient to perform required analyses of the impacts of the designation is lacking, or

(2) The biological needs of the species are not sufficiently well known to permit identification of an area as critical habitat.

When critical habitat is not determinable, the Act provides for an additional year to publish a critical habitat designation (16 U.S.C. 1533(b)(6)(C)(ii)).

We reviewed the available information pertaining to the biological needs of the species and habitat characteristics where this species is located. This and other information represent the best scientific data available and led us to conclude that the designation of critical habitat is determinable for the sharpnose shiner and smalleye shiner.

Physical or Biological Features

In accordance with section 3(5)(A)(i) and 4(b)(1)(A) of the Act and regulations at 50 CFR 424.12, in determining which areas within the geographical area occupied by the

species at the time of listing to designate as critical habitat, we consider the physical or biological features that are essential to the conservation of the species and which may require special management considerations or protection. These include, but are not limited to:

(1) Space for individual and population growth and for normal behavior;

(2) Food, water, air, light, minerals, or other nutritional or physiological requirements;

(3) Cover or shelter;

(4) Sites for breeding, reproduction, or rearing (or development) of offspring; and

(5) Habitats that are protected from disturbance or are representative of the historical, geographic, and ecological distributions of a species.

Sharpnose Shiner

We derive the specific physical or biological features required for the sharpnose shiner from studies of this species' habitat, ecology, and life history as described below. We have used the best available information, as described in the June 2013 SSA Report (Service 2013, Chapter 2). To identify the physical and biological needs of the sharpnose shiner, we have relied on conditions at currently occupied locations where the shiner has been observed during surveys and the best information available on the species. Below, we summarize the physical and biological features needed by foraging and breeding sharpnose shiners. For a complete review of the physical and biological features required by the sharpnose shiner, see Chapter 2 of the June 2013 SSA Report (Service 2013, Chapter 2). We have determined that the following physical or biological features are

essential to the sharpnose shiner.

Space for Individual and Population Growth and for Normal Behavior

Sharpnose shiners occur in fairly shallow, flowing water, often less than 0.5 meters (m) deep with sandy substrates. They broadcast spawn semi-buoyant eggs and larvae that may remain suspended in the water column for several days before they are capable of independent swimming, indicating there is a minimum river segment length necessary to support successful reproduction. A comparison of minimum estimated reach length requirements for similar species and current modeling efforts for this species indicate an unobstructed reach length of greater than 275 kilometers (km) (171 miles (mi)) is likely required to complete the species' life history. Lengths greater than 275 km (171 mi) would also provide migratory pathways to refugia in which sharpnose shiners may survive drought conditions.

Therefore, based on the information above and additional analysis in the June 2013 SSA Report (Service 2013, Chapter 2), we identify flowing water of sufficient unobstructed length (275 km (171 mi)) to be a physical or biological feature essential to the conservation of the sharpnose shiner.

Food, Water, Air, Light, Minerals, or Other Nutritional or Physiological Requirements

Sharpnose shiners are generalist feeders consuming aquatic and terrestrial invertebrates (mostly insects), plant material, and detritus. The presence of terrestrial

insects in its diet suggests native riparian vegetation along the stream banks where the sharpnose shiners occur is important in providing food availability. The prevalence of sand-silt in the gut contents of sharpnose shiners indicate they likely forage among the sediments when food availability is low, suggesting river segments containing sandy substrates may be preferred by this species.

Flowing water of sufficient quality (minimal pollution, lacking golden alga toxicity, and within physiological tolerances) is required for the survival of these species. Sharpnose shiners can tolerate temperatures of 39.2 °C (102.6 °F) only briefly and generally require oxygen concentrations above 2.66 milligrams per liter (mg/L). Sharpnose shiners experience significant mortality at salinities greater than 15 parts per thousand (ppt) (25 millisiemens per centimeter (mS/cm)). The susceptibility of sharpnose shiners to environmental pollutants is not well understood; however, it has been observed that petroleum contamination, and possibly other pollutants, are capable of killing this species. Although the effects of golden alga on sharpnose shiners have not been documented, toxic blooms in occupied habitat are certain to cause mortality.

Native riparian vegetation adjacent to the river channel where the sharpnose shiner occurs is important as a source of food (terrestrial insects) and to maintain physical habitat conditions in the stream channel. Riparian areas are essential for energy and nutrient cycling, filtering runoff, absorbing and gradually releasing floodwaters, recharging groundwater, and maintaining stream flows. Healthy riparian corridors help ensure aquatic resources maintain the ecological integrity essential to stream fishes, including the sharpnose shiner. A riparian width of 30 m (98 ft) is generally sufficient to

protect the water quality of adjacent streams and is expected to provide the necessary prey base for sharpnose shiners (Service 2013, Chapter 6).

Therefore, based on the information above and additional analysis in the June 2013 SSA Report (Service 2013, Chapter 2), we identify river segments containing flowing water of sufficient quality (i.e., within physiological tolerances, low in toxic pollutants, and lacking toxic golden alga blooms) with sandy substrates, and their associated native riparian vegetation, to be physical or biological features essential to the conservation of the sharpnose shiner.

Cover or Shelter

Specific cover or sheltering requirements for sharpnose shiners within the aquatic ecosystem have not been identified and may not be pertinent to their conservation because these fish mostly occur in open water. Therefore, we have not identified any specific cover or shelter habitat requirements to be physical or biological features essential to the conservation of the sharpnose shiner.

Sites for Breeding, Reproduction, or Rearing (or Development) of Offspring

Successful reproduction by sharpnose shiners requires minimum levels of flowing water through the summer breeding season. Cyprinid eggs spawned into the pelagic zone (open water not near the river bottom) become semi-buoyant within 10 to 30 minutes, allowing them to drift through the water column for approximately 1 or 2 days prior to

hatching. Larval stages may drift in the water column for an additional 2 to 3 days post-hatching.

Spawning occurs asynchronously (fish not spawning at the same time) from April through September during periods of no and low flow, and synchronously (many fish spawning at the same time) during elevated streamflow events. Successful recruitment (survival to the juvenile fish stage) does not occur during periods completely lacking flow. This is because in no-flow conditions, the floating eggs, zygotes, and larval fish of broadcast spawners sink and suffocate in the anoxic sediments and are more susceptible to predation. Modeling studies have estimated minimum mean summer discharge of 2.61 cubic meters per second (m^3s^{-1}) (92 cubic feet per second (cfs)) is necessary to sustain a population of sharpnose shiners.

Therefore, based on the information above and additional analysis in the June 2013 SSA Report (Service 2013, Chapter 2), we identify river segments with a minimum mean summer discharge of approximately 2.61 m^3s^{-1} (92 cfs) to be physical or biological features essential to the conservation of the sharpnose shiner.

Habitats that are Protected from Disturbance or are Representative of the Historic, Geographical, and Ecological Distributions of a Species

Sharpnose shiner habitat is subject to dynamic changes resulting from flooding and drying of occupied water ways. Consequently, fluctuating water levels create circumstances in which the extent of the sharpnose shiner's range vary over time, and

may be periodically contracted or expanded depending on water availability. Worsening drought conditions are increasing the intensity and duration of river drying in the upper Brazos River basin. As a result of these dynamic changes, particularly during intense droughts, sharpnose shiners require unobstructed river segments through which they can migrate to find refuge from river drying. These fish can later emigrate from these refugia and recolonize normally occupied areas when suitable conditions return.

Therefore, based on the information above and additional analysis in the June 2013 SSA Report (Service 2013, Chapter 2), we identify unobstructed river segments of at least 275 km (171 mi) to be a physical or biological feature essential to the conservation of the sharpnose shiner.

Smalleye Shiner

We derive the specific physical or biological features required for the smalleye shiner from studies of this species' habitat, ecology, and life history as described below. We have used the best available information, as described in the June 2013 SSA Report (Service 2013, Chapter 2). To identify the physical and biological needs of the smalleye shiner, we have relied on conditions at currently occupied locations where the shiner has been observed during surveys and the best information available on the species. Below, we summarize the physical and biological features needed by foraging and breeding smalleye shiners. For a complete review of the physical and biological features required by the smalleye shiner, see Chapter 2 of the June 2013 SSA Report (Service 2013, Chapter 2). We have determined that the following physical or biological features are

essential to the smalleye shiner.

Space for Individual and Population Growth and for Normal Behavior

Smalleye shiners occur in fairly shallow, flowing water, often less than 0.5 m deep with sandy substrates. They broadcast spawn semi-buoyant eggs and larvae that may remain suspended in the water column for several days before larval fish are capable of independent swimming, indicating there is a minimum stream reach length necessary to support successful reproduction. A comparison of minimum estimated reach length requirements for similar species and current modeling efforts for this species indicate that an unobstructed reach length of greater than 275 km (171 mi) is likely required to complete the species' life history. Lengths greater than 275 km (171 mi) would also provide migratory pathways to refugia in which smalleye shiners may survive drought conditions.

Therefore, based on the information above and additional analysis in the June 2013 SSA Report (Service 2013, Chapter 2), we identify flowing water of sufficient unobstructed length (275 km (171 mi)) to be a physical or biological feature essential to the conservation of the smalleye shiner.

Food, Water, Air, Light, Minerals, or Other Nutritional or Physiological Requirements

Smalleye shiners are generalist feeders consuming aquatic and terrestrial invertebrates (mostly insects), plant material, and detritus. The presence of terrestrial

insects in the smalleye shiner's diet suggests native riparian vegetation along the banks of inhabited rivers is important in providing food availability, as well as the general health of the aquatic riverine ecosystem. The prevalence of sand-silt in the gut contents of smalleye shiners indicate they likely forage among the sediments when food availability is low, suggesting river segments containing sandy substrates may be preferred by this species.

Water of sufficient quality (minimal pollution, lacking golden alga toxicity, and within physiological tolerances) is required for the survival of these species. Smalleye shiners can tolerate temperatures of 40.6 °C (105.1 °F) only briefly and generally require oxygen concentrations above 2.11 mg/L. Smalleye shiners experience significant mortality at salinities greater than 18 ppt (30 mS/cm). The susceptibility of smalleye shiners to environmental pollutants is not well understood; however, it has been observed that petroleum contamination, and possibly other pollutants, are capable of killing this species. Although the effects of golden alga on smalleye shiners have not been documented, blooms in occupied habitat are certain to cause mortality in this species.

Native riparian vegetation adjacent to the river channel where the smalleye shiner occurs is important as a source of food (terrestrial insects) and to maintain physical habitat conditions in the stream channel. Riparian areas are essential for energy and nutrient cycling, filtering runoff, absorbing and gradually releasing floodwaters, recharging groundwater, and maintaining stream flows. Healthy riparian corridors help ensure aquatic resources maintain the ecological integrity essential to stream fishes, including the smalleye shiner. A riparian width of 30 m (98 ft) is generally sufficient to

protect the water quality of adjacent streams and is expected to provide the necessary prey base for smalleye shiners (Service 2013, Chapter 6).

Therefore, based on the information above and additional analysis in the June 2013 SSA Report (Service 2013, Chapter 2), we identify sandy-bottomed river segments containing flowing water of sufficient quality (i.e., within physiological tolerance, low in toxic pollutants, and lacking toxic golden algal blooms), and their associated native riparian vegetation, to be physical or biological features essential to the conservation of the smalleye shiner.

Cover or Shelter

Specific cover or sheltering requirements for smalleye shiners within the aquatic ecosystem have not been identified and may not be pertinent to their conservation because these fish mostly occur in open water. Therefore, we have not identified any specific cover or shelter habitat requirements to be physical or biological features essential to the conservation of the smalleye shiner.

Sites for Breeding, Reproduction, or Rearing (or Development) of Offspring

Successful reproduction by smalleye shiners requires minimum levels of flowing water through the summer breeding season. Cyprinid eggs spawned into the pelagic zone (open water not near the river bottom) become semi-buoyant within 10 to 30 minutes, allowing them to drift through the water column for approximately 1 or 2 days prior to

hatching. Larval stages may drift in the water column for an additional 2 to 3 days post-hatching.

Spawning occurs asynchronously from April through September during periods of no and low flow, and synchronously during elevated streamflow events. Successful recruitment (survival to the juvenile fish stage) does not occur during periods completely lacking flow. This is because in no-flow conditions, the floating eggs, zygotes, and larval fish of broadcast spawners sink and suffocate in the anoxic sediments and are more susceptible to predation. Modeling studies have estimated minimum mean summer discharge of 6.43 m^3s^{-1} (227 cfs) is necessary to sustain a population of the smalleye shiner.

Therefore, based on the information above and additional analysis in the June 2013 SSA Report (Service 2013, Chapter 2), we identify river segments with a minimum mean summer discharge of approximately 6.43 m^3s^{-1} (227 cfs) to be physical or biological features essential to the conservation of the smalleye shiner.

