DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[Docket No. FWS–R2–ES–2020–0011; FF09E21000 FXES1111090FEDR 223]

RIN 1018–BD96

Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Narrow-Headed Gartersnake

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), designate critical habitat for the narrow-headed gartersnake (*Thamnophis rufipunctatus*) under the Endangered Species Act of 1973 (Act), as amended. In total, 23,785 acres (9,625 hectares) in Greenlee, Apache, Yavapai, Gila, and Coconino Counties, Arizona, and Grant, Hidalgo, and Catron Counties, New Mexico, fall within the boundaries of the critical habitat designation for the narrow-headed gartersnake. This rule extends the Act's protections to the narrow-headed gartersnake's designated critical habitat.

DATES: This rule is effective November 22, 2021.

ADDRESSES: This final rule is available on the internet at *http://www.regulations.gov*. Comments and materials we received, as well as supporting documentation we used in preparing this rule, are available for public inspection at *http://www.regulations.gov* at Docket No. FWS–R2–ES–2020–0011.

The coordinates or plot points or both from which the maps are generated are included in the decision file for this critical habitat designation and are available at *http://www.regulations.gov* at Docket No. FWS–R2–ES–2020–0011 or on the Service's website at *https://www.fws.gov/southwest/es/arizona/*. Additional supporting information that we developed for this critical habitat designation will be available on the Service's website set out above and at *http://www.regulations.gov*.

FOR FURTHER INFORMATION CONTACT: Jeff Humphrey, Field Supervisor, U.S. Fish and Wildlife Service, Arizona Ecological Services Field Office, Fish and Wildlife Office, 9828 North 31st Ave. #C3, Phoenix, AZ 85051–2517; telephone 602–242–0210. Persons who use a telecommunications device for the deaf (TDD) may call the Federal Relay Service at 800–877–8339.

SUPPLEMENTARY INFORMATION:

Executive Summary

Why we need to publish a rule. Under the Act, if we determine that a species is an endangered or threatened species, we must designate critical habitat to the maximum extent prudent and determinable. On July 8, 2014, we published a final rule to list the narrow-headed gartersnake as a threatened species (79 FR 38678). Designations of critical habitat can be completed only by issuing a rule.

What this document does. This rule designates critical habitat for the narrow-headed gartersnake of approximately 23,785 acres (9,625 hectares) in Greenlee, Apache, Yavapai, Gila, and Coconino Counties, Arizona, and Grant, Hidalgo, and Catron Counties, New Mexico.

The basis for our action. Under section 4(a)(3) of the Act, if we determine that any species is an endangered or threatened species, we must, to the maximum extent prudent and determinable, designate critical habitat. Section 3(5)(A) of the Act defines critical habitat as (i) the specific areas within the geographical area occupied by the species, at the time it is listed, on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protections; and (ii) specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination by the Secretary that such areas are essential for the conservation of the species. The Secretary may exclude an area from critical habitat if she determines that the benefits of such exclusion outweigh the benefits of specifying such areas as part of critical habitat, unless she 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. Section 4(b)(2) of the Act states that the Secretary must make the designation on the basis of the best scientific data available and after taking into consideration the economic impact, the impact on national security, and any other relevant impacts of specifying any particular area as critical habitat.

The critical habitat we are designating in this rule, consisting of eight units comprising approximately 447 stream miles (719 kilometers) within a maximum 326-foot (100-meter) lateral extent of the active stream channel, in an area of 23,784 acres (9,625 hectares) for the narrow-headed gartersnake, constitutes our current best assessment of the areas that meet the definition of critical habitat for the species.

Peer review and public comment. During the proposed rule stage, we sought the expert opinions of eight appropriate specialists. We received responses from three specialists, which informed our determination. Information we received from peer review is incorporated into this final rule. We also considered all comments and information we received from the public during the comment period.

Previous Federal Actions

Please refer to the final listing rule (79 FR 38678; July 8, 2014), the original proposed critical habitat rule (78 FR 41550; July 10, 2013), and the revised proposed critical habitat rule (85 FR 23608; April 28, 2020) for the narrow-headed gartersnake for a detailed description of previous Federal actions concerning this species. Those rules included the northern Mexican gartersnake (*Thamnophis eques megalops*), but we designated critical habitat for the northern Mexican gartersnake in an earlier, separate final rule (80 FR 22518; April 28, 2021). This rule designates critical habitat only for the narrow-headed gartersnake.

Supporting Documents

In the revised proposed critical habitat rule (85 FR 23608; April 28, 2020), we stated that a draft analysis document under the National Environmental Policy Act (NEPA; 42 U.S.C. 4321 *et seq.*) for the designation of critical habitat would be completed. We have now finalized an environmental assessment with a finding of no significant impact under NEPA. The environmental assessment and finding of no significant impact are available at *http://www.regulations.gov* at Docket No. FWS–R2–ES–2020–0011 and from the Arizona Ecological Services Field Office at *https://www.fws.gov/southwest/es/arizona/*. See Required Determinations, below, for a discussion of our NEPA obligations for this designation.

No changes were made to our economic analysis after considering public comment on the draft document. The final updated economic analysis document (IEc 2021, entire) is available at *http://www.regulations.gov at* Docket No. FWS–R2–ES–2020–0011.

Summary of Changes From the Proposed Rule

We reviewed the comments related to critical habitat for the narrow-headed gartersnake (see Summary of Comments and Recommendations, below), completed our analysis of areas

considered for exclusion under section 4(b)(2) of the Act (16 U.S.C. 1531 *et seq.*), reviewed our analysis of the physical or biological features (PBFs) essential to the long-term conservation of the narrow-headed gartersnake, and finalized the economic analysis of the designation. This final rule incorporates changes from our 2020 revised proposed critical habitat rule (85 FR 23608; April 28, 2020) based on the comments that we received, and have responded to in this document, and considers efforts to conserve the narrow-headed gartersnake.

As a result, our final designation of critical habitat reflects the following changes from the April 28, 2020, revised proposed rule (85 FR 23608):

(1) We revised unit areas based on comments we received regarding areas that did or did not contain the PBFs essential to the conservation of the species. These changes resulted in a net increase of 5,081 acres (ac) (2,056 hectares (ha)) of critical habitat. Critical habitat units were extended laterally to capture areas needed for brumation, a period of dormancy during the winter. All areas added to this final critical habitat designation were proposed as critical habitat for the narrow-headed gartersnake in the 2013 original proposed critical habitat rule (78 FR 41550; July 10, 2013) (see *Summary of Essential Physical or Biological Features*).

(2) We modified PBFs 1(B), 1(C), 1(D), and 3 for the narrow-headed gartersnake as identified below under Physical or Biological Features Essential to the Conservation of the Species.

(3) We excluded approximately 508 ac (206 ha) from portions of units for the narrow-headed gartersnake, as identified below in Table 2 (Areas excluded from critical habitat designation by critical habitat unit for the narrow-headed gartersnake).

(4) We corrected several errors in unit descriptions.

Summary of Comments and Recommendations

We requested written comments from the public on the original proposed critical habitat rule (78 FR 41550; July 10, 2013) and on the revised proposed critical habitat rule (85 FR 23608; April 28, 2020) for the narrow-headed gartersnake. The comment period for the original proposed critical habitat rule opened on July 10 and closed on September 9, 2013; the comment period for the revised proposed critical habitat rule opened on April 28 and closed on June 29, 2020.

For the original proposed critical habitat rule (78 FR 41550; July 10, 2013), we contacted appropriate Federal, State, and Tribal governments; local agencies; scientific organizations; and other interested parties and invited them to comment on the proposed critical habitat designation. For the revised proposed critical habitat rule (85 FR 23608; April 28, 2020), we again contacted all interested parties, including appropriate Federal and State agencies, Tribal governments, scientific experts and organizations, and other interested parties, and invited them to submit written comments on the revised proposal. In the April 28, 2020, revised proposed rule, we stated that any comments we received in response to the July 10, 2013, proposed rule need not be resubmitted as they would be fully considered in this final rule. Newspaper notices inviting general public comments were published throughout the range of the proposed critical habitat designation for both the original and revised proposed rules.

During the comment period on the original proposed critical habitat rule (78 FR 41550; July 10, 2013), we received approximately 30 written comment letters on the proposed critical habitat designation. During the comment period on the revised proposed critical habitat rule (85 FR 23608; April 28, 2020), we received an additional 40 comment letters on the revised proposed critical habitat designation or the draft economic analysis (IEc 2019, entire). We also received one additional request for exclusion of an area that was not identified in the revised proposed rule. We reviewed each exclusion request and whether the requester provided information or a reasoned rationale to initiate an analysis or support an exclusion (see Policy Regarding Implementation of Section 4(b)(2) of the Endangered Species Act (81 FR 7226; February 11, 2016)). All substantive information provided during both comment periods has either been incorporated directly into this final determination or is addressed in our responses below.

We also note that we no longer use primary constituent elements (PCEs) to identify areas as critical habitat. We eliminated PCEs due to redundancy with the physical or biological features (PBFs). This change in terminology is in accordance with a February 11, 2016 (81 FR 7414), rule to implement changes to the regulations for designating critical habitat. In the revised proposed critical habitat rule (85 FR 23608; April 28, 2020), we used the comments we had received and additional information to revise: (1) The PBFs that are essential to the conservation of the species and which may require special management considerations or protection under the Act; (2) the criteria used to define the areas occupied at the time of listing for the species; and (3) the criteria used to identify critical habitat boundaries. We then applied the revised PBFs and identification criteria for the species, along with additional information we received regarding where these PBFs exist on the landscape to determine the geographic extent of each critical habitat unit. We received comments on the original proposed critical habitat rule (78 FR 41550; July 10, 2013) that referred to PCEs, and our responses to those comments below correlate with the respective PBFs from the revised proposed critical habitat rule (85 FR 23608; April 28, 2020).

Peer Review

In accordance with our peer review policy published on July 1, 1994 (59 FR 34270), and our August 22, 2016, memorandum updating and clarifying the role of peer review actions under the Act, we solicited expert opinion on the original proposed critical habitat rule (78 FR 41550; July 10, 2013) from eight knowledgeable individuals with scientific expertise that includes familiarity with the narrow-headed gartersnake and its habitat, biological needs, and threats. We received responses from three of the peer reviewers. In 2020, during the public comment period for the revised proposed critical habitat rule (85 FR 23608; April 28, 2020), we received comments from one of the peer reviewers regarding our revised proposed rule. We address these peer reviewer comments in this final rule as appropriate.