Habitats that are Protected from Disturbance or are Representative of the Historic, Geographical, and Ecological Distributions of a Species

Smalleye shiner habitat is subject to dynamic changes resulting from flooding and drying of occupied water ways. Consequently, fluctuating water levels create circumstances in which the extent of the sharpnose and smalleye shiner's range vary over time, and may be periodically contracted or expanded depending on water availability.

Worsening drought conditions are increasing the intensity and duration of river drying in the upper Brazos River basin. As a result of these dynamic changes, particularly during intense droughts, smalleye shiners require unobstructed river segments through which they can migrate to find refuge from river drying. These fish can later emigrate from these refugia and recolonize normally occupied areas when suitable conditions return.

Therefore, based on the information above and additional analysis in the June 2013 SSA Report (Service 2013, Chapter 2), we identify unobstructed river segments of at least 275 km (171 mi) to be a physical or biological feature essential to the conservation of the sharpnose shiner.

Summary of Physical or Biological Features

In summary, the sharpnose shiner and smalleye shiner need specific vital resources for survival and completion of their life histories. One of the most important aspects of their life histories is that their broadcast-spawn eggs and developing larvae require flowing water of sufficient length within which they develop into free-swimming juvenile fish. In addition, sharpnose shiners and smalleye shiners typically live for no more than two breeding seasons. As a result, if resources are not available in a single spawning season, their populations would be greatly impacted, and if resources are not available through two consecutive breeding seasons the impacts would be catastrophic.

The sharpnose shiner and smalleye shiner have exceptionally specialized habitat requirements to support these life-history needs and maintain adequate population sizes.

Habitat requirements are characterized by river segments of greater than 275 km (171 mi) with estimated average spawning season flows greater than 2.61 m^3s^{-1} (92 cfs) for the sharpnose shiner and of 6.43 m^3s^{-1} (227 cfs) for the smalleye shiner. River segment lengths of 275 km (171 mi) or greater also aid in providing sharpnose and smalleye shiners refugia from river drying during severe drought. In addition, individual shiners also need sandy substrates to support foraging, water quality within their physiological and toxicological tolerances, and intact upland vegetation capable of supporting their prey base. Intact upland vegetation is also important in providing adequate filtration of surface water runoff to maintain a healthy aquatic ecosystem.

Populations of sharpnose shiners and smalleye shiners with a high likelihood of long-term viability require contiguous river segments containing the physical and biological features that are essential to the conservation of these species. This contiguous suitable habitat is necessary to retain the reproductive success of these species in the face of natural and manmade seasonal fluctuations of water availability. Sharpnose shiner and smalleye shiner habitat is subject to dynamic changes resulting from flooding and drying of occupied water ways. Consequently, fluctuating water levels create circumstances in which the extent of the sharpnose and smalleye shiner's range vary over time, and may be periodically contracted or expanded depending on water availability.

Primary Constituent Elements for the Sharpnose Shiner and Smalleye Shiner

According to 50 CFR 424.12(b), we are required to identify the physical or biological features essential to the conservation of the sharpnose shiner and smalleye

shiner within the geographic area occupied by the species at the time of listing, focusing on the features' primary constituent elements. We consider primary constituent elements to be the elements of physical or biological features that provide for a species' life-history processes and that are essential to the conservation of the species.

Sharpnose Shiner

Based on our current knowledge of the physical or biological features and habitat characteristics required to sustain the species' life-history processes (Service 2013, Chapter 2), we determine that the primary constituent element (PCE) specific to the sharpnose shiner consists of a riverine system with habitat to support all life stages of sharpnose shiners, which includes:

(1) Unobstructed, sandy-bottomed river segments greater than 275 km (171 mi) in length.

(2) Flowing water of greater than approximately 2.61 m^3s^{-1} (92 cfs) averaged over the shiner spawning season (April through September).

(3) Water of sufficient quality to support survival and reproduction, characterized by:

a. Temperatures generally less than 39.2 °C (102.6 °F);

b. Dissolved oxygen concentrations generally greater than 2.66 mg/L;

c. Salinities generally less than 15 ppt (25 mS/cm); and

d. Sufficiently low petroleum and other pollutant concentrations such that mortality does not occur.

(4) Native riparian vegetation capable of maintaining river water quality, providing a terrestrial prey base, and maintaining a healthy riparian ecosystem.

Smalleye Shiner

Based on our current knowledge of the physical or biological features and habitat characteristics required to sustain the species' life-history processes (Service 2013, Chapter 2), we determine that the primary constituent element (PCEs) specific to the smalleye shiner consists of a riverine system with habitat to support all life history stages of smalleye shiners, which includes:

(1) Unobstructed, sandy-bottomed river segments greater than 275 km (171 mi) in length.

(2) Flowing water of greater than approximately 6.43 m^3s^{-1} (227 cfs) averaged over the shiner spawning season (April through September).

(3) Water of sufficient quality to support survival and reproduction, characterized by:

a. Temperatures generally less than 40.6 °C (105.1 °F);

b. Dissolved oxygen concentrations generally greater than 2.11 mg/L;

c. Salinities less than 18 ppt (30 mS/cm); and

d. Sufficiently low petroleum and other pollutant concentrations such that mortality does not occur.

(4) Native riparian vegetation capable of maintaining river water quality, providing a terrestrial prey base, and maintaining a healthy riparian ecosystem.

Special Management Considerations or Protection

When designating critical habitat, we assess whether the specific areas within the geographic area occupied by the species at the time of listing contain features that are essential to the conservation of the species and which may require special management considerations or protection. The features essential to the conservation of these species may require special management considerations or protection to reduce the following threats: Habitat loss and modification from fragmentation of river segments; alteration to natural flow regimes by impoundment, groundwater withdrawal, and drought; water quality degradation; and invasive saltcedar encroachment.

River fragmentation decreases the unobstructed river length required for successful reproduction in these species. Impoundments, groundwater withdrawal, saltcedar encroachment, and drought have the potential to reduce river flow below the minimum requirement to keep the eggs and larvae of these species afloat and ultimately for sustainment of sharpnose and smalleye shiner populations. Water quality degradation resulting from pollution sources; lack of flows maintaining adequate temperatures, oxygen concentrations, and salinities; and the destruction of adjacent riparian vegetation's run-off filtering abilities may result in water quality parameters beyond which sharpnose and smalleye shiners are capable of surviving. As such, the features essential to the conservation of these species require special management from these threats.

For sharpnose shiners and smalleye shiners, special management considerations or protection are needed to address threats. Management activities that could ameliorate threats include, but are not limited to: (1) Removing or modifying existing minor fish barriers to allow fish passage; (2) managing existing reservoirs to allow sufficient river flow to support shiner reproduction and population growth; (3) protecting groundwater, surface water, and spring flow quantity; (4) protecting water quality by implementing comprehensive programs to control and reduce point sources and non-point sources of pollution; and (5) protecting and managing native riparian vegetation . A more complete discussion of the threats to the sharpnose shiner and smalleye shiner and their habitats can be found in the June 2013 SSA Report (Service 2013, Chapter 3).

Criteria Used To Identify Critical Habitat

As required by section 4(b)(2) of the Act, we use the best scientific data available to designate critical habitat. For this proposed rule, we rely heavily on the analysis of biological information reviewed in the June 2013 SSA Report (Service 2013). In accordance with section 3(5)(A) of the Act and its implementing regulation at 50 CFR 424.12(e), we first determined what specific areas, within the geographical area occupied by the species at the time they are listed, contain the physical or biological features that are essential to the conservation of the species and which may require special management considerations or protections. Next, we considered whether designating any additional areas—outside those currently occupied at the time of listing—are necessary to ensure the conservation of the species. We are not currently proposing to designate any areas outside the geographical area occupied by the species because no areas were

determined to be essential for the conservation of either species. Finally, we described how we determined the lateral extent and mapping processes used in developing the proposed critical habitat units.

Areas Occupied at the Time of Listing

For the purpose of designating critical habitat for the sharpnose and smalleye shiners, we defined occupancy based on several criteria. First, survey results since 2008 confirm that both species persist within the Brazos River basin of Texas upstream of Possum Kingdom Lake in the Brazos River main stem, Salt Fork of the Brazos River, Double Mountain Fork of the Brazos River, and North Fork Double Mountain Fork of the Brazos River (Service 2013, Chapter 4). We chose to use survey results from the last 5 years because these data are relatively consistent from year to year and represent the best available information for what areas should be considered occupied at the time of listing. Second, a lack of sufficient fish sampling exists for some tributaries once known to be historically occupied by one or both species. The sharpnose and smalleye shiner are similar in their biology, and they are both capable of colonizing river segments when conditions are favorable. Therefore, we considered tributary streams occupied at the time of listing if they were previously occupied by either species and are contiguous (i.e., lacking fish migration barriers) with areas in the upper Brazos River confirmed to be occupied by both species. Third, tributaries for which we had no information that either species recently or historically occurred were not considered occupied, even if they were contiguous with areas that are currently occupied.

Segments considered to be occupied at the time of listing were then assessed to determine if they contained the physical or biological features for the species and whether they required special management or protection. River segments not exceeding 275 km (171 mi) upstream of the lentic waters of Possum Kingdom Lake were not included because they lack the necessary physical or biological features for successful reproduction. Segments that do not typically maintain suitable water quality conditions (i.e., within physiological tolerances, minimal pollution, lacking regular golden alga blooms) were not included because they would not likely support a viable population of shiners. Segments not likely to maintain minimum mean spawning season flows capable of sustaining populations of either species, even during favorable climatic conditions, were also not included because they would not support successful reproduction.

The lower Brazos River, where shiners were released in 2012, is considered unoccupied for the purposes of determining critical habitat because prior to their 2012 release, both species had become extirpated or were functionally extirpated from this area as no fish had been collected since 2006. The release effort in 2012 was likely insufficient to restart a population of these species in the lower Brazos River. Therefore, given the old age and small number of fish released in 2012, it is likely they are extirpated from this reach of the Brazos River (Service 2013, Chapter 4).

Areas Unoccupied at the Time of Listing

To determine if any areas not considered occupied at the time of listing are essential for the conservation of the species we considered: (1) Whether the area was

historically occupied; (2) the potential contribution of the area to the conservation of each species based on our June 2013 SSA Report (Service 2013, Chapter 2); (3) whether the area could be restored to contain the habitat conditions needed to support the species; and (4) whether a viable population of the species could be reestablished at the site. We recognize that both species likely need additional areas beyond those currently occupied in order to have sufficient redundancy and resiliency for long-term viability. However, our review of the areas within the historical range found that none of them have all four of these necessary characteristics to be considered essential for the conservation of either species.

We considered four areas that were historically occupied by one or both species as possible critical habitat: the Colorado River, Wichita River, middle Brazos River (between Possum Kingdom Lake and the low water crossing near the City of Marlin, Falls County, Texas) and lower Brazos River (downstream of Marlin to the Gulf of Mexico). The smalleye shiner is not known to have naturally occurred outside of the Brazos River basin, so neither the Colorado nor Wichita Rivers were considered essential for the conservation of that species. For the sharpnose shiner, our review found that neither the Colorado nor Wichita Rivers were considered necessary to maintain viability of either species because of the limited abundance and distribution of this shiner historically. In addition, both of these rivers have extensive impoundments such that the unfragmented stream length needed for reproduction by these species is lacking. These impoundments are expected to continue to exist into the future with no apparent potential for their removal, thereby eliminating the ability of the Colorado or Wichita Rivers to contain the necessary habitat conditions to support either species. Therefore, the

Colorado and Wichita Rivers were not proposed as critical habitat for either species because of limited importance to the conservation of the species and the inability to restore the necessary habitat conditions for the species.

The middle Brazos River also lacks the necessary unimpounded river length required to support sharpnose and smalleye shiner reproduction (Service 2013, Chapter 4). These impoundments are expected to exist into the future with no apparent potential for their removal. As a result, there is no ability for these areas to be restored to contain the necessary habitat conditions to support the species. Therefore, since this area of the middle Brazos River cannot be restored to appropriate habitat conditions we find it is not essential for the conservation of either species, and we did not propose it as critical habitat.

The lower Brazos River was also found to likely have limited importance to the overall viability for both species (Service 2013, Chapter 2). The lower Brazos River does contain an unimpounded stream length long enough to support reproduction of sharpnose and smalleye shiners; however, their populations in this segment have already declined to the point that we presume they are extirpated from this reach. We expect the extirpation was the result of poor habitat conditions. Both the flow regime and river channel morphology of the lower Brazos River are considerably different (higher flow and deeper, wider channel) than the upper Brazos River, so this segment may never have supported populations of either species independent of the upper Brazos River populations. As a result, it is unlikely that sharpnose and smalleye shiners are capable of sustaining populations in the lower Brazos River without constant emigration (downstream dispersal) from the upstream source population in the upper Brazos River,

which is now isolated by impoundments in the middle Brazos River. Therefore, with limited importance and the inability to support populations, we find the lower Brazos River is not essential for the conservation of either species, and we did not propose this area for critical habitat.