This rule designates critical habitat only for the narrow-headed gartersnake; therefore, in this rule, we limit our discussion of the peer reviewer and public comments we received to those concerning the narrow-headed gartersnake. We reviewed all the comments we received from the peer reviewers for substantive issues and new information regarding the narrow-headed gartersnake and its habitat use and needs. The peer reviewers provided additional information, clarifications, and suggestions to improve the designation. Our revised proposed critical habitat rule (85 FR 23608; April 28, 2020) was developed in part to address some of the concerns and information raised by the peer reviewers in 2013. The additional details and information we received from or that were raised by the peer reviewers have been incorporated into this final rule, as appropriate. Substantive comments we

received from peer reviewers as well as Federal, State, Tribal, and local governments, nongovernmental organizations, and the public are summarized below.

Comment 1: One peer reviewer commented that nonnative fishes of the Centrarchidae and Ictaluridae families characterized by the term ''spiny-rayed fishes'' are not the only nonnative fishes that are detrimental to native fishes that are the prey for the gartersnake. They stated that the red shiner in the Cyprinidae family, nonnative mosquitofish in the Poeciliidae family, and nonnative trouts in the Salmonidae family all negatively impact native fishes as well. A second peer reviewer also commented that brown trout (*Salmo trutta*) are a harmful nonnative and would impact the PBFs related to lack of nonnative species in several subunits.

Our Response: In determining the PBFs for the gartersnake, we intended to identify those species of nonnative fish that were both considered highly predatory on gartersnakes and also highly competitive with gartersnakes in terms of common prey resources. The nonnative fish species we view as most harmful to gartersnake populations include bass (*Micropterus* sp.), flathead catfish (*Pylodictis* sp.), channel catfish (*Ictalurus* sp.), sunfish (Centrarchidae), bullheads (*Ameiurus* sp.), bluegill (*Lepomis* sp.), crappie (*Pomoxis* sp.), and brown trout. While other species may negatively impact native fishes, we highlighted the nonnative fish species that pose the greatest threat to narrow-headed gartersnakes.

Comment 2: One peer reviewer stated that our application of the ''adverse modification'' standard to fish renovation efforts is flawed because we can salvage gartersnakes prior to stream renovations and release them after a native fish prey base has been reestablished.

Our Response: For the public and section 7 practitioners to understand the types of actions considered to have potential effects to designated critical habitat, we generally identify those types of actions that could potentially result in adverse modification of designated critical habitat. The actual effects of a proposed action on designated critical habitat are dependent on many factors related to both the action being proposed and the project area. Conservation measures can be evaluated against specific attributes of the proposed action at the time of consultation for their suitability and potential implementation. We agree that salvaging gartersnakes prior to stream renovations and then releasing them after a native fish prey base has been reestablished could be a conservation recommendation identified during section 7 consultation to address effects of such a proposed action that includes fish renovation efforts.

Comment 3: One peer reviewer stated that no areas should be excluded from the critical habitat designation based on existing habitat conservation plans because we cannot enforce implementation of conservation plans.

Our Response: Section 4(b)(2) of the Act (16 U.S.C. 1533(b)(2)) states that we 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 Act provides that we may exclude an area from critical habitat if we determine that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless we determine, 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. Under our Policy Regarding Implementation of Section 4(b)(2) of the Endangered Species Act (81 FR 7226; February 11, 2016), when conducting this analysis we consider a number of factors including whether there are permitted conservation plans covering the species in the area such as habitat conservation plans, safe harbor agreements, or candidate conservation agreements with assurances, or whether there are non-permitted conservation agreements and partnerships that would be encouraged by designation of, or exclusion from, critical habitat. Under the policy, we analyze habitat conservation plans when weighing whether the benefits of exclusion outweigh the benefits of including these areas in the critical habitat designation, and our analysis includes looking at whether the permittee is properly implementing the plan and is expected to continue doing so. We have conducted a weighing analysis to determine if the benefits of exclusion outweigh the benefits of including these areas, and we have used our discretion to determine if the existing habitat conservation plans are sufficient to conserve the species (see discussion under Consideration of Impacts under Section 4(b)(2) of the Act, below).

Comment 4: One peer reviewer commented that it would be helpful to have a rating system for the PBFs about prey bases consisting of native fishes and an absence of nonnative fishes, to show a gradient among sites.

Our Response: For recovery implementation purposes, we see value in understanding and tracking the status of the PBFs related to prey base and absence of nonnative aquatic predators, such as nonnative fishes. However, in terms of species composition or relative abundance, we do not currently have information on what the threshold of each nonnative aquatic predator, or combination of such predators, is to be considered detrimental to the narrow-headed gartersnake. These thresholds would also vary depending on the condition of other PBFs, including organic and inorganic structural features in a stream.

Comment 5: One peer reviewer commented on several PBFs that are incorrectly applied to several subunits for the narrow-headed gartersnake, including PBF 3 in the Campbell Blue Subunit, West Fork Gila River Subunit, the lower 2 miles of Iron Creek Subunit, and Little Creek Subunit, and PBF 4 in the lower 2 miles of Iron Creek Subunit, Little Creek Subunit, and South Fork Negrito Creek.

Our Response: While we did not include descriptions of PBFs for each subunit in this document, we used the information provided by the peer reviewer in our reevaluation of occupancy in the revised proposed critical habitat rule (85 FR 23608; April 28, 2020).

Comment 6: One peer reviewer commented that Willow Creek should be a subunit for the narrow-headed gartersnake because there is a museum record from 1989 or 1990 and there are adequate PBFs. Because the site was formerly suitable, it is likely to become recolonized.

Our Response: In the revised proposed critical habitat rule (85 FR 23608; April 28, 2020), we reviewed gartersnake occupancy to determine that a stream or stream reach was occupied by the narrow-headed gartersnake at the time of listing if it is within the historical range of the species, contains all PBFs for the species (although the PBFs concerning prey availability and presence of nonnative, aquatic predators are often in degraded condition), and has a last known record of occupancy between 1998 and 2019 (see Occupancy Records, 85 FR 23608, p. 23617–23619) (see Criteria Used To Identify Critical Habitat). Willow Creek does not have a record for the narrow-headed gartersnake that meets this occupancy definition, so it is not included in this final critical habitat designation for the species.

Comment 7: One peer reviewer commented that we should add the mainstem of the Negrito reach from the confluence of the north and south fork Negrito Creeks to its confluence with the Tularosa River reach.

Our Response: In the revised proposed critical habitat rule (85 FR 23608; April 28, 2020), we reviewed gartersnake occupancy to determine that a stream or stream reach was occupied by the narrow-headed gartersnake at the time of listing if it is within the historical range of the species, contains all PBFs for the species (although the PBFs concerning prey availability and presence of nonnative, aquatic predators are often in degraded condition), and has a last known record of occupancy between 1998 and 2019 (see Occupancy Records, 85 FR 23608, p. 23617–23619) (see Criteria Used To Identify Critical Habitat). The mainstem of Negrito Creek meets this definition for the narrow-headed gartersnake and is included in this final critical habitat designation for the species.

Federal Agency Comments

Comment 8: The U.S. Forest Service (USFS) commented that the term ''spatially intermittent flow'' used in PCE 1 of the original proposed critical habitat rule (78 FR 41550; July 10, 2013) is ambiguous because spacing between sections of flowing water can vary greatly and may not meet the biological needs of the gartersnake or its prey base.

Our Response: In the revised proposed critical habitat rule (85 FR 23608; April 28, 2020) and this rule, we define perennial, intermittent, and ephemeral as related to stream flow included in PBF 1 for the narrow-headed gartersnake and clarify the spectrum of stream flow regimes that provide stream habitat for the species based on scientifically accepted stream flow definitions (Levick *et al.* 2008, p. 6; Stromberg *et al.* 2009, p. 330) (see ''Stream Flow'' in 85 FR 23608, April 28, 2020, p. 23613; see also Physical or Biological Features Essential to the Conservation of the Species, below).

Comment 9: USFS requested clarification of what level of water pollutants are ''low enough not to affect recruitment'' for PBF 1(C) for narrow-headed gartersnake in the revised proposed critical habitat rule (85 FR 23608; April 28, 2020).

Our Response: We do not have specific data related to water pollutants that are ''at levels low enough such that recruitment of narrow-headed gartersnakes is not inhibited'' (85 FR 23608, April 28, 2020, p. 23648). Therefore, in this rule, we have amended this PBF to read as follows: ''Water quality that meets or exceeds applicable State surface water quality standards'' (see Physical or Biological Features Essential to the Conservation of the Species, below). Although water quality is not identified as a threat to the narrow-headed gartersnake, it is a threat to its prey base. Water quality that is absent of pollutants or has low levels of pollutants is needed to support the fish prey base for the narrow-headed gartersnake. State water quality standards identify levels of pollutants required to maintain communities of organisms that have a taxa richness, species composition, and functional organization that includes the fish prey base of the narrow-headed gartersnake.

Comment 10: In response to the original proposed critical habitat rule (78 FR 41550; July 10, 2013), a Federal agency stated that we should make it clear that when the 600-foot (ft) (182-meter (m)) width of critical habitat falls outside the stream channel, such as when channels are constricted by narrow canyon walls, critical habitat does not include upland areas that would not be used by the narrow-headed gartersnake.

Our Response: In the revised proposed critical habitat rule (85 FR 23608; April 28, 2020) for the narrow-headed gartersnake, we defined the lateral extent of critical habitat to include terrestrial features within 89 ft (27 m) of the active channel of a stream that provide thermoregulation, shelter sites, and protection from predators. This lateral extent includes some portions of narrow canyon walls and limits upland areas beyond narrow canyon walls. This lateral distance was based on the greatest average distance narrow-headed gartersnakes moved from the water during the wet season at two different sites on the Tularosa River in New Mexico over a 3-year study with a sample size of 69 individuals (Jennings and Christman 2012, p. 12) (see ''Terrestrial Space Along Streams,'' 85 FR 23608, April 28, 2020, pp. 23614–23616).

Subsequently, we received two comments on the revised proposed critical habitat rule (85 FR 23608; April 28, 2020) that a distance of 89 ft (27 m) did not capture known brumation sites on canyon walls used by narrow-headed gartersnakes in Oak Creek Canyon in Arizona (see *Comment 43,* below). As explained in our response to comment 43 below, we increased the lateral extent of critical habitat up to 328 ft (100 m) in areas with steep canyon walls to more accurately capture areas used by the narrow-headed gartersnake for brumation. This lateral extent also limits upland areas beyond narrow canyon walls, and we conclude that the changes that we made in this rule address all comments on this issue.

Comment 11: In response to the original proposed critical habitat rule (78 FR 41550; July 10, 2013), USFS commented that the gartersnake has strong fidelity for brumation or natal sites.

Our Response: Although we have information that the narrow-headed gartersnake uses brumation sites, we are not aware of any literature supporting a conclusion that the species has strong fidelity for these brumation sites. In this designation, we include some areas that capture the PBFs of brumation sites that have been documented in telemetry studies conducted that are described in the revised proposed critical habitat rule (85 FR 23608, April 28, 2020—see ''Terrestrial Space Along Streams'' on pp. 85 FR 23614–23616).

Comment 12: In response to the original proposed critical habitat rule (78 FR 41550; July 10, 2013), several Federal entities commented that various areas in the proposal do not currently contain the PBFs for narrow-headed gartersnakes. USFS further stated that it would be more realistic if we limited critical habitat to the areas that had the PBFs, if the PBFs are clearly defined and determinable.

Our Response: For the revised proposed critical habitat rule (85 FR 23608; April 28, 2020), we reevaluated all streams to determine which stream reaches contain PBFs. The revised proposed critical habitat rule and this rule do not include stream reaches where we determined that water flow became completely ephemeral along an otherwise perennial or spatially intermittent stream, hydrologic processes needed to maintain streams could not be recovered, nonnative aquatic predators outnumbered native prey species, or streams were outside the elevation range for the narrow-headed gartersnake. The revised proposed critical habitat rule (85 FR 23608; April 28, 2020) and this rule include areas that were occupied at the time of listing and contain at least one of the PBFs. We acknowledge that in some locations, the PBFs concerning prey availability and presence of nonnative aquatic predators are often in degraded condition and may require special management (see Changes to Criteria Used to Identify Critical Habitat in 85 FR 23608, April 28, 2020, pp. 85 FR 23617–23623; and see Regulation Promulgation, below).

Comment 13: In response to the original proposed critical habitat rule (78 FR 41550; July 10, 2013), several Federal agencies provided lists of

specific areas included in proposed critical habitat that do not have stream flow requirements defined in PBF 1(A) to support the narrow-headed gartersnake or its corresponding prey species identified in PBF 3. These agencies identified reaches that lacked PBF 1(A) in some areas along the following streams included in the 2013 proposed critical habitat rule for the narrow-headed gartersnake: Diamond Creek, Little Creek, and Turkey Creek in the Upper Gila River Subbasin; Eagle Creek in the Middle Gila River Subbasin; Dry Blue Creek, San Francisco River, and South Fork Negrito Creek in the San Francisco River Subbasin; and Canyon Creek and Carrizo Creek in the Upper Salt River Subbasin. These areas included stream reaches where water flow became completely ephemeral along an otherwise perennial or spatially intermittent stream, and many included the origin of streams, some of which were outside of the known elevation range of the species.

Our Response: In the revised proposed critical habitat rule (85 FR 23608; April 28, 2020), we did not include stream reaches where water flow becomes completely ephemeral along an otherwise perennial or spatially intermittent stream, and we incorporated related information received from USFS and others regarding stream flow. We incorporated stream flow information received from USFS for Diamond Creek and Gilita Creek in the Upper Gila River Subbasin Unit for narrow-headed gartersnake. Based on information from USFS and others related to lack of stream flow along Diamond Creek and Gilita Creek, designated critical habitat for the narrow-headed gartersnake along Diamond Creek ends 0.26 miles (mi) (0.4 kilometers (km)) upstream from Star Canyon, and critical habitat along Gilita Creek ends upstream of Willow Creek. The rule set that we applied in the 2020 revised proposed rule limited critical habitat to the known elevation range of the species and limited stream length by dispersal distance from confirmed gartersnake locations dated 1998 or later. When applied, these two factors of the rule set removed all other areas that the commenting Federal agencies identified as not having stream flow requirements for the narrow-headed gartersnake.

Comment 14: In response to the original proposed critical habitat rule (78 FR 41550; July 10, 2013), USFS stated that narrow-headed gartersnake critical habitat in high montane meadows and stream origins in ponderosa pine and mixed conifer forests does not have potential to develop shoreline habitat as it is defined in PBF 1(C): Shoreline habitat with adequate structural complexity and appropriate amounts of shrub- and sapling-sized plants.

Our Response: The PBFs in the revised proposed critical habitat rule (85 FR 23608; April 28, 2020) and this rule do not include the term ''shoreline habitat'' or the components that were included in shoreline habitat in the 2013 proposed rule. Instead, PBFs 1(B) and 1(D) focus on components that are found throughout all habitat types used by the narrow-headed gartersnake, including organic and natural inorganic structural features important to the narrow-headed gartersnake that fall within the stream channel and within terrestrial habitat that is up to 328 ft (100 m) from the active stream channel.

Comment 15: USFS stated that many areas included in critical habitat in the original proposed critical habitat rule (78 FR 41550; July 10, 2013) do not have PBF 4: An absence of nonnative fish species of the families Centrarchidae and Ictaluridae, bullfrogs, and/or crayfish. USFS also stated that much of proposed critical habitat may not have the capacity to ever become recolonized by the narrow-headed gartersnake due to the current and likely future conditions of these nonnative invasive species. In response to the revised proposed critical habitat rule (85 FR 23608; April 28, 2020), USFS further commented that it will be difficult if not impossible for USFS to attain this PBF on its lands that it manages because nonnative species are managed by the State and not by USFS.

Our Response: The revised proposed critical habitat rule (85 FR 23608; April 28, 2020) and this final rule include areas that were occupied at the time of listing, but areas that contain nonnative aquatic predators are often in degraded condition and require special management. While recognizing USFS concerns, these areas have the capacity to be managed to improve the condition of the PBFs for the narrow-headed gartersnake through cooperative efforts between State wildlife agencies and USFS, and these types of efforts have already successfully been undertaken by USFS and State wildlife agencies within the range of the narrow-headed gartersnake.

Comment 16: In response to the revised proposed critical habitat rule (85 FR 23608; April 28, 2020), USFS stated that we did not provide much explanation for what might constitute special management considerations that may be needed in critical habitat, so it is not clear what types of management are likely to result in improved PBFs. USFS commented that there should be some recognition of the potential value of restorative actions that often have short-term adverse effects but are designed to result in beneficial effects (*e.g.,* channel restoration, prescribed fire, riparian vegetation improvements, etc.).

Our Response: In the revised proposed critical habitat rule (85 FR 23608; April 28, 2020), we stated that we were not changing any of the special management considerations from the 2013 original proposed critical habitat rule for the narrow-headed gartersnake (see Special Management Considerations or Protection in 85 FR 23608, April 28, 2020, p. 23624). However, the 2013 original proposed critical habitat rule did not include recognition of the potential value of restorative actions that often have short-term adverse effects but are designed to result in beneficial effects (see *Special Management Considerations or Protection* in 78 FR 41550, July 10, 2013, pp. 41555–41556). To address this comment and the information lacking in the 2013 original proposed critical habitat rule, we have added this information to the discussion of special management considerations in this final rule.

Comment 17: In response to the original proposed critical habitat rule (78 FR 41550; July 10, 2013), USFS stated that proposed critical habitat for the narrow-headed gartersnake included areas outside of the known elevation range and areas that do not have records of the species, including portions of Diamond Creek, Gilita Creek, and Iron Creek in the Upper Gila River Subbasin.

Our Response: In the revised proposed critical habitat rule (85 FR 23608; April 28, 2020), we included the elevation range of narrow-headed gartersnake as a PBF essential to the conservation of the species and did not include areas in the proposed critical habitat designation outside of this elevation range.

Comment 18: In response to the revised proposed critical habitat rule (85 FR 23608; April 28, 2020), USFS stated that East Fork Black River, Bear Wallow Creek, and Fish Creek were not considered occupied by narrow-headed gartersnake in the original proposed critical habitat rule (78 FR 41550; July 10, 2013), and that we did not provide information to support these additions in the 2020 revised proposed critical habitat rule. USFS questioned the validity of the Arizona Game and Fish Department (AGFD) record for narrow-headed gartersnake in Fish Creek and further stated that Fish Creek was

heavily impacted by the 2011 Wallow Fire. USFS recommended removing East Fork Black River, Bear Wallow Creek, and Fish Creek from the final designation.

Our Response: In the revised proposed critical habitat rule (85 FR 23608; April 28, 2020), we reviewed gartersnake occupancy to determine that a stream or stream reach was occupied at the time of listing for the narrow-headed gartersnake if it is within the historical range of the species, contains PBFs for the species (although the PBFs concerning prey availability and presence of nonnative aquatic predators are often in degraded condition), and has a last known record of occupancy between 1998 and 2019 (see Occupancy Records, 85 FR 23608, p. 23617–23619) (see Criteria Used To Identify Critical Habitat). During this review, we became aware of additional records for areas we did not include in the 2013 proposed rule, and so we included them in our occupancy determination. While we did not discuss individual gartersnake records that contribute to occupancy in the 2013 proposed rule or the 2020 revised proposed rule, we have these records in our files. AGFD provided and verified records of narrow-headed gartersnakes in the East Fork Black River, Bear Wallow Creek, and Fish Creek (Arizona Game and Fish Department 2013, entire; Ryan 2020, pers. comm.). While the 2011 Wallow Fire significantly reduced native fish abundance in Fish Creek, native fish have since recolonized the stream (Nowak *et al.* 2017, Table 3). For these reasons, we included these areas in this final designation.

Comment 19: In response to the original proposed critical habitat rule (78 FR 41550; July 10, 2013), USFS stated that proposed critical habitat will affect numerous livestock grazing allotments on the Tonto National Forest. In addition, another Federal agency stated concerns about current and potential future management of public lands within proposed designated critical habitat areas, including grazing and off-highway vehicle (OHV) use. There is a grazing permit renewal under review that would allow for grazing October through January within the Palmerita Ranch allotment on riparian and upland areas. The agency also stated that there is a special recreational permit issued for an annual 3-day OHV poker run event, which would occur partially on navigable washes on Federal lands.