In conclusion, based on the best available information we conclude that the areas within the historical range of one or both species, but not occupied by either species at the time of listing, are not essential for the conservation of either species. The Colorado and Wichita Rivers do not contribute substantially to the conservation of the sharpnose shiner. The middle Brazos River cannot be restored to contain the necessary habitat conditions to support either species. The lower Brazos River may not be important for the conservation of either species and is not likely able to support a viable population of either species. Therefore, we have not proposed any areas as critical habitat beyond what is occupied at the time of listing.

Lateral Extent

In determining the lateral extent (overbank areas adjacent to the river channel) of critical habitat along proposed riverine segments, we considered the definition of critical habitat under the Act. Under the Act, critical habitat must contain the physical or biological features essential to a species' conservation and which may require special management considerations or protection. Conservation of the river channel alone is not sufficient to conserve sharpnose and smalleye shiners because the nearby native riparian vegetation areas adjacent to the river channel where the shiners occur are important

components of the critical habitat for the shiners as a source of food (terrestrial insects) and to maintain physical habitat conditions in the stream channel. Riparian areas are essential for energy and nutrient cycling, filtering runoff, absorbing and gradually releasing floodwaters, recharging groundwater, and maintaining stream flows. Healthy riparian corridors help ensure aquatic resources maintain the ecological integrity essential to stream fishes, including the sharpnose shiner and smalleye shiner.

A riparian width of 5 to 30 m (16 to 98 (ft) is generally sufficient to protect the water quality of adjacent streams. The ability of riparian buffers to filter surface runoff is largely dependent on vegetation density, type, and slope, with dense, grassy vegetation and gentle slopes facilitating filtration. A riparian buffer width of 30 to 500 m (98 to 1,640 ft) should be sufficient to provide wildlife habitat; however, the riparian zone of the upper Brazos River may never have been extensive due to the aridity of the area, and the terrestrial insect prey base of the shiners would likely persist at even the thinnest recommended width. A riparian width of 30 m (98 ft) beyond the bankfull width of the river should be sufficient to maintain proper runoff filtration and provide the water quality and food base required by sharpnose and smalleye shiners (Service 2013, Chapter 6). As such, the proposed critical habitat includes the stream and river segments identified below and an area extending 30 meters (98 ft) perpendicularly to the stream channel beyond bankfull width. The bankfull width is the width of the stream or river at bankfull discharge and often corresponds to the edge of the riparian vegetation. Bankfull discharge is significant because it is the flow at which water begins to leave the active channel and move into the floodplain and serves to identify the point at which the active channel ceases and the floodplain begins.

Mapping

For each species, we are proposing one critical habitat unit, divided into six subunits. These subunits are derived from the most recent USGS high-resolution National Hydrological Flowline Dataset. Although river channels migrate naturally, it is assumed the segment lengths and locations will remain reasonably accurate over an extended period of time. All mapping was performed using ArcMap version 10 (Environmental Systems Research Institute, Inc.), a computer Geographic Information System (GIS) program.

We set the limits of each critical habitat subunit by identifying landmarks (reservoirs and dams) that clearly act as barriers to fish migration. Partial barriers to fish migration that impede fish movement only during low river flow are not used to identify segment endpoints because it is presumed fish may occasionally be capable of traversing these impediments. Stream confluences are also used to delineate the boundaries of subunits contiguous with other critical habitat subunits because they are logical and recognizable termini.

When determining proposed critical habitat boundaries, we also made every effort to avoid including developed areas such as lands covered by buildings, pavement, and other structures because such lands lack physical or biological features for the sharpnose shiner and smalleye shiner. The scale of the maps we prepared under the parameters for publication within the Code of Federal Regulations may not reflect the exclusion of such

developed lands. Any such lands inadvertently left inside critical habitat boundaries shown on the maps of this proposed rule have been excluded by text in the proposed rule and are not proposed for designation as critical habitat. Therefore, if the critical habitat is finalized as proposed, a Federal action involving these lands would not trigger section 7 consultation with respect to critical habitat and the requirement of no adverse modification unless the specific action would affect the physical or biological features in the adjacent critical habitat.

Summary

In summary, we are proposing for designation as critical habitat geographic areas that we have determined are occupied by the sharpnose shiner and smalleye shiner at the time of listing and contain sufficient elements of physical or biological features to support life-history processes essential to the conservation of the species and that may require special management considerations or protection. We are not proposing to designate any unoccupied areas as critical habitat.

The critical habitat designation is defined by the maps, as modified by any accompanying regulatory text, presented at the end of this document in the **Proposed Regulation Promulgation** section. We will make the coordinates or plot points or both on which each map is based available to the public on *http://www.regulations.gov* at Docket No. FWS–R2–ES–2013–0008, at *http://www.fws.gov/southwest/es/ArlingtonTexas/*, and at the Arlington, Texas, Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT** above).

Proposed Critical Habitat Designation

We are proposing to designate a single critical habitat unit divided into six subunits in Texas of approximately 1,002 river km (623 mi) of the upper Brazos River basin and the upland areas extending beyond the bankfull river channel by 30 meters on each side. The six subunits proposed as critical habitat make up the contiguous, unobstructed section of the upper Brazos River system consisting of portions of the Brazos River main stem, Salt Fork of the Brazos River, White River, Double Mountain Fork of the Brazos River, North Fork Double Mountain Fork of the Brazos River, and South Fork Double Mountain Fork of the Brazos River. The critical habitat areas we describe below constitute our current best assessment of areas that contain the essential physical or biological features for both species (although the needs of both species differ slightly) and meet the definition of critical habitat for both shiner species. The subunits we propose as critical habitat are shown in Table 1.

TABLE 1.—Proposed critical habitat subunits for the sharpnose shiner and smalleye shiner.

Critical Habitat Subunit	Length of Subunit in River Kilometers (River Miles)
Subunit 1. Upper Brazos River Main Stem	326.8 (203.1)
Subunit 2. Salt Fork of the Brazos River	275.1 (171.0)
Subunit 3. White River	40.3 (25.1)
Subunit 4. Double Mountain Fork of the Brazos River	239.8 (149.0)

Subunit 5. North Fork Double Mountain Fork of the Brazos River	108.6 (67.5)
Subunit 6. South Fork Double Mountain Fork of the Brazos River	11.1 (6.9)
Total	**1,001.9 (622.5)**

Note: Area sizes may not sum due to rounding.

The critical habitat areas include the river channels within the identified stream segments. The stream beds of navigable waters (stream beds maintaining an average width of at least 30 ft wide from the mouth up) in Texas are generally owned by the State, in trust for the public, while the lands alongside the streams can be privately owned. Therefore, for all stream segments included in the proposed critical habitat; the stream beds, including the small, seasonally dry portion of the stream beds between the bankfull width, where vegetation occurs; and the wetted channel, are owned by the State for the purposes of this proposed rule. To the best of our knowledge, all adjacent riparian areas are privately owned.

Unit Description

We determined the proposed unit of the upper Brazos River basin and its subunits are occupied by both species at the time of listing (Service 2013, Chapter 4). The upper Brazos River critical habitat unit, when considered in its entirety, exhibits all four of the primary constituent elements of critical habitat for both species. Some individual subunits may not contain all of the physical or biological features of critical habitat under all climatic conditions. For example, the elements of physical and biological features

supporting the life-history processes of sharpnose and smalleye shiners are highly dependent on the naturally variable climatic conditions and river flow characteristics of the upper Brazos River basin and may not be present in all critical habitat subunits at all times (i.e., during severe droughts). However, each subunit likely contains suitable habitat during wet climatic conditions and will exhibit one or more of the essential physical or biological features that may require special management considerations or protection and are therefore included in the proposed designation under section 3(5)(A)(i) of the Act.

Subunits are designated based on sufficient elements of physical or biological features being present to support life-history processes of the sharpnose and smalleye shiners. Some subunits contain all of the identified elements of physical or biological features and support multiple life-history processes, while other subunits contain only some elements of the physical or biological features necessary to support each species' particular use of that habitat. The following subunit descriptions briefly describe each of the proposed critical habitat subunits and the reasons why they meet the definition of critical habitat for the sharpnose shiner and smalleye shiner. The subunits are generally numbered from downstream to upstream.

Subunit 1: Upper Brazos River Main Stem

Subunit 1 is 326.8 km (203.1 mi) long in Young, Throckmorton, Baylor, Knox, King, and Stonewall Counties. The downstream extent of the Upper Brazos River Main Stem Subunit is approximately 15 river km (9.3 miles) upstream of the eastern border of

Young County where it intersects the upper portion of Possum Kingdom Lake. The upstream extent of this subunit is at the confluence of the Double Mountain Fork of the Brazos River and the Salt Fork of the Brazos River where they form the Brazos River main stem.

Subunit 1 provides an adequate length of unobstructed, sandy bottomed river (PCE 1) often with sufficient flow (PCE 2) and water quality (PCE 3) to support sharpnose and smalleye shiner survival and reproduction. However, during periods of severe drought, sufficient flow may not be maintained. Many upland areas adjacent to this subunit are encroached by saltcedar, although it generally contains the native riparian vegetation capable of maintaining river water quality and an adequate prey base for both shiner species (PCE 4).

Habitat features in this subunit are primarily threatened by groundwater withdrawal, saltcedar invasion, water quality degradation, drought, and impoundment. The South Bend Reservoir, identified as a feasible water management strategy by the Brazos G Regional Water Planning Group, would occur on this subunit if constructed, while the Throckmorton Reservoir and Millers Creek Reservoir Augmentation would occur on tributaries that discharge into this subunit (Service 2013, Chapter 3). The physical or biological features in this subunit may require special management considerations or protection to minimize impacts from these threats.

Subunit 2: Salt Fork of the Brazos River

Subunit 2 is 275.1 km (171 mi) long in Stonewall, Kent, and Garza Counties. The downstream extent of the Salt Fork of the Brazos River Subunit is at the confluence of the Double Mountain Fork of the Brazos River and the Salt Fork of the Brazos River where they form the Brazos River main stem. The upstream extent of this subunit is on the Salt Fork of the Brazos River at the McDonald Road crossing in Garza County, which acts as a barrier to fish passage.

Subunit 2 provides an adequate length of unobstructed, sandy bottomed river (PCE 1) often with sufficient flow (PCE 2) and water quality (PCE 3) to support sharpnose and smalleye shiner survival and reproduction. However, during periods of severe drought, sufficient flow may not be maintained and naturally occurring salt plumes may occasionally result in inadequate water quality. Many upland areas adjacent to this subunit are encroached by saltcedar, although it generally contains the native riparian vegetation capable of maintaining river water quality and an adequate prey base for both shiner species (PCE 4).

Habitat features in this subunit are primarily threatened by groundwater withdrawal, saltcedar invasion, desalination projects, water quality degradation, and drought. Several of these threats have the potential to decrease surface water volume available for fish use. The threat of reservoir impoundment is minimized because the highly saline water of this subunit is generally of little use for industrial, agricultural, and municipal needs. The physical or biological features in this subunit may require special management considerations or protection to minimize impacts from these threats.

Subunit 3: White River

Subunit 3 is 40.3 km (25.1 mi) long in Kent, Garza, and Crosby Counties. The downstream extent of the White River Subunit is at the confluence of the White River with the Salt Fork of the Brazos River. The upstream extent is immediately downstream of the White River Lake impoundment on the White River.

Given the lack of adequate sampling from this area, records of the smalleye shiner from the White River are old and rare, and sharpnose shiners have never been recorded from this subunit (Service 2013, Chapter 2). However, records of both species have been documented within the last 5 years from the Salt Fork of the Brazos River less than 1 km (0.6 mi) downstream of the confluence of this subunit. Therefore, the White River Subunit is contiguous with areas currently occupied by both species, and there are no fish barriers to prevent them from migrating into this area. Therefore, given the information above and the biological similarity between these species, we consider this subunit within the geographic range occupied by both species. Furthermore, the White River provides surface water flow of relatively low salinity into the Salt Fork of the Brazos River, which may be important in maintaining the water quality of this downstream subunit.

Subunit 3 provides an adequate length of unobstructed, sandy bottomed river (PCE 1) when considered as part of the contiguous critical habitat unit as a whole. This subunit likely contains only sufficient flow (PCE 2) and water quality (PCE 3) to support sharpnose and smalleye shiner survival and reproduction under wet climatic conditions or when water is being released from upstream impoundments. During periods of severe

drought, sufficient flow may not be maintained. Upland areas adjacent to this subunit are likely encroached by saltcedar, although it generally contains the native riparian vegetation capable of maintaining river water quality and an adequate prey base for both shiner species (PCE 4).

Habitat features in this subunit are primarily threatened by groundwater withdrawal, saltcedar invasion, water quality degradation, drought, and impoundment. Flow is normally available in this subunit only as a result of water release from White River Lake upstream of this subunit. Therefore, the physical or biological features in this subunit may require special management considerations or protection to minimize impacts from these threats.