Our Response: With respect to livestock grazing and OHV use in areas of critical habitat, Federal agencies that authorize, carry out, or fund actions that may affect listed species or designated critical habitat are required to consult with us to ensure the action is not likely to jeopardize listed species or destroy or adversely modify designated critical habitat. This consultation requirement under section 7 of the Act is not a prohibition of Federal agency actions; rather, it is a means by which they may ensure that their actions proceed in a manner that avoids jeopardy or adverse modification. Even in areas absent designated critical habitat, if the Federal agency action may affect a listed species, consultation is still required to ensure the action is not likely to jeopardize the species. Because the areas designated as critical habitat are occupied and consultation will be required to meet the jeopardy standard, the impact of the critical habitat designation should be minimal and administrative in nature.

Comment 20: In response to the revised proposed critical habitat rule (85 FR 23608; April 28, 2020), USFS stated that maintenance of adequate base flow in Eagle Creek is impacted by State water law and rights and outside of the purview of USFS. USFS expressed concern that Federal agencies may be impacted by the Act's section 7 reasonable and prudent measures that are not implementable.

Our Response: We understand that maintenance of adequate base flow in streams is impacted by State water law and rights that are outside of the purview of USFS. Under section 7 of the Act when evaluating the effects on critical habitat, we consider impacts on base flow from ongoing State water management operations within the designated units that are not within the agencies' discretion to modify to be part of the baseline of an effects analysis. Service policy states that section 7 consultation should result in reasonable and prudent measures that minimize the impacts of incidental take to the extent reasonable and prudent. They should be developed in coordination with the action agency and applicant, in any, to ensure that the measures are reasonable, that they cause only minor changes to the project, and that they are within the legal authority and jurisdiction of the agency or applicant to carry out. Therefore, they must be implementable.

Comment 21: In response to the original proposed critical habitat rule (78 FR 41550; July 10, 2013), USFS requested we define disturbance thresholds for actions ''that would significantly increase sediment deposition or scouring within the stream channel'' such as vegetation treatments, prescribed fire, and wildfire suppression. USFS also requested we include language addressing the scope, scale, and duration of actions ''that would alter water chemistry beyond the tolerance limits of a gartersnake prey base'' and actions ''that would remove, diminish, or significantly alter the structural complexity of key natural structural habitat features in and adjacent to critical habitat.'' USFS stated that these actions are extremely broad in scope and do not differentiate short-term impacts from true long-term, more permanent impacts that could result in adverse modification.

Our Response: The purpose of the designation of critical habitat to identify those areas critical to the conservation of the species. For the public and section 7 practitioners to understand the types of actions considered to have potential effects on designated critical habitat, we generally identify those types of actions that could potentially result in adverse modification of designated critical habitat. The actual effects of a proposed action on designated critical habitat are dependent on many factors related to both the action being proposed and the project area. Therefore, we cannot determine and include thresholds for adverse modification in this rule. The appropriate process for that determination is the Act's section 7 process, during which specific factors within the proposed action and conditions within the project area can be evaluated.

Comment 22: In response to the revised proposed critical habitat rule (85 FR 23608; April 28, 2020), USFS commented that ''[a]ctions and structures that would physically block movement of gartersnakes and their prey species'' should not include a discussion of predatory species, because the presence of nonnative aquatic predatory species in a waterbody reduces population viability, which is considered under actions included in those ''that would directly or indirectly result in the introduction, spread, or augmentation of predatory nonnative species in gartersnake habitat.''

Our Response: Including this language with regard to nonnative aquatic predatory species within the description of actions and structures that would block the movements of gartersnakes and their prey species, as well as within the description of actions that would result in the introduction, spread, and augmentation of predatory nonnative species, is important to clarify two different types of effects that result from similar actions. The presence of such nonnative aquatic predatory species can both act as a barrier to movement and reduce habitat

quality due to presence of nonnative aquatic predatory species.

Comment 23: In response to both the original proposed critical habitat rule (78 FR 41550; July 10, 2013) and the revised proposed critical habitat rule (85 FR 23608; April 28, 2020), USFS and others stated that we need to provide a reasonable, rational, and non-arbitrary timeframe for restocking of streams treated with piscicides, as the application of a standard that would determine adverse modification if the prey base was affected as described for 7 or more days would in many cases preclude the application of piscicides to restore listed or at-risk aquatic species, forsaking their recovery for gartersnakes.

Our Response: The purpose of the designation of critical habitat is not to evaluate every potential project or action that could adversely affect or modify designated critical habitat, but rather to identify those areas critical to the conservation of the narrow-headed gartersnake. For the public and section 7 practitioners to understand the types of actions considered to have potential effects to designated critical habitat, we generally identify those types of actions that could potentially result in adverse modification of designated critical habitat. The actual effects of a proposed action of designated critical habitat are dependent on many factors related to both the action being proposed and the project area. Therefore, we cannot determine and include overall thresholds for adverse modification in this rule. The appropriate process for that determination is during the Act's section 7 process, during which specific factors within the proposed action and conditions within the project area can be evaluated.

Comment 24: The U.S. Small Business Administration and other commenters stated that we should consider the full scope of economic impacts to small entities and conduct a thorough Regulatory Flexibility Act analysis for critical habitat rules.

Our Response: Under the Regulatory Flexibility Act (RFA; 5 U.S.C. 601 *et seq.*), as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA; 5 U.S.C. 801 *et seq.*), Federal agencies are required to evaluate the potential incremental impacts of a rulemaking only on directly regulated 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 out 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, we can certify that this rule will not have a significant economic impact on a substantial number of small entities (see Required Determinations, below). Thus, no regulatory flexibility analysis is required.

Comment 25: The U.S. Small Business Administration commented that we should continue to engage with stakeholders early in the process and consider public comments.

Our Response: Stakeholder engagement is important to balancing the long-term conservation of sensitive species and their habitats with the interests of stakeholders and the needs of the public. For our original proposed critical habitat rule (78 FR 41550; July 10, 2013) and revised proposed critical habitat rule (85 FR 23608; April 28, 2020), we conducted outreach to relevant Federal, State, and local municipalities and stakeholders, and published public news releases to alert the public to the proposals and request public comments. Specifically, in the proposed rules, we solicited information from the public regarding potential exclusions of areas based on management plans or other conservation efforts including partnerships, as well as other information related to the species and potential impacts of designating critical habitat. This final rule outlines our consideration of public comments we received on both the original and revised proposed rules.

State Comments

Comment 26: Arizona Game and Fish Department (AGFD) commented that while they recognize the intent of our use of the term ''predatory sportfish,'' it is important to point out that all sportfish are predatory, as are all of our native fishes (*i.e.,* they all prey on other organisms) and all interactions with sportfish are not negative. Further, not all sportfish or native species eat snakes.

Our Response: In the revised proposed critical habitat rule (85 FR 23608; April 28, 2020), we used the term ''predatory sportfish'' to explain how we delineated critical habitat: We identified and removed stream reaches where stocking or management of predatory sportfish is a priority and is conducted on a regular basis. In this rule, we have removed the term ''predatory sportfish'' and replaced it with ''nonnative fish species of the families Centrarchidae and Ictaluridae,'' so that it is consistent with the description of species used in the PBF related to nonnative aquatic predators.

Comment 27: In response to our original proposed critical habitat rule (78 FR 41550; July 10, 2013), New Mexico Department of Game and Fish (NMDGF) commented that the narrow-headed gartersnake is known both historically and recently from all three of its properties within or adjacent to the Upper Gila River Subbasin Unit. These properties include the Red Rock Wildlife Management Area, which is a public fishing and recreation area; the Bill Evans Fishing Area, which is a public fishing site; and the Heart Bar Wildlife Area, which is a public fishing and recreation area. NMDGF also noted that the proposal includes its Glenwood State Fish Hatchery within the narrow-headed gartersnake San Francisco River Subbasin Unit.

Our Response: In the revised proposed critical habitat rule (85 FR 23608; April 28, 2020), we reviewed narrow-headed gartersnake occupancy to determine that a stream or stream reach was occupied at the time of listing for the narrow-headed gartersnake if it is within the historical range of the species, contains PBFs for the species (although the PBFs concerning prey availability and presence of nonnative aquatic predators are often in degraded condition), and has a last known record of occupancy between 1998 and 2019 (see Occupancy Records, 85 FR 23608, p. 23617–23619) (see Criteria Used To Identify Critical Habitat). As a result of our review of occupancy and implementation of our rule set for stream length, we have added Red Rock Wildlife Management Area, Bill Evans Fish Area, and Heart Bar Wildlife Area to the description of the Upper Gila River Subbasin Unit in this final critical habitat designation for the narrow-headed gartersnake.

Comment 28: AGFD stated that the revised proposed critical habitat rule (85 FR 23608; April 28, 2020) is adequate for recovery of the narrow-headed gartersnake and that there are some areas that were occupied historically but from which the species has been extirpated. AGFD will continue the recovery efforts of reintroducing narrow-headed gartersnakes back into historically occupied habitats to contribute to recovery, regardless of their current occupied status or their critical habitat designation.

Our Response: We appreciate the AGFD's partnership in the conservation and recovery of the narrow-headed

gartersnake. We only consider unoccupied areas to be essential where a critical habitat designation limited to geographical areas occupied at the time of listing by the species would be inadequate to ensure the conservation of the species. In addition, for an unoccupied area to be considered essential, we must determine that there is a reasonable certainty both that the area will contribute to the conservation of the species and that the area contains one or more of the PBFs essential to the conservation of the species. At this point in time, we do not know what areas within the species' historical range will contribute to the conservation of the species.

Comment 29: Both AGFD and NMDGF stated concerns with the *Application of the* ''*Adverse Modification*'' *Standard* discussion in the revised proposed critical habitat rule (85 FR 23608, April 28, 2020, pp. 23633–23634). AGFD pointed out that in the same discussion in the original proposed critical habitat rule (78 FR 41550, July 10, 2013, pp. 41576–41577), we discuss activities ''that may affect critical habitat, when carried out, funded, or authorized by a Federal agency [and that] should result in section 7 consultation,'' but in the 2020 revised proposed critical habitat rule, we discuss the same activities but change the ''may affect critical habitat'' to ''are likely to destroy or adversely modify critical habitat.'' AGFD recommended that in the final rule we use the same language in this discussion that we used in the 2013 original proposed critical habitat rule. AGFD also expressed concern that the 2020 revised proposed critical habitat rule essentially says that the effect has already been determined that any of these activities will destroy or adversely modify critical habitat.

Our Response: The change in wording as it applies to the *Application of the* ''*Adverse Modification*'' *Standard* in the 2020 revised proposed critical habitat rule (85 FR 23608, April 28, 2020) was a response to correct an error in phrasing from the original proposed critical habitat rule (78 FR 41550, July 10, 2013). In this rule's *Application of the* ''*Adverse Modification*'' *Standard* discussion, below, we include actions that could cause adverse effects to critical habitat, and not necessarily cause adverse modification to critical habitat, so that the public and section 7 practitioners can understand the types of actions we consider to have potential effects to designated critical habitat. The actual effects of a proposed action on designated critical habitat are dependent on many factors related to both the action being proposed and the project area. Therefore, we cannot determine and include thresholds for adverse modification in this rule. The appropriate process for that determination is the Act's section 7 process, during which specific factors within the proposed action and conditions within the project area can be evaluated.

Comment 30: Both AGFD and NMDGF stated concerns with some activities included in the analysis of the ''adverse modification'' standard because the activities are valuable to the restoration and recovery of native species even if they have temporary impacts to critical habitat. AGFD and NMDGF expressed concern about the time threshold we included in the *Application of the* ''*Adverse Modification*'' *Standard* discussion to determine that actions that would deliberately remove, diminish, or significantly alter the native or nonnative, soft-rayed fish component of the prey base within occupied habitat for a period of 7 days or longer would reach an adverse modification determination. AGFD further explained that stream renovation projects are needed to ensure that a healthy native fish community exists and that gartersnakes will also thrive. Chemical renovations can take longer than 7 days for the chemicals to dissipate to levels that are safe for native fish, or multiple treatments may need to be conducted to be effective. NMDGF requested removing fish barriers, water diversion, fish habitat restoration, and chemical treatments from the *Application of the* ''*Adverse Modification*'' *Standard* discussion in the final rule.

Our Response: In this rule's *Application of the* ''*Adverse Modification*'' *Standard* discussion, below, we acknowledge that some conservation actions will have short-term adverse effects but will ultimately result in long-term benefits to gartersnake critical habitat. The actual effects of a proposed action of designated critical habitat are dependent on many factors related to both the action being proposed and the project area. The appropriate process for that determination is the Act's section 7 process, during which specific factors within the proposed action and conditions within the project area can be evaluated. We understand that there are no clear data to suggest that narrow-headed gartersnakes must feed within 7 days of their last meal. As stated above, we also agree that it is not possible to determine and include thresholds for adverse modification in this rule. Therefore, in this rule, we removed the time threshold that commenters interpreted to limit fish removal to a 7-day window.

Comment 31: NMDGF requested exclusion for the Glenwood State Fish Hatchery in the Whitewater Creek Subunit of the San Francisco River Subbasin Unit for the narrow-headed gartersnake because there are no records of the species within the hatchery boundary and Whitewater Creek is not perennial at the hatchery. NMDGF further explains that the Service's Memorandum for the Intra-Service Section 7 Endangered Species Act Consultation for the Proposed Operation and Maintenance of Hatchery Facilities NM F–66 Project concurred with a ''no effect'' determination for the narrow-headed gartersnake because the snake is not currently present.

Our Response: In the revised proposed critical habitat rule (85 FR 23608; April 28, 2020), we reviewed narrow-headed gartersnake occupancy to determine that a stream or stream reach was occupied at the time of listing for narrow-headed gartersnake if it is within the historical range of the species, contains PBFs for the species (although the PBFs concerning prey availability and presence of nonnative aquatic predators are often in degraded condition), and has a last known record of occupancy between 1998 and 2019 (see Occupancy Records, 85 FR 23608, p. 23617–23619) (see Criteria Used To Identify Critical Habitat). The segment of Whitewater Creek included in the critical habitat designation for the narrow-headed gartersnake meets this definition.

In the revised proposed critical habitat rule (85 FR 23608; April 28, 2020) and this rule, we also define perennial, intermittent, and ephemeral as related to stream flow included in PBF 1 for the narrow-headed gartersnake and clarify the spectrum of stream flow regimes that provide stream habitat for the species based on scientifically accepted stream flow definitions (Levick *et al.* 2008, p. 6; Stromberg *et al.* 2009, p. 330) (see ''Stream Flow'' in 85 FR 23608, April 28, 2020, p. 23613; see also Physical or Biological Features Essential to the Conservation of the Species, below). Although Whitewater Creek is ephemeral at the Glenwood State Fish Hatchery, it is perennial upstream of the hatchery and downstream at its confluence with the San Francisco River, so the entire stream segment meets our definition of critical habitat.

Under section 7 of the Act, Federal agencies are required to consult with the Service to ensure that the actions they carry out, fund, or authorize are not

likely to jeopardize the continued existence of the species, or destroy or adversely modify critical habitat. For a jeopardy or ''take'' analysis, we analyze effects to a species if the species is present in the action area during the time of the action. For an adverse modification analysis, we analyze effects to critical habitat if critical habitat for a species is present in the action area. Therefore, defining where a species is occupied at the time of listing for critical habitat designation is not synonymous with a determination that an area is currently occupied for purposes of a jeopardy analysis under section 7 of the Act or a ''take'' analysis under section 10 of the Act. Those determinations depend on the best available information at the time of the analysis, and the likely effects and likelihood of take depend on the action under consideration.

While the Glenwood State Fish Hatchery along Whitewater Creek meets our definition of critical habitat, consideration of possible exclusions from critical habitat are in our discretion and generally follow our Policy Regarding Implementation of Section 4(b)(2) of the Endangered Species Act (81 FR 7226; February 11, 2016). With respect to NMDGF's request to exclude the Glenwood State Fish Hatchery along Whitewater Creek, we are not excluding the area from this final rule. See Consideration of Impacts under Section 4(b)(2) of the Act, *Private or Other Non-Federal Conservation Plans or Agreements and Partnerships, in General,* below.

Comment 32: New Mexico Department of Agriculture (NMDA) expressed support for excluding private lands owned by Freeport-McMoRan within the U-Bar Ranch property along the Gila River from critical habitat for the narrow-headed gartersnake. NMDA stated that voluntary conservation planning and actions on the property are adequate for conserving the species. Freeport-McMoRan Tyrone Inc. and Pacific Western Land Company (collectively known as ''FMC'') also commented that lands owned by FMC along the upper Gila River in the Gila/Cliff Valley, Grant County, New Mexico, should be excluded from critical habitat pursuant to section 4(b)(2) of the Act based on their habitat management plans for spikedace (*Meda fulgida*) and loach minnow (*Rhinichthys cobitis*) and for southwestern willow flycatcher (*Empidonax traillii extimus*). They stated that these management plans protect and support habitat for aquatic and riparian species, including native prey species for the narrow-headed gartersnake.

Our Response: Consideration of possible exclusions from critical habitat are in our discretion and generally follow our Policy Regarding Implementation of Section 4(b)(2) of the Endangered Species Act (81 FR 7226; February 11, 2016). In response to FMC's request to exclude their lands along the upper Gila River based on FMC habitat management plans for spikedace and loach minnow and for grazing management actions benefiting southwestern willow flycatcher, we have determined that the exclusion would not be appropriate for several reasons. Although we commend FMC for investing time, effort, and funding for conservation on the Gila River, the habitat conservation efforts to date that have been implemented are focused on management actions for spikedace, loach minnow, and southwestern willow flycatcher along the Gila River. There are no conservation efforts specific to the narrow-headed gartersnake included in these plans. In identifying critical habitat for the narrow-headed gartersnake, we identified those areas that meet the definition of critical habitat under section 3(5)(A) of the Act. Although management actions for one listed species may overlap other species' habitat or be mutually beneficial to multiple listed species, the PBFs in occupied habitat for the narrow-headed gartersnake differ from the PBFs identified for spikedace, loach minnow, and southwestern willow flycatcher. As a result, excluding these areas based on management for listed fish and bird species does not meet our criteria for exclusion. With respect to the Upper Gila River Subbasin Unit for the narrow-headed gartersnake, we determined that the benefits of exclusion do not outweigh the benefits of inclusion. See Consideration of Impacts under Section 4(b)(2) of the Act, *Private or Other Non-Federal Conservation Plans or Agreements and Partnerships, in General,* below.

Comment 33: NMDA commented that we should reconsider the value of critical habitat if we cannot identify a case in which consultation would require additional conservation measures.

Our Response: We are required by section 4(a)(3) of the Act to designate critical habitat for listed species if we find that the designation is prudent and determinable, as we did for the narrow-headed gartersnake, regardless of whether we can foresee project modifications that may be required.

Comment 34: NMDGF requested that we exclude developed, human-made fish migration barrier structures from critical habitat because including them will hinder conservation efforts for native fish and snakes by delaying construction and maintenance efforts of these structures.

Our Response: When determining critical habitat boundaries, we made efforts to avoid including developed areas such as lands covered by buildings, pavement, and other structures because such lands lack the PBFs. The human-made fish barriers are in-water structures that fall within the boundaries of habitats used by narrow-headed gartersnakes. Because of this and the limitations of map scale, any developed lands, such as constructed fish barriers left inside critical habitat boundaries, are not considered critical habitat because they lack the necessary PBFs. However, a Federal action involving the fish barriers, such as maintenance, may trigger section 7 consultation with respect to critical habitat or the prohibition of adverse modification if the specific action would affect the PBFs in surrounding critical habitat.

Comment 35: The New Mexico Interstate Stream Commission commented that the Service must complete an environmental impact statement (EIS) for designating critical habitat.

Our Response: NEPA dictates that the Service determine the appropriate level of NEPA review (40 CFR 1501.3). The Service completed an environmental assessment (EA) to determine whether an EIS was necessary or if a finding of no significant impact (FONSI) could be determined. The Service released a draft EA that was available for public comment from December 18, 2020, to January 16, 2021, on the Arizona Ecological Services Field Office website; we received five comments on the draft EA. After addressing the public comments received, the Service finalized the EA and found that designating critical habitat for the narrow-headed gartersnake would not result in significant impacts to the environment. A copy of the final EA and FONSI is available at *http://www.regulations.gov* at Docket No. FWS–R2–ES–2020–0011. Therefore, the appropriate NEPA process was completed, and an EIS is not required.