Subunit 4: Double Mountain Fork of the Brazos River

Subunit 4 is 239.8 km (149 mi) long in Stonewall, Haskell, Fisher, and Kent Counties. The downstream extent of the Double Mountain Fork of the Brazos River Subunit is at the confluence of the Double Mountain Fork of the Brazos River and the Salt Fork of the Brazos River where they form the Brazos River main stem. The upstream extent of this subunit is at the confluence of the South Fork Double Mountain Fork of the Brazos River and the North Fork Double Mountain Fork of the Brazos River where they form the Double Mountain Fork of the Brazos River.

Subunit 4 provides an adequate length of unobstructed, sandy bottomed river (PCE 1) when considered as part of the contiguous critical habitat unit as a whole. This

subunit likely contains sufficient flow (PCE 2) and water quality (PCE 3) to support sharpnose and smalleye shiner survival and reproduction most of the time although during periods of severe drought, sufficient flow may not be maintained. Upland areas adjacent to this subunit are likely encroached by saltcedar, but it generally contains the native riparian vegetation capable of maintaining river water quality and an adequate prey base for both shiner species (PCE 4).

Habitat features in this subunit are primarily threatened by groundwater withdrawal, saltcedar invasion, water quality degradation, drought, and impoundment. The Double Mountain Fork East and West Reservoirs, identified as feasible water management strategies by the Brazos G Regional Water Planning Group, would occur in this subunit if constructed (Service 2013, Chapter 3). Therefore, the physical or biological features in this subunit may require special management considerations or protection to minimize impacts from these threats.

Subunit 5: North Fork Double Mountain Fork of the Brazos River

Subunit 5 is 108.6 km (67.5 mi) long in Kent, Garza, and Crosby Counties. The downstream extent of the North Fork Double Mountain Fork Subunit is at the confluence of the South Fork Double Mountain Fork of the Brazos River and the North Fork Double Mountain Fork of the Brazos River where they form the Double Mountain Fork of the Brazos River. The upstream extent of this subunit is the earthen impoundment near Janes-Prentice Lake in Crosby County, Texas.

Subunit 5 provides an adequate length of unobstructed, sandy bottomed river (PCE 1) when considered as part of the contiguous critical habitat unit as a whole. This subunit likely contains sufficient flow (PCE 2) and water quality (PCE 3) to support sharpnose and smalleye shiner survival and reproduction much of the time, but during periods of severe drought, sufficient flow may not be maintained. Upland areas adjacent to this subunit are likely encroached by saltcedar, although it generally contains the native riparian vegetation capable of maintaining river water quality and an adequate prey base for both shiner species (PCE 4).

Habitat features in this subunit are primarily threatened by groundwater withdrawal, saltcedar invasion, water quality degradation, drought, and impoundment. Post Reservoir and the North Fork Diversion Reservoir, identified as feasible water management strategies by the Brazos G Regional Water Planning Group, would occur in this subunit if constructed (Service 2013, Chapter 3). Therefore, the physical or biological features in this subunit may require special management considerations or protection to minimize impacts from these threats.

Subunit 6: South Fork Double Mountain Fork of the Brazos River

Subunit 6 is 11.1 km (6.9 mi) long in Kent and Garza Counties. The downstream extent of the South Fork Double Mountain Fork Subunit is at the confluence of the South Fork Double Mountain Fork of the Brazos River and the North Fork Double Mountain Fork of the Brazos River where they form the Double Mountain Fork of the Brazos River. The upstream extent of this subunit is immediately downstream of the John T.

Montford Dam of Lake Alan Henry. Although there is a lack of recent records (smalleye shiner last observed in 1992) in this subunit, it is contiguous with areas currently occupied by both species, and there are no known fish barriers to prevent them from migrating into this area. The subunit does not have public access, and there are few opportunities to survey for fish in this river segment. However, given the information above and the biological similarity between these species, we consider this subunit within the geographic range occupied by both sharpnose and smalleye shiners.

Subunit 6 provides an adequate length of unobstructed, sandy bottomed river (PCE 1) when considered as part of the contiguous critical habitat unit as a whole. This subunit likely contains only sufficient flow (PCE 2) and water quality (PCE 3) to support sharpnose and smalleye shiner survival and reproduction under wet climatic conditions or when water is being actively released from upstream impoundments. During periods of severe drought, sufficient flow may not be maintained. Upland areas adjacent to this subunit may be encroached by saltcedar, although it generally contains the native riparian vegetation capable of maintaining river water quality and an adequate prey base for both shiner species (PCE 4).

Habitat features in this subunit are primarily threatened by drought and impoundment. Flow is normally present in this subunit only as a result of water released from Lake Alan Henry. Flow from this subunit directly affects surface water volume in the Double Mountain Fork of the Brazos River Subunit available for fish use. Therefore, the physical or biological features in this subunit may require special management considerations or protection to minimize impacts from these threats.

Effects of Critical Habitat Designation

Section 7 Consultation

Section 7(a)(2) of the Act requires Federal agencies, including the Service, to ensure that any action they fund, authorize, or carry out is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of designated critical habitat of such species. In addition, section 7(a)(4) of the Act requires Federal agencies to confer with the Service on any agency action that is likely to jeopardize the continued existence of any species proposed to be listed under the Act or result in the destruction or adverse modification of proposed critical habitat.

Decisions by the 5th and 9th Circuit Courts of Appeals have invalidated our regulatory definition of "destruction or adverse modification" (50 CFR 402.02) (see *Gifford Pinchot Task Force* v. *U.S. Fish and Wildlife Service*, 378 F. 3d 1059 (9th Cir. 2004) and *Sierra Club* v. *U.S. Fish and Wildlife Service et al*., 245 F.3d 434, 442 (5th Cir. 2001)), and we do not rely on this regulatory definition when analyzing whether an action is likely to destroy or adversely modify critical habitat. Under the statutory provisions of the Act, we determine destruction or adverse modification on the basis of whether, with implementation of the proposed Federal action, the affected critical habitat would continue to serve its intended conservation role for the species.

If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency (action agency) must enter into consultation with us. Examples of actions that are subject to the section 7 consultation process are actions on State, tribal, local, or private lands that require a Federal permit (such as a permit from the U.S. Army Corps of Engineers under section 404 of the Clean Water Act (33 U.S.C. 1251 *et seq*.) or a permit from the Service under section 10 of the Act) or that involve some other Federal action (such as funding from the Federal Highway Administration, Federal Aviation Administration, or the Federal Emergency Management Agency). Federal actions not affecting listed species or critical habitat, and actions on State, tribal, local, or private lands that are not federally funded or authorized, do not require section 7 consultation.

As a result of section 7 consultation, we document compliance with the requirements of section 7(a)(2) through our issuance of:

(1) A concurrence letter for Federal actions that may affect, but are not likely to adversely affect, listed species or critical habitat; or

(2) A biological opinion for Federal actions that may affect, or are likely to adversely affect, listed species or critical habitat.

When we issue a biological opinion concluding that a project is likely to jeopardize the continued existence of a listed species and/or destroy or adversely modify critical habitat, we provide reasonable and prudent alternatives to the project, if any are identifiable, that would avoid the likelihood of jeopardy and/or destruction or adverse modification of critical habitat. We define "reasonable and prudent alternatives" (at 50

CFR 402.02) as alternative actions identified during consultation that:

(1) Can be implemented in a manner consistent with the intended purpose of the action,

(2) Can be implemented consistent with the scope of the Federal agency's legal authority and jurisdiction,

(3) Are economically and technologically feasible, and

(4) Would, in the Director's opinion, avoid the likelihood of jeopardizing the continued existence of the listed species and/or avoid the likelihood of destroying or adversely modifying 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 are similarly variable.

Regulations at 50 CFR 402.16 require Federal agencies to reinitiate consultation on previously reviewed actions in instances where we have listed a new species or subsequently designated critical habitat that may be affected and the Federal agency has retained discretionary involvement or control over the action (or the agency's discretionary involvement or control is authorized by law). Consequently, Federal agencies sometimes may need to request reinitiation of consultation with us on actions for which formal consultation has been completed, if those actions with discretionary involvement or control may affect subsequently listed species or designated critical habitat.

Application of the "Adverse Modification" Standard

The key factor related to the adverse modification determination is whether, with implementation of the proposed Federal action, the affected critical habitat would continue to serve its intended conservation role for the species. Activities that may destroy or adversely modify critical habitat are those that alter the physical or biological features to an extent that appreciably reduces the conservation value of critical habitat for the sharpnose shiner or smalleye shiner. As discussed above, the role of critical habitat is to support life-history needs of the species and provide for the conservation of the species.

Section 4(b)(8) of the Act requires us to briefly evaluate and describe, in any proposed or final regulation that designates critical habitat, activities involving a Federal action that may destroy or adversely modify such habitat, or that may be affected by such designation.

Activities that may affect critical habitat, when carried out, funded, or authorized by a Federal agency, should result in consultation for the sharpnose shiner or smalleye shiner. These activities include, but are not limited to:

(1) Activities physically disturbing the riverine habitat upon which these shiner species depend, particularly by decreasing surface water flows or altering channel morphology. Such activities could include, but are not limited to, impoundment, in-stream mining, channelization, and dewatering. These activities could result in the

physical destruction of habitat or the modification of habitat such that it no longer supports the reproduction of these species.

(2) Activities increasing the concentration of pollutants in surface water within areas designated as critical habitat. Such activities could include, but are not limited to, increases in impervious cover in the surface watershed, destruction of the adjacent upland areas by land uses incompatible with maintaining a healthy riverine system, and release of pollutants into the surface water or connected groundwater. These activities could alter water conditions to levels that are beyond the tolerances of the shiner species and result in direct or cumulative adverse effects to these individuals and their life cycles.

(3) Activities depleting the underlying groundwater or otherwise diverting water to an extent that decreases or stops the flow of surface waters within areas designated as critical habitat. Such activities could include, but are not limited to, excessive water withdrawals from aquifers and diversion of natural discharge features. These activities could dewater habitat or reduce water quality to levels that are beyond the tolerances of the sharpnose and smalleye shiner, and result in direct or cumulative adverse effects to these individuals and their life cycles.

(4) Activities leading to the introduction, expansion, or increased density of an exotic plant or animal species that is detrimental to the sharpnose shiner or smalleye shiner or their habitat.

Exemptions

Application of Section 4(a)(3) of the Act

The Sikes Act Improvement Act of 1997 (Sikes Act) (16 U.S.C. 670a) required each military installation that includes land and water suitable for the conservation and management of natural resources to complete an integrated natural resources management plan (INRMP) by November 17, 2001.

The National Defense Authorization Act for Fiscal Year 2004 (Pub. L. 108–136) amended the Act to limit areas eligible for designation as critical habitat. Specifically, section 4(a)(3)(B)(i) of the Act (16 U.S.C. 1533(a)(3)(B)(i)) now provides: "The Secretary shall not designate as critical habitat any lands or other geographic areas owned or controlled by the Department of Defense, or designated for its use, that are subject to an integrated natural resources management plan prepared under section 101 of the Sikes Act (16 U.S.C. 670a), if the Secretary determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation."

There are no Department of Defense lands within the proposed critical habitat designation for the sharpnose shiner or smalleye shiner; therefore we are not exempting any areas under section 4(a)(3)(B)(i) of the Act.

Exclusions

Application of Section 4(b)(2) of the Act

Section 4(b)(2) of the Act states that the Secretary shall designate and make revisions to critical habitat on the basis of the best available scientific data after taking into consideration the economic impact, national security impact, and any other relevant impact of specifying any particular area as critical habitat. The Secretary may exclude an area from critical habitat if he determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless he determines, based on the best scientific data available, that the failure to designate such area as critical habitat will result in the extinction of the species. In making that determination, the statute on its face, as well as the legislative history, are clear that the Secretary has broad discretion regarding which factor(s) to use and how much weight to give to any factor.

Under section 4(b)(2) of the Act, we may exclude an area from designated critical habitat based on economic impacts, impacts on national security, or any other relevant impacts. In considering whether to exclude a particular area from the designation, we identify the benefits of including the area in the designation, identify the benefits of excluding the area from the designation, and evaluate whether the benefits of exclusion outweigh the benefits of inclusion. If the analysis indicates that the benefits of exclusion outweigh the benefits of inclusion, the Secretary may exercise his discretion to exclude the area only if such exclusion would not result in the extinction of the species.

Exclusions Based on Economic Impacts

Under section 4(b)(2) of the Act, we consider the economic impacts of specifying any particular area as critical habitat. In order to consider economic impacts, we are preparing an analysis of the economic impacts of the proposed critical habitat designation and related factors. Potential land use sectors that may be affected by a sharpnose shiner and smalleye shiner critical habitat designation include sectors associated with construction or improvement of roads, bridges, pipelines, or bank stabilization; residential or commercial development; the control of surface waters or removal of groundwater; and irrigation water use and management.