Tribal Comments

In accordance with our requirements to coordinate with Tribes on a government-to-government basis, we solicited information from the following 17 Tribes regarding the designation of critical habitat for the narrow-headed gartersnake: Chemehuevi Indian Tribe, Cocopah Indian Tribe, Colorado River

Indian Tribes, Fort McDowell Yavapai Nation, Fort Mojave Indian Tribe, Gila River Indian Community (GRIC), Hopi Tribe, Hualapai Tribe, Mescalero Apache Tribe, Pascua Yaqui Tribe, Salt River Pima—Maricopa Indian Community, San Carlos Apache Tribe, Tohono O'odham Nation, Tonto Apache Tribe, White Mountain Apache Tribe, Yavapai-Apache Nation, and Yavapai-Prescott Indian Tribe. While all of these Tribes may have interest in lands included in proposed critical habitat for the narrow-headed gartersnake, the only Tribal land included in the revised proposed critical habitat designation (85 FR 23608; April 28, 2020) was land owned by the San Carlos Apache Tribe and the White Mountain Apache Tribe. We also met with representatives of the GRIC and White Mountain Apache Tribe to discuss this proposed designation. The GRIC expressed concern regarding potential effects that critical habitat may have on water allocation. In communications with the Service, the San Carlos Apache Tribe expressed interest in being excluded from the designation, and White Mountain Apache Tribe sent a letter requesting to be excluded from the designation.

Comment 36: GRIC expressed concern about how designation of critical habitat for the narrow-headed gartersnake on the Gila and San Francisco Rivers might cause potential curtailment of water inflow to San Carlos Reservoir and subsequent downstream delivery to GRIC pursuant to their water rights settlement.

Our Response: We do not anticipate water inflow to San Carlos Reservoir and subsequent downstream delivery of water to GRIC will be impacted by this critical habitat designation. The economic analysis outlines the substantial baseline protections currently afforded the narrow-headed gartersnake throughout the designation, and it includes a determination that the impacts of this critical habitat designation will be minimal (see Consideration of Impacts under Section 4(b)(2) of the Act, *Private or Other Non-Federal Conservation Plans Related to Permits Under Section 10 of the Act*).

Comment 37: White Mountain Apache Tribe requested that the White Mountain Apache Homeland be excluded from the designation of critical habitat based on the White Mountain Apache Tribe's management and conservation of narrow-headed gartersnake habitat through several measures. These measures include formally approving the White Mountain Apache Native Fish Management Plan that includes prey species of the narrow-headed gartersnake; enacting Resolution 89–149 to designate streams and riparian zones as sensitive fish and wildlife areas; adopting a Water Quality Protection Ordinance to promote the health of Tribal waters and the people, plants, and wildlife that depend on them; and implementing overall holistic management of wildlife and natural resources within the Tribe's Homeland. White Mountain Apache Tribe also stated that the designation would infringe on Tribal sovereignty and directly interfere with Tribal self-government recognized as paramount in Joint Secretarial Order No. 3206.

Our Response: We have reviewed the request for exclusion from the White Mountain Apache Tribe and excluded all Tribal lands from the final designation under section 4(b)(2) of the Act (see Consideration of Impacts under Section 4(b)(2) of the Act, below). Because all Tribal lands have been excluded from this final critical habitat designation, any required conservation activities on Tribal lands would be based solely on the presence of the narrow-headed gartersnake on Tribal lands due to the listing of the species as a threatened species under the Act (see 79 FR 38678; July 8, 2014).

Public Comments

Comment 38: Several commenters stated that designating critical habitat for the narrow-headed gartersnake is not prudent because disclosing where individuals can be found would increase illegal taking of these species. Several commenters also stated that designating critical habitat is not prudent because most of the stream reaches included in the proposed designation have already been designated as critical habitat for other listed species.

Our Response: As discussed in the final listing rule (79 FR 38678; July 8, 2014), there is no imminent threat of take attributed to illegal collection for this species, and identification and mapping of critical habitat is not expected to initiate any such threat.

Additionally, criteria used to determine if designation of critical habitat for the narrow-headed gartersnake is prudent pursuant to our regulations (50 CFR 424.12(a)(1)) may differ from criteria used to designate critical habitat for other listed species. Therefore, because none of the circumstances enumerated in our regulations at 50 CFR 424.12(a)(1) has been met and because there are no other circumstances we have identified for which this designation of critical habitat would not be prudent, we have determined that the designation of critical habitat is prudent for the species.

In development of the revised proposed critical habitat rule (85 FR 23608; April 28, 2020), we used the best scientific and commercial information available. In that revised proposed rule, we reassessed occupancy at the time of listing by reviewing all records for the narrow-headed gartersnake that we used in our original proposed critical habitat rule (78 FR 41550; July 10, 2013) in conjunction with expected survivorship of the species. We also used subsequent surveys in areas that had no detection of the species, and reviewed changes in threats that may have prevented occupancy at the time of listing. We determined that the best available information reflecting occupancy at the time of listing supports a more recent date of records since 1998, which includes areas within the United States (see Criteria Used To Identify Critical Habitat, below). This and other information represent the best scientific and commercial data available and led us to determine areas of occupancy at the time of listing. Our review of the best scientific and commercial data available supports the conclusion that the designation of critical habitat is prudent and determinable for the narrow-headed gartersnake.

Comment 39: Multiple commenters stated that the available data are insufficient to identify the species' needs and impacts from wildfires in order to determine areas for critical habitat.

Our Response: In development of the revised proposed critical habitat rule (85 FR 23608; April 28, 2020), we used the best scientific and commercial information available. We have sufficient information to determine the areas essential to the conservation of the species (*i.e.,* critical habitat) as documented in the 2020 revised proposed rule. In addition to reviewing narrow-headed gartersnake-specific survey reports, we also focused on survey reports and heritage data for fish and amphibians from State wildlife agencies, as they captured important data on the existing community ecology that affects the status of the narrow-headed gartersnake. In addition to species data sources, we used publicly available geospatial datasets depicting water bodies, stream flow, vegetation type, and elevation to identify critical habitat areas. We reviewed the available information pertaining to the biological needs of the species and habitat characteristics where the species is located. This and other information represent the best scientific and commercial data available and led us to

conclude that the designation of critical habitat is determinable for the narrow-headed gartersnake.

As discussed in the final listing rule (79 FR 38678; July 8, 2014), landscape-scale wildfires have impacted the species and its habitats. We understand that wildfires can cause sedimentation that can reduce water quality and prey availability for the narrow-headed gartersnake, and we included areas in critical habitat that had records of the species from 1998 to 2019, but that may need special management to maintain PBFs 1 and 3 as a result of recent or future wildfires.

Comment 40: Two commenters stated that ephemeral reaches of streams, as well as intermittent streams, can provide habitat for narrow-headed gartersnakes. Gartersnakes use them on a seasonal basis, and they may have lower densities of nonnative aquatic species. Therefore, they should be included in the critical habitat designation.

Our Response: In development of the revised proposed critical habitat rule (85 FR 23608; April 28, 2020), we clarified the spectrum of stream flow regimes that provide stream habitat for the narrow-headed gartersnake based on scientifically accepted stream flow definitions (Levick *et al.* 2008, p. 6; Stromberg *et al.* 2009, p. 330). We define a ''spatially intermittent'' stream as a stream that is interrupted, perennially interrupted, or spatially intermittent; has perennial flow occurring in areas with shallow bedrock or high hydraulic connectivity to regional aquifers; and has ephemeral to intermittent flow occurring in areas with deeper alluvial basins or greater distance from the headwaters (Stromberg *et al.* 2009, p. 330). The spatial patterning of wet and dry reaches on spatially intermittent streams changes through time in response to climatic fluctuations and to human modifications of the landscape (Stromberg *et al.* 2009, p. 331).

We explain that streams that have perennial or spatially intermittent flow can provide stream habitat for the species (Levick *et al.* 2008, p. 6; Stromberg *et al.* 2009, p. 330) (see ''Stream Flow'' in 85 FR 23608, April 28, 2020, p. 23613; and Physical or Biological Features Essential to the Conservation of the Species, below). While streams with intermittent flow reaches do serve as habitat for narrow-headed gartersnakes and are included in the designation, ephemeral streams do not. Within the range of the narrow-headed gartersnake, perennial streams become ephemeral as they approach their headwaters. Narrow-headed gartersnakes have not been found in these ephemeral reaches because fish communities become sparse to nonexistent in these areas so that the gartersnake prey base is likely absent. In addition, there is no upstream habitat above the headwaters of a stream, so these ephemeral reaches do not provide connectivity and are not included in critical habitat.

Comment 41: One commenter stated that we should maintain a shoreline component as part of the PBFs that identify critical habitat. They stated their view that eliminating the shoreline component could result in improperly leaving out habitats that narrow-headed gartersnakes use because they span the transition between upland riparian and in-stream habitats.

Our Response: We do not use the term ''shoreline habitat'' in the PBFs for the narrow-headed gartersnake because shorelines fluctuate. Instead, we are focusing on the substrate. The key to the original primary constituent element for ''shoreline habitat'' was the substrate itself, not the fluctuating shoreline. The revised PBF 1 focuses on the organic and natural inorganic structural features important to the narrow-headed gartersnake that fall within the stream channel and still encompass the transition between in-stream habitat and land habitat.

Comment 42: One commenter stated that there are no currently available data on the effects of pollutants on the recruitment of narrow-headed gartersnakes; therefore, including PBF 1(C) for the narrow-headed gartersnake, which concerns water quality with low to zero levels of pollutants, is not using the best available science.

Our Response: We do not have specific data related to the effects of water pollutants on the recruitment of the narrow-headed gartersnake. Therefore, in this rule, we have amended the relevant PBF to read as follows: ''Water quality that meets or exceeds applicable State surface water quality standards.'' (For more information, see Physical or Biological Features Essential to the Conservation of the Species, below). Although water quality is not identified as a direct threat to the narrow-headed gartersnake, it is a threat to its prey base. Water quality that is absent of pollutants or has low levels of pollutants is needed to support the fish prey base for the narrow-headed gartersnake. State water quality standards identify levels of pollutants required to maintain communities of organisms that have a taxa richness, species composition, and functional organization that includes the fish prey base of the narrow-headed gartersnake.

Comment 43: Two commenters stated that 89 ft (27 m) from the water's edge does not capture the lateral distance from streams that individual narrow-headed gartersnakes moved for brumation in Oak Creek Canyon, Arizona, which is between 276 and 328 ft (84 and 100 m).

Our Response: We agree that terrestrial habitat as defined in PBF 1(D) for the narrow-headed gartersnake does not include all known brumation sites for the species, including several sites located on steep slopes in Oak Creek Canyon that we discussed in the revised proposed rule (see ''Terrestrial Space Along Streams,'' 85 FR 23608, April 28, 2020, pp. 23614–23616). In the 2020 revised proposed rule, we modified that lateral extent boundary of critical habitat to 89 ft from the active channel of a stream based on the greatest average distance moved from water during the wet season on the Tularosa River in New Mexico from a 3-year study with a sample size of 69 individuals at two different sites. Because this study was conducted during the active season, it does not include brumation sites. We also did not include areas for brumation in PBF 1(D) for the narrow-headed gartersnake. This was an oversight, and we have added brumation to PBF 1(D) for narrow-headed gartersnake in this final rule. As a result, we have also increased the lateral extent of critical habitat for the narrow-headed gartersnake up to 328 ft (100 m) from the water's edge, so that critical habitat includes additional areas for brumation along streams within narrow-walled canyons such as Oak Creek Canyon in Arizona (see *Summary of Essential Physical or Biological Features,* below). All areas included in this final rule as a result of increasing the lateral extent of critical habitat units was proposed as critical habitat for the narrow-headed gartersnake in the 2013 original proposed critical habitat rule (78 FR 41550; July 10, 2013).

Comment 44: One commenter stated that the proposed critical habitat for the narrow-headed gartersnake in Eagle Creek in Greenlee County, Arizona, lacks recent detections, is primarily on Tribal land, and lacks habitat for the species because it is dominated by nonnative aquatic predators.

Our Response: In the revised proposed critical habitat rule (85 FR 23608; April 28, 2020), we reviewed gartersnake occupancy to determine that a stream or stream reach was occupied at the time of listing for the narrow-headed gartersnake if it is within the historical range of the species, contains

PBFs for the species (although the PBFs concerning prey availability and presence of nonnative aquatic predators are often in degraded condition), and has a last known record of occupancy between 1998 and 2019 (see Occupancy Records, 85 FR 23608, p. 23617–23619) (see Criteria Used To Identify Critical Habitat). The segment of Eagle Creek included in critical habitat for the narrow-headed gartersnake meets this definition, but the areas of it owned by the San Carlos Apache Tribe were excluded from this final designation.

Comment 45: One commenter stated that we should determine occupancy at the time of listing (2014) from 1980 to today, as was done in the original proposed critical habitat rule (78 FR 41550; July 10, 2013), rather than 1998 to today, which was done in the revised proposed critical habitat rule (85 FR 23608; April 28, 2020). Repeated discoveries of populations of narrow-headed gartersnakes that were thought to be lost or were unknown indicates using 1980 as the earliest year to determine occupancy at the time of listing is therefore more appropriate. A lack of documentation of occupancy reflects incomplete survey effort rather than true non-occupancy.

Our Response: As explained extensively in the revised proposed critical habitat rule (85 FR 23608; April 28, 2020), although it is possible that narrow-headed gartersnakes are still extant in areas where they were detected only during the 1980s or prior, we have determined that the best available information reflecting occupancy at the time of listing supports a more recent date of records since 1998.

Based on our analyses in the listing rule (79 FR 38678; July 8, 2014), we conclude that there has been a significant decline in the species over the past 50 years. This decline appeared to accelerate during the two decades immediately before listing occurred. From this observation, we conclude that many areas that were occupied by the species in surveys during the 1980s are likely no longer occupied because those populations have likely disappeared. To determine where loss of populations was most likely, we reviewed survey efforts after 1989 that did not detect narrow-headed gartersnakes in some of the areas included in the original proposed critical habitat rule (78 FR 41550; July 10, 2013). All surveys conducted since the 1980s that were considered included at least the same amount or more search effort than those surveys that detected the species in the 1980s. Since 1998, researchers have detected narrow-headed gartersnakes in many areas where they were found in the 1980s, and this includes some areas where they had not been found prior to the 2014 final listing rule (see Criteria Used To Identify Critical Habitat, below). An increase in a species' detection information often occurs as a result of a species being listed as an endangered or threatened species, due to increased survey effort spurred by consultation requirements under section 7, as well as recovery actions or State coordination efforts under section 6, of the Act. Additional occupancy information is also sometimes obtained as a result of academic research on a species. Because the best available information supports a conclusion that these areas were occupied at the time of listing, we have included these areas in critical habitat (see Criteria Used To Identify Critical Habitat, below).

Comment 46: Multiple comments suggested we consider using longer stream lengths to determine gartersnake occupancy. A species might use a stream's entire wetted length, rather than just certain reaches, and the narrow-headed gartersnake had previously been connected in large stretches of river that are part of high-quality contiguous riparian habitat.

Our Response: In the original proposed critical habitat rule (78 FR 41550; July 10, 2013), we included the entire stream length of a perennial or intermittent stream if it had at least one known record for the narrow-headed gartersnake and at least one record of a native prey species present. In doing so, we included many areas that were not within the known range of the species, did not have records of the species, or did not contain the PBFs. For the revised proposed critical habitat rule (85 FR 23608; April 28, 2020), we reevaluated all streams based on comments and reports on water availability, prey availability, and surveys to determine which reaches contain the PBFs.

In the revised proposed critical habitat rule (85 FR 23608; April 28, 2020) and this final rule, critical habitat includes occupied streams or stream reaches within the historical range with survey records of the narrow-headed gartersnake dated from 1998 to 2019 that have retained the necessary PBFs that will allow for the maintenance and expansion of existing populations. We placed outer boundaries on the portion of a stream that is considered occupied. We identified the most upstream and downstream records of the narrow-headed gartersnake along each continuous stream reach determined by presence of PBFs, and we extended the stream reach to include a dispersal distance of 2.2 mi (3.6 km). After identifying the stream reaches that meet the above parameters, we then connected those reaches with intervening areas that have the PBFs. We consider these intervening areas occupied because the species occurs upstream and downstream and multiple PBFs are present that allow the species to move through these stream reaches.

Comment 47: One commenter stated that critical habitat should include areas where native prey is limited and/or where nonnative species are present, for both occupied and unoccupied critical habitat, because narrow-headed gartersnakes can survive with low natural prey populations and the presence of nonnatives. Another commenter stated that we should not exclude stream reaches where other Federal, State, Tribal, or private entities may stock predatory sportfish regularly or as needed, because recovery of listed species should be prioritized in those areas.

Our Response: This critical habitat designation includes many areas that are occupied by the narrow-headed gartersnake, where native prey is limited, and where nonnative species that prey on gartersnakes are present. Please see Final Critical Habitat Designation, below, for unit descriptions, including why units meet the definition of critical habitat for the narrow-headed gartersnake.

Areas subject to stocking of predatory sportfish are not occupied by the narrow-headed gartersnake. We have not identified any unoccupied areas that meet the definition of critical habitat. Please see our response to *Comment 50,* below.

Comment 48: One commenter stated that the gartersnake is currently distributed in stream reaches that are dominated by nonnative vertebrates and crayfish; therefore, the best available science does not support excluding areas as critical habitat based on an abundance of nonnative aquatic predators.

Our Response: We acknowledge that the narrow-headed gartersnake is extant in some areas that have abundant nonnative aquatic predators, some of which also are prey for gartersnakes, so the presence of nonnative aquatic predators is not always indicative of absence of the gartersnake (Holycross *et al.* 2006). Although we acknowledge that we do not have a thorough understanding of narrow-headed gartersnake population dynamics in the presence of nonnative aquatic predators as compared to other areas, areas with aquatic predators that are currently known to support gartersnake

populations are included in this critical habitat designation. That said, we think it is reasonable to conclude, based on the best scientific data currently available, that streams or stream reaches should not be included in the final designation if the last known occupancy is prior to 1998 and the stream reaches have experienced a rapid decline in native prey species coupled with an increase in nonnative aquatic predators since gartersnakes were detected in these areas prior to 1998 (85 FR 23608; April 28, 2020).

Comment 49: Several commenters stated that designation of unoccupied critical habitat is needed for the narrow-headed gartersnake. Specifically, habitat fragmentation, small populations, and genetics threaten the species with extinction and thus make unoccupied critical habitat essential. Designating unoccupied habitat is also important to restore connectivity among populations, and the Service should also consider reintroduction of the gartersnake to unoccupied areas.

Our Response: As discussed in the final listing rule (79 FR 38678; July 8, 2014), continued population decline and extirpations threaten the genetic representation of the narrow-headed gartersnake because some populations have become disconnected and isolated from neighboring populations. This can lead to a reduction in the species' redundancy and resiliency when isolated, small populations are at increased vulnerability to the effects of threats and stochastic events, without a means for natural recolonization.

As required by section 4(b) of the Act, we use the best scientific and commercial data available in determining areas within the geographical area occupied at the time of listing that contain the features essential to the conservation of the species and which may require special management considerations or protection, and areas outside of the geographical area occupied at the time of listing that are essential for the conservation of the species. However, based on the best scientific data available we have not identified any unoccupied areas that are essential for the conservation of the species. While we know the conservation of the species will depend on increasing the number and distribution of populations of the narrow-headed gartersnake, not all of its historical range will be essential to the conservation of the species, and we are unable to delineate any specific unoccupied areas that are essential at this time. A number of areas within these watersheds continue to contain some or could develop many of the PBFs upon which the species depends, although the best available scientific data indicate all these areas are currently unoccupied. Some areas in these watersheds with the potential to support the PBFs are likely important to the overall conservation strategy for the narrow-headed gartersnake. Any specific areas essential to the species' conservation within these watersheds are not currently identifiable due to our limited understanding regarding the ideal configuration for the development of future habitat to support the narrow-headed gartersnake's persistence, and the ideal size, number, and configuration of these habitats. Although there may be a future need to expand the area occupied by the species to reach recovery, these areas have not been identified in recovery planning for the narrow-headed gartersnake. Therefore, we cannot identify unoccupied areas that are currently essential to the conservation of the species that should be designated as critical habitat.

Comment 50: One commenter stated that only including areas occupied by the species at the time of listing does not allow for naturally occurring range expansion into other areas with suitable habitat that already exist or are newly created from habitat restoration activities.

Our Response: Limiting critical habitat to areas occupied by a species at the time of listing does not prevent a species from naturally expanding into other areas. As discussed in the final listing rule (79 FR 38678; July 8, 2014), continued population decline and extirpations threaten the genetic representation of the narrow-headed gartersnake because some populations have become disconnected and isolated from neighboring populations. This can lead to a reduction in the species' redundancy and resiliency when isolated, small populations are at increased vulnerability to the effects of threats and stochastic events, without a means for natural recolonization.