During the development of a final designation, we will consider economic impacts, public comments, and other new information, and areas may be excluded from the final critical habitat designation under section 4(b)(2) of the Act and our implementing regulations at 50 CFR 424.19.

Exclusions Based on National Security Impacts

Under section 4(b)(2) of the Act, we consider whether there are lands where a national security impact might exist. There are no Department of Defense lands within the proposed critical habitat designation for the sharpnose shiner or smalleye shiner; therefore, currently, there are no areas proposed for exclusion based on impacts on national security.

Exclusions Based on Other Relevant Impacts

Under section 4(b)(2) of the Act, we consider any other relevant impacts, in addition to economic impacts and impacts on national security. We consider a number of factors including whether the landowners have developed any HCPs or other management plans for the area, or whether there are conservation partnerships that would be encouraged by designation of, or exclusion from, critical habitat. In addition, we look at Tribal management in recognition of their capability to appropriately manage their own resources, and consider the government-to-government relationship of the United States with Tribal entities. We also consider any social impacts that might occur because of the designation.

When we evaluate the existence of a conservation plan when considering the benefits of exclusion, we consider a variety of factors, including but not limited to, whether the plan is finalized; how it provides for the conservation of the essential physical or biological features; whether there is a reasonable expectation that the conservation management strategies and actions contained in a management plan will be implemented into the future; whether the conservation strategies in the plan are likely to be effective; and whether the plan contains a monitoring program or adaptive management to ensure that the conservation measures are effective and can be adapted in the future in response to new information.

In preparing this proposal, we have determined that there are currently no HCPs for the sharpnose shiner or smalleye shiner. The proposed designation does not include any tribal lands or trust resources. We anticipate no impact on tribal lands, partnerships, or HCPs from this proposed critical habitat designation. Accordingly, we are not

currently considering excluding any areas from the critical habitat designation based on other relevant impacts.

Required Determinations

Regulatory Planning and Review—Executive Orders 12866 and 13563

Executive Order 12866 provides that the Office of Information and Regulatory Affairs (OIRA) in the Office of Management and Budget 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 Executive Order 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. Executive Order 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 (RFA; 5 U.S.C. 601 *et seq*.) as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996 (5 U.S.C 801 *et seq.*), whenever an agency must 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 effects 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 the agency certifies the rule will not have a significant economic impact on a substantial number of small entities. The SBREFA amended the RFA to require Federal agencies to provide a certification statement of the factual basis for certifying that the rule will not have a significant economic impact on a substantial number of small entities.

According to the Small Business Administration, small entities include small organizations such as independent nonprofit organizations; small governmental jurisdictions, including school boards and city and town governments that serve fewer than 50,000 residents; and small businesses (13 CFR 121.201). Small businesses include such businesses as manufacturing and mining concerns with fewer than 500 employees, wholesale trade entities with fewer than 100 employees, retail and service businesses with less than $5 million in annual sales, general and heavy construction businesses with less than $27.5 million in annual business, special trade contractors doing less than $11.5 million in annual business, and forestry and logging operations with fewer than 500 employees and annual business less than $7 million. To determine whether small entities

may be affected, we will consider the types of activities that might trigger regulatory impacts under this designation as well as types of project modifications that may result. In general, the term "significant economic impact" is meant to apply to a typical small business firm's business operations.

Importantly, the incremental impacts of a rule must be *both* significant and substantial to prevent certification of the rule under the RFA and to require the preparation of an initial regulatory flexibility analysis. If a substantial number of small entities are affected by the proposed critical habitat designation, but the per-entity economic impact is not significant, the Service may certify. Likewise, if the per-entity economic impact is likely to be significant, but the number of affected entities is not substantial, the Service may also certify.

Under the RFA, as amended, and following recent court decisions, Federal agencies are only required to evaluate the potential incremental impacts of rulemaking on those entities directly regulated by the rulemaking itself, and not the potential impacts to indirectly affected entities. The regulatory mechanism through which critical habitat protections are realized is section 7 of the Act, which requires Federal agencies, in consultation with the Service, to ensure that any action authorized, funded, or carried by the Agency is not likely to adversely modify critical habitat. Therefore, only Federal action agencies are directly subject to the specific regulatory requirement (avoiding destruction and adverse modification) imposed by critical habitat designation. Under these circumstances, it is our position that only Federal action agencies will be directly regulated by this designation. Therefore, because Federal agencies are not small entities,

the Service may certify that the proposed critical habitat rule will not have a significant economic impact on a substantial number of small entities.

We acknowledge, however, that in some cases, third-party proponents of the action subject to permitting or funding may participate in a section 7 consultation, and thus may be indirectly affected. We believe it is good policy to assess these impacts if we have sufficient data before us to complete the necessary analysis, whether or not this analysis is strictly required by the RFA. While this regulation does not directly regulate these entities, in our draft economic analysis we will conduct a brief evaluation of the potential number of third parties participating in consultations on an annual basis in order to ensure a more complete examination of the incremental effects of this proposed rule in the context of the RFA.

In conclusion, we believe that, based on our interpretation of directly regulated entities under the RFA and relevant case law, this designation of critical habitat will only directly regulate Federal agencies which are not by definition small business entities. As such, we certify that, if promulgated, this designation of critical habitat would not have a significant economic impact on a substantial number of small business entities. Therefore, an initial regulatory flexibility analysis is not required. However, though not necessarily required by the RFA, in our draft economic analysis for this proposal we will consider and evaluate the potential effects to third parties that may be involved with consultations with Federal action agencies related to this action.

Energy Supply, Distribution, or Use—Executive Order 13211

Executive Order 13211 (Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use) requires agencies to prepare Statements of Energy Effects when undertaking certain actions. We do not expect the designation of this proposed critical habitat to significantly affect energy supplies, distribution, or use. Oil and gas pipelines crossing the proposed critical habitat can be buried under the river channel and the contours of the channel bed returned to their natural state. Also, the minimal and unpredictable flows of the upper Brazos River are not well suited for hydroelectric power generation. Therefore, this action is not a significant energy action, and no Statement of Energy Effects is required. However, we will further evaluate this issue as we conduct our economic analysis, and review and revise this assessment as warranted.

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*.), we make the following findings:

(1) This rule would not produce a Federal mandate. In general, a Federal mandate is a provision in legislation, statute, or regulation that would impose an enforceable duty upon State, local, or tribal governments, or the private sector, and includes both "Federal intergovernmental mandates" and "Federal private sector mandates." These terms are defined in 2 U.S.C. 658(5)–(7). "Federal intergovernmental

mandate" includes a regulation that "would impose an enforceable duty upon State, local, or tribal governments" with two exceptions. It excludes "a condition of Federal assistance." It also excludes "a duty arising from participation in a voluntary Federal program," unless the regulation "relates to a then-existing Federal program under which $500,000,000 or more is provided annually to State, local, and tribal governments under entitlement authority," if the provision would "increase the stringency of conditions of assistance" or "place caps upon, or otherwise decrease, the Federal Government's responsibility to provide funding," and the State, local, or tribal governments "lack authority" to adjust accordingly. At the time of enactment, these entitlement programs were: Medicaid; Aid to Families with Dependent Children work programs; Child Nutrition; Food Stamps; Social Services Block Grants; Vocational Rehabilitation State Grants; Foster Care, Adoption Assistance, and Independent Living; Family Support Welfare Services; and Child Support Enforcement. "Federal private sector mandate" includes a regulation that "would impose an enforceable duty upon the private sector, except (i) a condition of Federal assistance or (ii) a duty arising from participation in a voluntary Federal program."

The designation of critical habitat does not impose a legally binding duty on non-Federal Government entities or private parties. Under the Act, the only regulatory effect is that Federal agencies must ensure that their actions do not destroy or adversely modify critical habitat under section 7. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests

squarely on the Federal agency. Furthermore, to the extent that non-Federal entities are indirectly impacted because they receive Federal assistance or participate in a voluntary Federal aid program, the Unfunded Mandates Reform Act would not apply, nor would critical habitat shift the costs of the large entitlement programs listed above onto State governments.

(2) We do not believe that this rule would significantly or uniquely affect small governments. The lands adjacent to the river channel being proposed for critical habitat designation are primarily owned by private landowners, which do not fit the definition of "small governmental jurisdiction." Therefore, a Small Government Agency Plan is not required. However, we will further evaluate this issue as we conduct our economic analysis, and review and revise this assessment as warranted.

Takings—Executive Order 12630

In accordance with Executive Order 12630 (Government Actions and Interference with Constitutionally Protected Private Property Rights), we are analyzing the potential takings implications of designating critical habitat for the sharpnose shiner and smalleye shiner in a takings implications assessment. The best information currently available indicates that this designation of critical habitat for the sharpnose shiner and smalleye shiner does not pose significant takings implications. However, we will further evaluate this issue as we conduct our economic analysis, and complete a takings implications assessment before issuing a final determination.

Federalism—Executive Order 13132

In accordance with Executive Order 13132 (Federalism), this proposed rule does not have significant Federalism effects. A federalism summary impact statement is not required. In keeping with Department of the Interior and Department of Commerce policy, we requested information from, and coordinated development of, this proposed critical habitat designation with appropriate State resource agencies. The designation of critical habitat in geographic areas currently occupied by the sharpnose shiner and smalleye shiner imposes no additional restrictions to those in place as a result of the listing of the species and, therefore, has little incremental impact on State and local governments and their activities. The designation may have some benefit to these governments because the areas that contain the physical or biological features essential to the conservation of the species are more clearly defined, and the elements of the features of the habitat necessary to the conservation of the species are specifically identified. This information does not alter where and what federally sponsored activities may occur. However, it may assist local governments in long-range planning (rather than having them wait for case-by-case section 7 consultations to occur).

Where State and local governments require approval or authorization from a Federal agency for actions that may affect critical habitat, consultation under section 7(a)(2) would be required. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests

squarely on the Federal agency.

Civil Justice Reform—Executive Order 12988

In accordance with Executive Order 12988 (Civil Justice Reform), the Office of the Solicitor has determined that the rule does not unduly burden the judicial system and that it meets the requirements of sections 3(a) and 3(b)(2) of the Order. We have proposed designating critical habitat in accordance with the provisions of the Act. To assist the public in understanding the habitat needs of the species, the proposed rule identifies the elements of physical or biological features essential to the conservation of the species. The areas of proposed critical habitat are presented on maps, and the rule provides several options for the interested public to obtain more detailed location information, if desired.

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

This rule does not contain any new collections of information that require approval by OMB under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq*.). This rule will not impose recordkeeping or reporting requirements on State or local governments, individuals, businesses, or organizations. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

National Environmental Policy Act (42 U.S.C. 4321 et seq.)

It is our position that, outside the jurisdiction of the U.S. Court of Appeals for the Tenth Circuit, we do not need to prepare environmental analyses pursuant to NEPA (42 U.S.C. 4321 *et seq.*) in connection with designating critical habitat under the Act. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244). This position was upheld by the U.S. Court of Appeals for the Ninth Circuit (*Douglas County* v. *Babbitt*, 48 F.3d 1495 (9th Cir. 1995), cert. denied 516 U.S. 1042 (1996)).

Government-to-Government Relationship with Tribes

In accordance with the President's memorandum of April 29, 1994 (Government-to-Government Relations with Native American Tribal Governments; 59 FR 22951), Executive Order 13175 (Consultation and Coordination With Indian Tribal Governments), and the Department of the Interior's manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal Tribes on a government-to-government basis. In accordance with Secretarial Order 3206 of June 5, 1997 (American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act), we readily acknowledge our responsibilities to work directly with tribes in developing programs for healthy ecosystems, to acknowledge that tribal lands are not subject to the same controls as Federal public lands, to remain sensitive to Indian culture, and to make information available to tribes.

We determined there are no tribal lands that meet our criteria for critical habitat. Therefore, we are not proposing to designate critical habitat for sharpnose or smalleye shiners on tribal lands.

Clarity of the Rule

We are required by Executive Orders 12866 and 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 comments should be as specific as possible. For example, you should tell us the numbers of the sections or paragraphs that are unclearly written, which sections or sentences are too long, the sections where you feel lists or tables would be useful, etc.

References Cited

A complete list of references cited in this rulemaking is available on the Internet

at *http://www.regulations.gov* under Docket No. FWS–R2–ES–2013–0008 in the June 2013 version of the Status Assessment Report for the Sharpnose Shiner and Smalleye Shiner (Service 2013), and upon request from the Arlington, Texas, Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

Authors

The primary authors of this document are the staff members of the Arlington, Texas, Ecological Services Field Office.

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—ENDANGERED AND THREATENED WILDLIFE AND PLANTS

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

Authority: 16 U.S.C. 1361–1407; 1531–1544; 4201–4245, unless otherwise noted.

2. In § 17.95, amend paragraph (e) by adding entries for "Sharpnose Shiner (*Notropis oxyrhynchus*)" and "Smalleye Shiner (*Notropis buccula*)" in the same alphabetical order that the species appear in the table at § 17.11(h), to read as follows:

§ 17.95 Critical habitat—fish and wildlife.

* * * * *

(e) *Fishes.*

* * * * *

Sharpnose Shiner (*Notropis oxyrhynchus*)

(1) Critical habitat units are depicted for Baylor, Crosby, Fisher, Garza, Haskell, Kent, King, Knox, Stonewall, Throckmorton, and Young Counties, Texas, on the maps below.

(2) Critical habitat includes the bankfull width of the river channel within the identified river segments indicated on the maps below, and includes a lateral distance of 30 meters (98 feet) 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, and generally occurs every 1 to 2 years.

(3) Within these areas, the primary constituent elements of the physical or biological features essential to the conservation of the sharpnose shiner consist of a riverine system with habitat to support all life-history stages of the sharpnose shiner, which includes:

(i) Unobstructed, sandy-bottomed river segments greater than 275 kilometers (171 miles) in length.

(ii) Flowing water of greater than 2.61 cubic meters per second (m^3s^{-1}) (92 cubic feet per second (cfs)) averaged over the shiner spawning season (April through September).

(iii) Water of sufficient quality to support survival and reproduction, characterized by:

(A) Temperatures generally less than 39.2 °C (102.6 °F);

(B) Dissolved oxygen concentrations generally greater than 2.66 milligrams per liter (mg/L);

(C) Salinities generally less than 15 parts per thousand (ppt) (25 millisiemens per centimeter (mS/cm)); and

(D) Sufficiently low petroleum and other pollutant concentrations such that mortality does not occur.

(iv) Native riparian vegetation capable of maintaining river water quality, providing a terrestrial prey base, and maintaining a healthy riparian ecosystem.

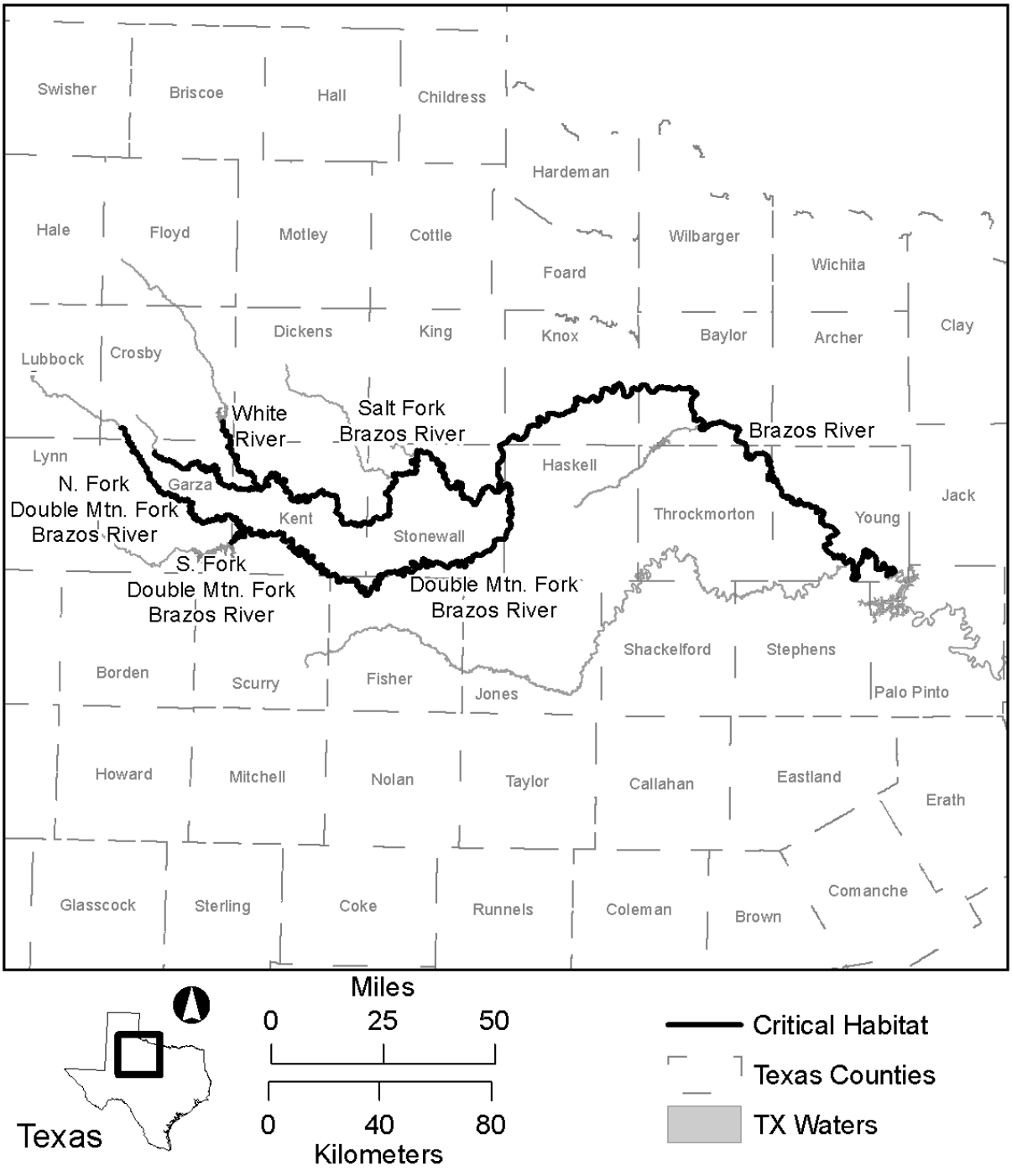
(4) Critical habitat does not include manmade structures (such as buildings, railroads, roads, and other paved areas) and the land on which they are located existing within the legal boundaries on the effective date of this rule.

(5) *Critical habitat map units*. Data layers defining map units were created using the

USGS National Hydrography Dataset's flowline data in ArcMap (Environmental Systems Research Institute, Inc.), a computer geographic information system program. The 30-m (98-ft) lateral extent adjacent to each segment's active channel is not displayed in the included figures because it is not appropriate at these map scales. Segments were mapped using the NAD 1983 UTM Zone 14 projection. Endpoints of stream segments for each critical habitat subunit are reported as latitude, longitude in decimal degrees. The maps in this entry, as modified by any accompanying regulatory text, establish the boundaries of the critical habitat designation. The coordinates or plot points or both on which each map is based are available to the public at the Service's Internet site (*http://www.fws.gov/southwest/es/ArlingtonTexas/*), at *http://www.regulations.gov* at Docket No. FWS–R2–ES–2013–0008, and at the Arlington, Texas, Ecological Services Field Office. You may obtain field office location information by contacting one of the Service regional offices, the addresses of which are listed at 50 CFR 2.2.

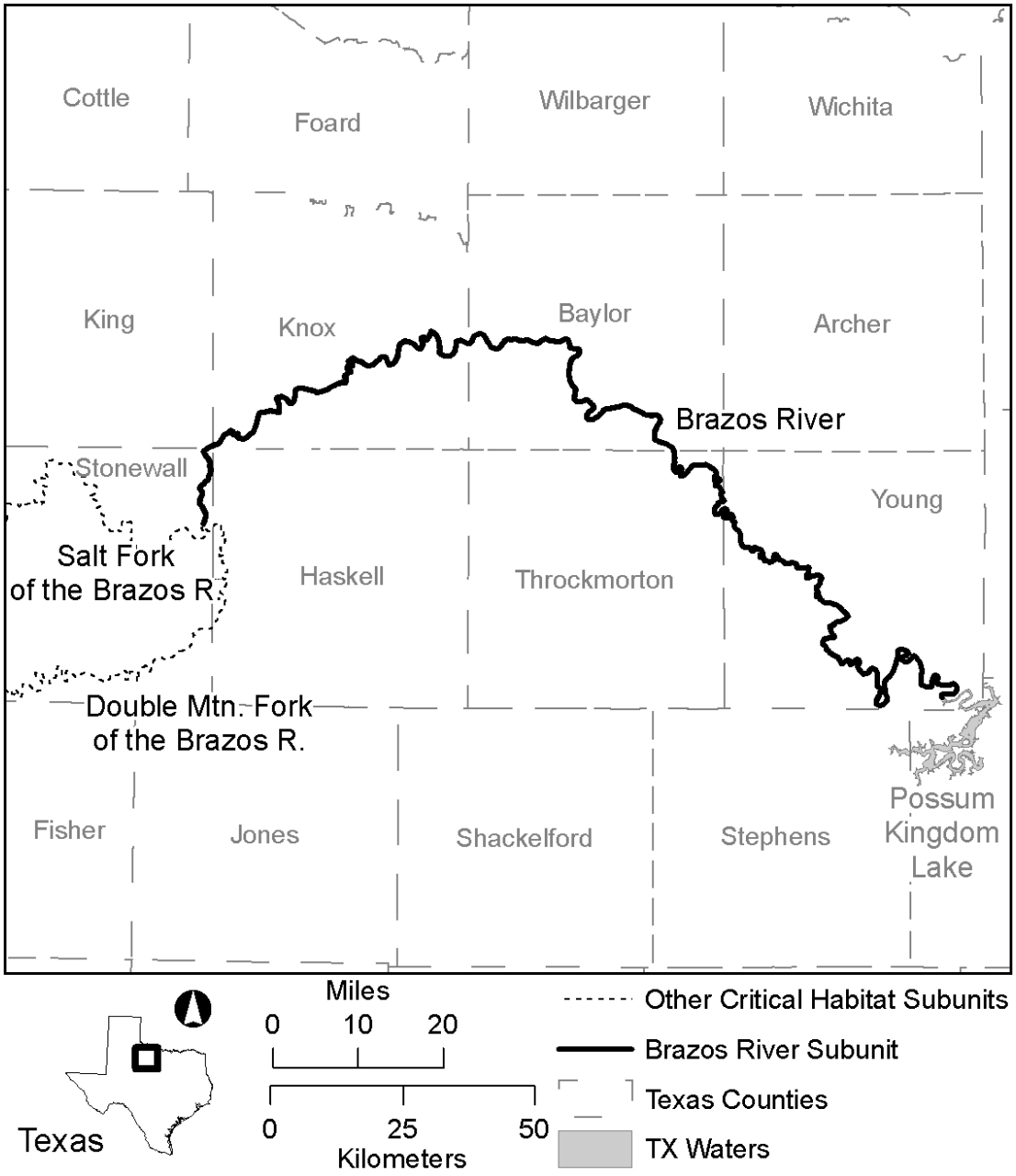
(6) Index map of critical habitat for the sharpnose shiner and smalleye shiner follows:

Index Map: Critical Habitat for the Sharpnose Shiner and Smalleye Shiner



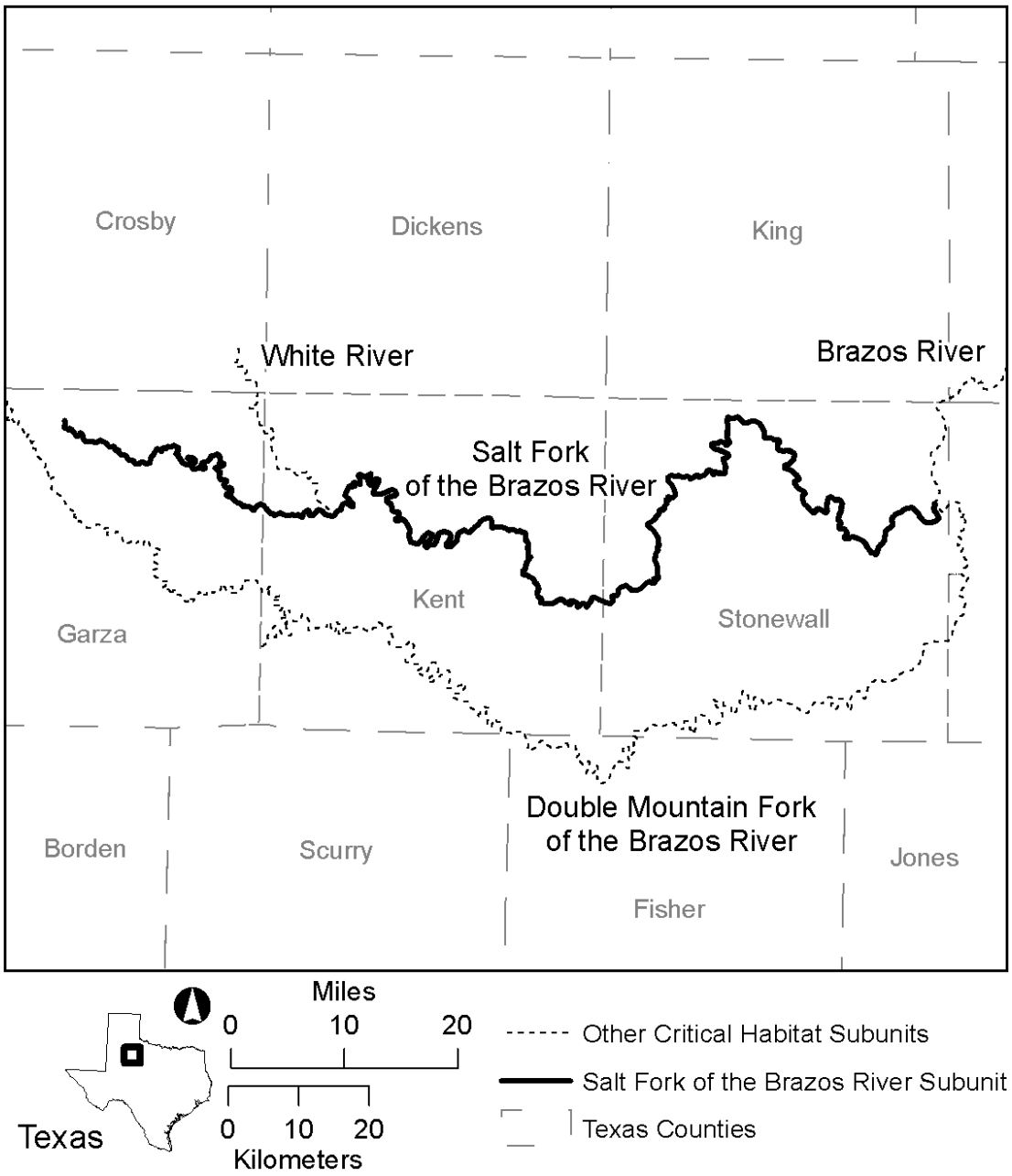
(7) Subunit 1: Upper Brazos River Main Stem from approximately 15 river km (9.3 miles) upstream of the eastern border of Young County where it intersects the upper portion of Possum Kingdom Lake (32.974302, -98.509880) upstream to the confluence of the Double Mountain Fork of the Brazos River and the Salt Fork of the Brazos River where they form the Brazos River main stem (33.268404, -100.010209); Baylor, King, Knox, Stonewall, Throckmorton, and Young Counties, Texas. Map of Upper Brazos River Main Stem Subunit follows:

Critical Habitat for Sharpnose and Smalleye Shiners: Brazos River Main Stem Subunit



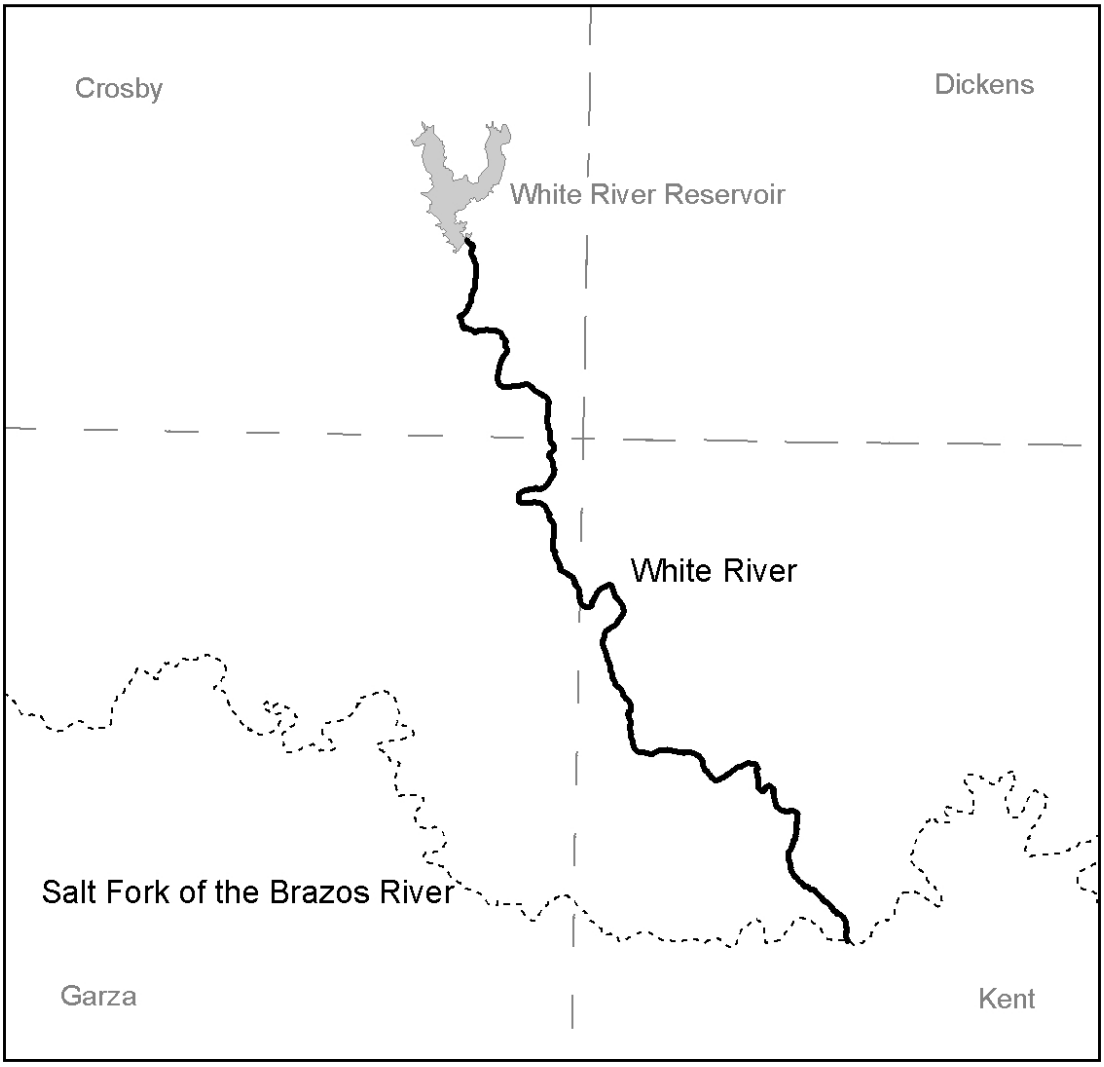
(8) Subunit 2: Salt Fork of the Brazos River from its confluence with the Double Mountain Fork of the Brazos River (33.268404, -100.010209) upstream to the McDonald Road crossing (33.356258, -101.345890); Garza, Kent, and Stonewall Counties, Texas. Map of Salt Fork of the Brazos River Subunit follows:

Critical Habitat for Sharpnose and Smalleye Shiners: Salt Fork of the Brazos River Subunit



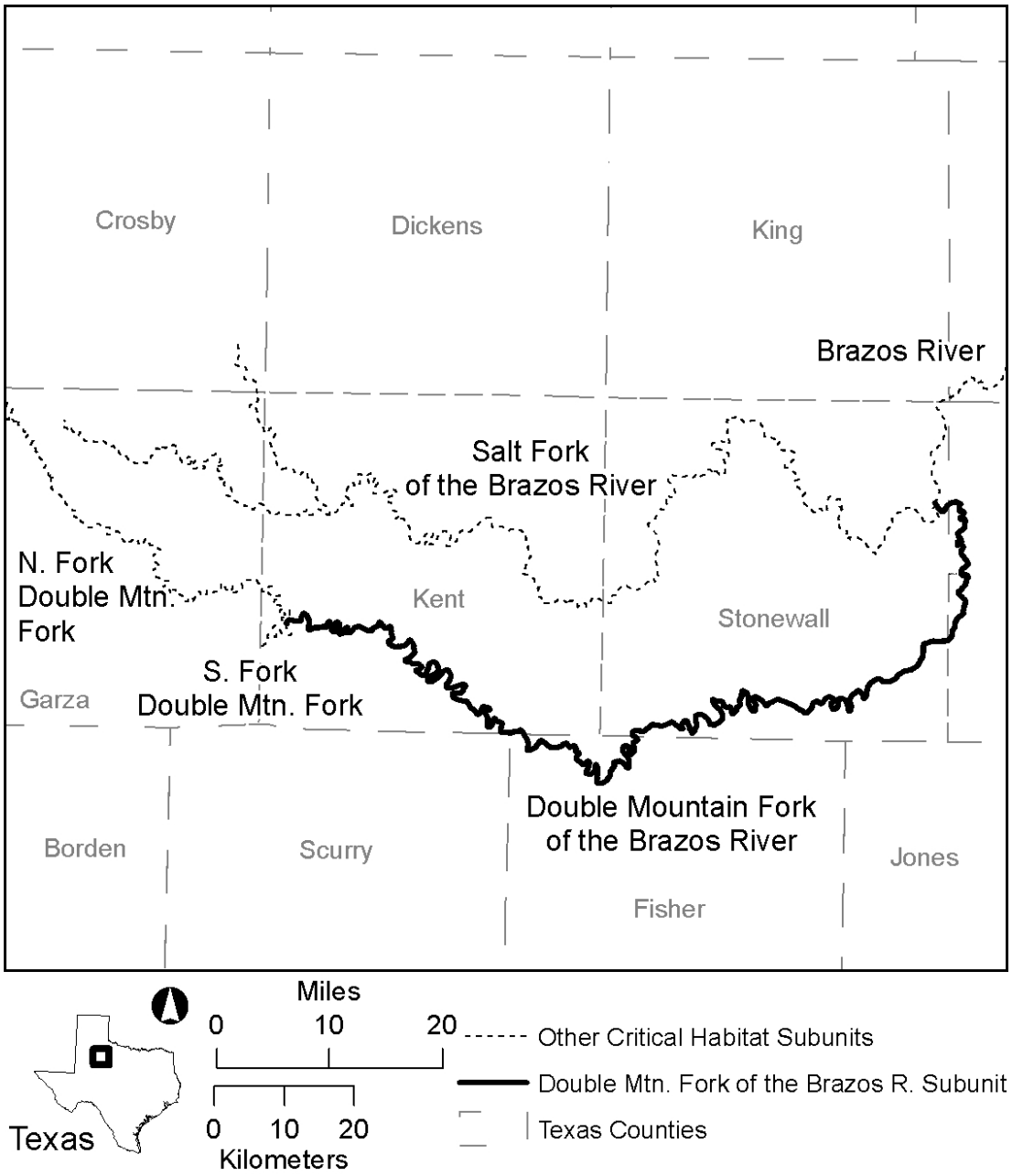
(9) Subunit 3: White River from its confluence with the Salt Fork of the Brazos River (33.241172, -100.936181) upstream to the White River Lake impoundment (33.457240, -101.084546); Crosby, Garza, and Kent Counties, Texas. Map of White River Subunit follows:

Critical Habitat for Sharpnose and Smalleye Shiners: White River Subunit



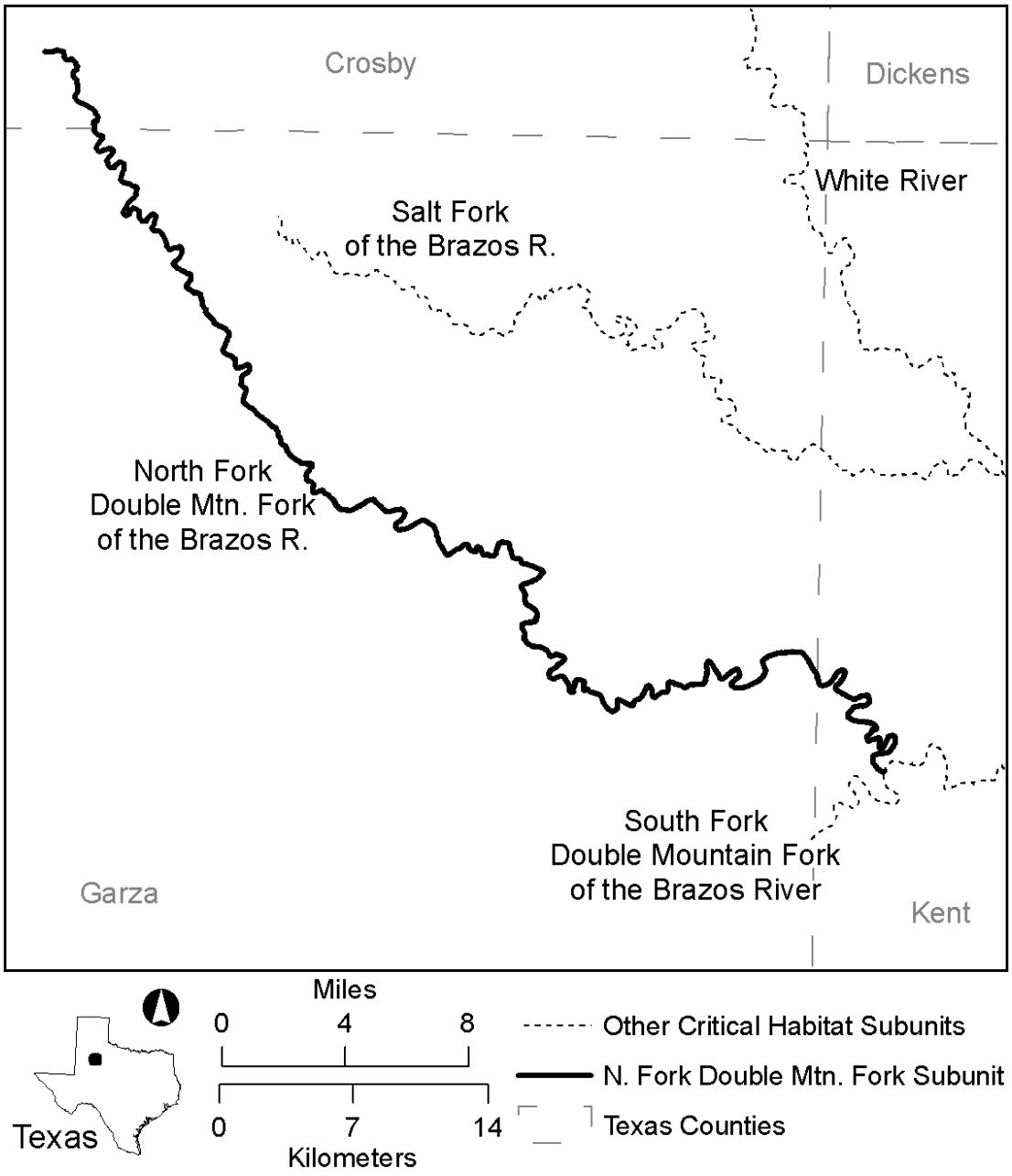
(10) Subunit 4: Double Mountain Fork of the Brazos River from its confluence with the Salt Fork of the Brazos River (33.268404, -100.010209) upstream to the confluence of the South Fork Double Mountain Fork of the Brazos River and the North Fork Double Mountain Fork of the Brazos River where they form the Double Mountain Fork of the Brazos River (33.100269, -100.999803); Fisher, Haskell, Kent, and Stonewall Counties, Texas. Map of Double Mountain Fork of the Brazos River Subunit follows:

Critical Habitat for Sharpnose and Smalleye Shiners: Double Mountain Fork of the Brazos River Subunit



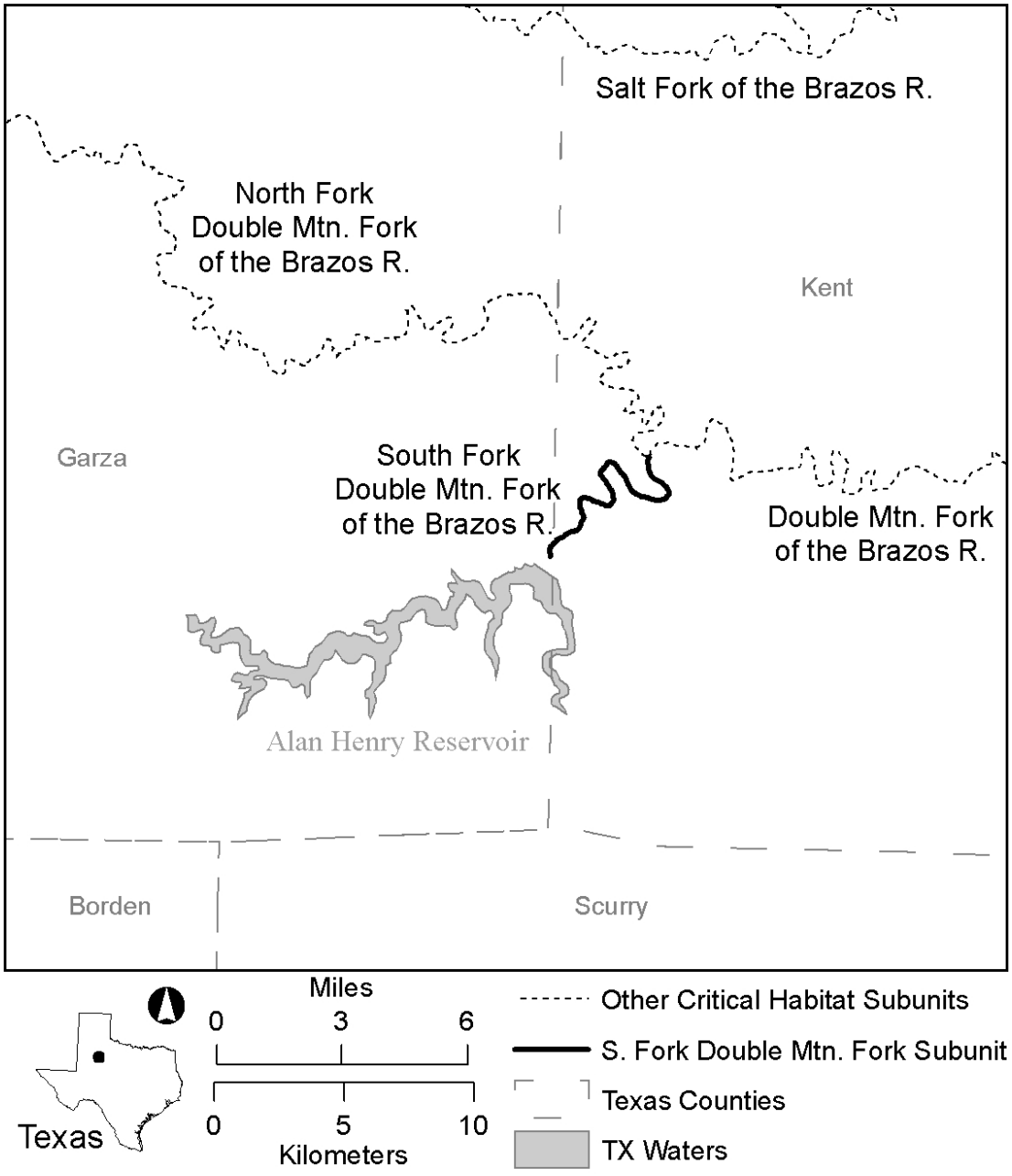
(11) Subunit 5: North Fork Double Mountain Fork of the Brazos River from its confluence with the South Fork Double Mountain Fork of the Brazos River (33.100269, -100.999803) upstream to the earthen impoundment near Janes-Prentice Lake (33.431515, -101.479610); Crosby, Garza, and Kent Counties, Texas. Map of North Fork Double Mountain Fork of the Brazos River Subunit follows:

Critical Habitat for Sharpnose and Smalleye Shiners: North Fork Double Mountain Fork of the Brazos River Subunit



(12) Subunit 6: South Fork Double Mountain Fork of the Brazos River from its confluence with the North Fork Double Mountain Fork of the Brazos River (33.100269, -100.999803) upstream to the John T. Montford Dam of Lake Alan Henry (33.065008, -101.039780); Garza and Kent Counties, Texas. Map of South Fork Double Mountain Fork of the Brazos River Subunit follows:

Critical Habitat for Sharpnose and Smalleye Shiners: South Fork Double Mountain Fork of the Brazos River Subunit



Smalleye Shiner (*Notropis buccula*)

(1) Critical habitat units are depicted for Baylor, Crosby, Fisher, Garza, Haskell, Kent, King, Knox, Stonewall, Throckmorton, and Young Counties, Texas, on the maps.

(2) Critical habitat includes the bankfull width of the river channel within the identified river segments indicated on the maps, and includes a lateral distance of 30 meters (98 feet) 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 and generally occurs every 1 to 2 years.

(3) Within these areas, the primary constituent elements of the physical or biological features essential to the conservation of the smalleye shiner consist of a riverine system with habitat to support all life-history stages of the smalleye shiner, which includes:

(i) Unobstructed, sandy-bottomed river segments greater than 275 kilometers (171 miles) in length.

(ii) Flowing water of greater than 6.43 cubic meters per second (m^3s^{-1}) (227 cubic feet per second (cfs)) averaged over the shiner spawning season (April through September).

(iii) Water of sufficient quality to support survival and reproduction, characterized by:

(A) Temperatures generally less than 40.6 °C (105.1 °F);

(B) Dissolved oxygen concentrations generally greater than 2.11 milligrams per liter (mg/L);

(C) Salinities generally less than 18 parts per thousand (ppt) (30 millisiemens per centimeter (mS/cm)); and

(D) Sufficiently low petroleum and other pollutant concentrations such that mortality does not occur.

(iv) Native riparian vegetation capable of maintaining river water quality, providing a terrestrial prey base, and maintaining a healthy riparian ecosystem;

(4) Critical habitat does not include manmade structures (such as buildings, railroads, roads, and other paved areas) and the land on which they are located existing within the legal boundaries on the effective date of this rule.

(5) *Critical habitat map units*. Data layers defining map units were created using the USGS National Hydrography Dataset's flowline data in ArcMap (Environmental Systems Research Institute, Inc.), a computer geographic information system program. The 30-m (98-ft) lateral extent adjacent to each segment's active channel is not displayed in the figures because it is not appropriate at these map scales. Segments were mapped using the NAD 1983 UTM Zone 14 projection. Endpoints of stream segments for each critical habitat subunit are reported as latitude, longitude in decimal degrees. The maps, as modified by any accompanying regulatory text, establish the boundaries of the critical habitat designation. The coordinates or plot points or both on which each map is based are available to the public at the Service's Internet site (*http://www.fws.gov/southwest/es/ArlingtonTexas/*), at *http://www.regulations.gov* at Docket No.

FWS–R2–ES–2013–0008, and at the Arlington, Texas, Ecological Services Field Office. You may obtain field office location information by contacting one of the Service regional offices, the addresses of which are listed at 50 CFR 2.2.

(6) Index map of critical habitat units for the smalleye shiner is provided at paragraph (6) of the entry for the sharpnose shiner in this paragraph (e).

(7) Subunit 1: Upper Brazos River Main Stem from approximately 15 river km (9.3 miles) upstream of the eastern border of Young County where it intersects the upper portion of Possum Kingdom Lake (32.974302, -98.509880) upstream to the confluence of the Double Mountain Fork of the Brazos River and the Salt Fork of the Brazos River where they form the Brazos River main stem (33.268404, -100.010209); Baylor, King, Knox, Stonewall, Throckmorton, and Young Counties, Texas. Map of Upper Brazos River Main Stem Subunit is provided at paragraph (7) of the entry for the sharpnose shiner in this paragraph (e).

(8) Subunit 2: Salt Fork of the Brazos River from its confluence with the Double Mountain Fork of the Brazos River (33.268404, -100.010209) upstream to the McDonald Road crossing (33.356258, -101.345890); Garza, Kent, and Stonewall Counties, Texas. Map of Salt Fork of the Brazos River Subunit is provided at paragraph (8) of the entry for the sharpnose shiner in this paragraph (e).

(9) Subunit 3: White River from its confluence with the Salt Fork of the Brazos River (33.241172, -100.936181) upstream to the White River Lake impoundment (33.457240, -

101.084546); Crosby, Garza, and Kent Counties, Texas. Map of White River Subunit is provided at paragraph (9) of the entry for the sharpnose shiner in this paragraph (e).

(10) Subunit 4: Double Mountain Fork of the Brazos River from its confluence with the Salt Fork of the Brazos River (33.268404, -100.010209) upstream to the confluence of the South Fork Double Mountain Fork of the Brazos River and the North Fork Double Mountain Fork of the Brazos River where they form the Double Mountain Fork of the Brazos River (33.100269, -100.999803); Fisher, Haskell, Kent, and Stonewall Counties, Texas. Map of Double Mountain Fork of the Brazos River Subunit is provided at paragraph (10) of the entry for the sharpnose shiner in this paragraph (e).

(11) Subunit 5: North Fork Double Mountain Fork of the Brazos River from its confluence with the South Fork Double Mountain Fork of the Brazos River (33.100269, -100.999803) upstream to the earthen impoundment near Janes-Prentice Lake (33.431515, -101.479610); Crosby, Garza, and Kent Counties, Texas. Map of North Fork Double Mountain Fork of the Brazos River Subunit is provided at paragraph (11) of the entry for the sharpnose shiner in this paragraph (e).

(12) Subunit 6: South Fork Double Mountain Fork of the Brazos River from its confluence with the North Fork Double Mountain Fork of the Brazos River (33.100269, -100.999803) upstream to the John T. Montford Dam of Lake Alan Henry (33.065008, -101.039780); Garza and Kent Counties, Texas. Map of South Fork Double Mountain Fork of the Brazos River Subunit is provided at paragraph (12) of the entry for the sharpnose shiner in this

paragraph (e).

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Dated: July 18, 2013

Rachel Jacobson

Principal Deputy Assistant Secretary for Fish and Wildlife and Parks

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