As required by section 4(b) of the Act, we use the best scientific and commercial data available in determining areas within the geographical area occupied at the time of listing that contain the features essential to the conservation of a species and which may require special management considerations or protection, and areas outside of the geographical area occupied at the time of listing that are essential for the conservation of the species. However, based on the best scientific data available we have not identified any unoccupied areas that that are essential for the conservation of the species. While we know the conservation of the species will depend on increasing the number and distribution of populations of the narrow-headed gartersnake, not all of the species' historical range will be essential to the conservation of the species, and we are unable to delineate any specific unoccupied areas that are essential at this time. A number of areas within these watersheds continue to contain some, or could develop many, of the PBFs upon which the species depends, although the best available scientific data indicate all these areas are currently unoccupied. Some areas in these watersheds with the potential to support the PBFs are likely important to the overall conservation strategy for the narrow-headed gartersnake. Any specific areas essential to the species' conservation within these watersheds are not currently identifiable due to our limited understanding regarding the ideal configuration for the development of future habitat to support the narrow-headed gartersnake's persistence, and the ideal size, number, and configuration of these habitats. Although there may be a future need to expand the area occupied by the species to reach recovery, these areas have not been identified in recovery planning for the narrow-headed gartersnake. Therefore, we cannot identify unoccupied areas that are currently essential to the conservation of the species that should be designated as critical habitat.

Comment 51: One commenter stated that there are recent sightings of narrow-headed gartersnakes in Turkey Creek (which is part of the Upper Gila River Subbasin), so this area should not have been removed from the original proposed critical habitat designation.

Our Response: This record was from 2020, and we are not aware of any confirmed records between 1998 and 2019, as delineated in our rule set (see Occupancy Records, 85 FR 23608, p. 23617–23619) (see Criteria Used To Identify Critical Habitat), that document the narrow-headed gartersnake in Turkey Creek, so this site is not included in our critical habitat designation because it does not meet the definition of an occupied reach for the species.

Comment 52: One commenter requested confirmation that upper and lower Oak Creek have been removed from critical habitat, both of which have recent sightings of narrow-headed gartersnakes.

Our Response: This area has not been removed from the critical habitat designation. In the revised proposed critical habitat rule (85 FR 23608; April

28, 2020), we reviewed gartersnake occupancy to determine that a stream or stream reach was occupied at the time of listing for narrow-headed gartersnake if it is within the historical range of the species, contains PBFs for the species (although the PBFs concerning prey availability and presence of nonnative aquatic predators are often in degraded condition), and has a last known record of occupancy between 1998 and 2019. The segment of Oak Creek from its confluence with Sterling Canyon downstream to 800 ft before its confluence with Turkey Creek meets this definition and is included in this critical habitat designation for the narrow-headed gartersnake.

Comment 53: Several commenters stated that our use of historical data spanning two decades to characterize areas of critical habitat that are ''occupied at the time of listing'' for purposes of a designation under section 3(5)(A)(i) of the Act is not synonymous with a determination that habitat is currently occupied for purposes of a ''take'' analysis under sections 7 and 10 of the Act, and that the distinction between these two concepts needs to be fully acknowledged and its implications explained in the final rule.

Our Response: We designate areas as critical habitat that are occupied at the time of listing if those areas have one or more of the PBFs present that are essential to the conservation of the species and may require special management considerations or protection (see 81 FR 7414; February 11, 2016). In the 2020 revised proposed critical habitat rule (85 FR 23608; April 28, 2020), we estimated that maximum longevity for the narrow-headed gartersnake is 15 years, so it is reasonable to conclude that a gartersnake detected between 1998 and 2019 represents a population that could still be present at the time of listing in 2014, depending on the extent of threats in the area. We also included narrow-headed gartersnake detections after the species was listed because these areas were likely occupied at the time of listing in 2014. As a result, there are areas in this final designation of critical habitat with records of gartersnakes from 1998 through 2019.

Under section 7 of the Act, Federal agencies are required to consult with the Service to ensure that the actions they carry out, fund, or authorize are not likely to jeopardize the continued existence of the species, or destroy or adversely modify critical habitat. For a jeopardy or ''take'' analysis, we analyze effects to a species if the species is present in the action area during the time of the action. For an adverse modification analysis, we analyze effects to critical habitat if critical habitat for a species is present in the action area. Therefore, defining where a species is occupied at the time of listing for critical habitat designation is not synonymous with a determination that an area is currently occupied for purposes of a jeopardy analysis under section 7 of the Act or a ''take'' analysis under section 10 of the Act. Those determinations depend on the best available information at the time of the analysis, and the likely effects and likelihood of take depend on the action under consideration.

Comment 54: One commenter stated that livestock grazing would have a significant impact on habitat for the narrow-headed gartersnake and that special management considerations and protection would benefit the species.

Our Response: As discussed in the final listing rule (79 FR 38678; July 8, 2014), livestock grazing is a largely managed land use, and, where closely managed, it is not likely to pose significant threats to the narrow-headed gartersnake. In cases where poor livestock management results in fence lines in persistent disrepair, allowing unmanaged livestock access to occupied habitat, adverse effects from loss of vegetative cover, sedimentation, or alteration of prey base may result. Activities that significantly reduce cover or increase sedimentation are addressed below under *Application of the* ''*Adverse Modification*'' *Standard* and Special Management Considerations or Protection.

Comment 55: One commenter stated that while we note that critical habitat units that have nonnative fish require special management, we do not explain how this management will be accomplished or whether it is even possible to reduce nonnatives to a level that will support narrow-headed gartersnakes.

Our Response: We expect the science of removing nonnative fish will continue to evolve over time; for that reason, we did not prescribe specific methods of special management as part of this final designation. At this time, in the areas that require management of nonnative fish, special management may involve using mechanical or chemical methods to remove nonnative, invasive fish species.

Comment 56: One commenter requested that we include a statement regarding the application of the ''adverse modification'' standard that existing activities are part of the baseline and, therefore, are presumed not to adversely modify critical habitat. The commenter further stated that we should affirmatively state that ''adverse modification'' will not be found where the agency, working with the project proponent, demonstrates that it will offset impacts to critical habitat through the protection and maintenance of alternative habitat within the designation, which is of comparable quality to the habitat that would be lost.

Our Response: Section 7 of the Act requires us to ensure that any action authorized, funded, or carried out by the agency is not likely to destroy or 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. This adverse modification standard does not change whether the activities are ongoing or new, and we do not have a mechanism to determine that existing activities are presumed to not destroy or adversely modify critical habitat. Any new activity under section 7 will require evaluation of the effects of the action based on the specifics of the location of the project and its effects.

Comment 57: Several commenters stated that we should consider an increased scope of economic impacts to small entities for the critical habitat rule. They also stated that the economic impact of the proposed designation would be significant on agricultural and ranching operations.

Our Response: For the revised proposed critical habitat rule (85 FR 23608; April 28, 2020), we made available, and requested public comments on, a draft economic analysis (DEA) to examine the incremental costs associated with the designation of critical habitat. Our DEA did not find that there would be significant economic impacts to agriculture from this designation of critical habitat. This analysis includes impacts to third-party entities, such as local governments and private landowners. Critical habitat does not restrict private landowner access to their property, and private landowners would only need to consult with the Service under section 7 of the Act if Federal agency funding or permitting for an activity is needed. Because the areas are considered occupied, most costs are not associated with the critical habitat designation, but rather with listing of the species as threatened. In our mapping of critical habitat, we focused on areas that contain the PBFs for the species. We do not anticipate requesting additional modifications for livestock grazing or agricultural operations, or cost-share projects undertaken with agencies such as the U.S. Department of Agriculture's Natural Resources

Conservation Service (NRCS), as a result of the critical habitat designation beyond those required for the species itself. The economic analysis outlines the substantial baseline protections currently afforded the narrow-headed gartersnake through its listed status under the Act and the presence of the species in all designated critical habitat units, as well as overlap with the designated critical habitat of other, similar listed species. As a result of these protections, the economic analysis concludes that incremental impacts associated with section 7 consultations for the narrow-headed gartersnake are likely limited to additional administrative effort. Many of the areas designated as critical habitat for the narrow-headed gartersnake are already designated critical habitat for other listed species, and thus the designation of critical habitat for the narrow-headed gartersnake is not anticipated to cause an incremental increase in economic effects.

However, we recognize the potential for landowners' perceptions of the Act to influence land use decisions, including decisions to participate in Federal programs such as those managed by NRCS. Several factors can influence the magnitude of perception-related effects, including the community's experience with the Act and understanding of the degree to which future section 7 consultations could delay or affect land use activities. Information is not available to predict the impact of the designation of critical habitat on landowners' decisions to pursue cost-share projects with NRCS in the future. However, incremental effects due to the designation of critical habitat for the narrow-headed gartersnake are likely to be minimized because the species is already listed.

Comment 58: One commenter requested we update the economic analysis to account for the impact of COVID–19 on economic conditions.

Our Response: We do not anticipate any additional effects on economic conditions as a result of the impact of the COVID–19 pandemic. For the revised proposed critical habitat rule (85 FR 23608; April 28, 2020), we made available, and requested public comments on, our DEA to examine the incremental costs associated with the designation of critical habitat. The DEA did not identify significant impacts. Because the critical habitat areas are considered occupied, the majority of costs are not associated with the critical habitat designation, but rather with listing of the species as threatened. If Federal funding is involved, the Federal agency providing the funding is the party responsible for meeting the Act's obligations to consult on projects on private lands. We have considered and applied the best available scientific and commercial information in determining the economic impacts associated with designating critical habitat. Critical habitat designation may also generate ancillary benefits by protecting the PBFs on which the species depends. As a result, management actions undertaken to conserve the species or its habitat may have coincident, positive social welfare implications, such as increased recreational opportunities in a region or improved property values on nearby parcels.

Background

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.

Our regulations at 50 CFR 424.02 define the geographical area occupied by the species as an area that may generally be delineated around species' occurrences, as determined by the Secretary (*i.e.,* range). Such areas may include those areas used throughout all or part of the species' life cycle, even if not used on a regular basis (*e.g.,* migratory corridors, seasonal habitats, and habitats used periodically, but not solely by vagrant individuals).

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 Federal agency would be required to consult with the Service under section 7(a)(2) of the Act. However, even if the Service were to conclude that the proposed activity would result in destruction or adverse modification of the critical habitat, the Federal action agency and the landowner are not required to abandon the proposed activity, or to restore or recover the species; instead, they must 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 or biological features that occur in specific occupied areas, we focus on the specific features that are essential to support the life-history needs of the species, including, but not limited to, water characteristics, soil type, geological features, prey, vegetation, symbiotic species, or other features. A feature may be a single habitat characteristic or a more complex combination of habitat characteristics. Features may include habitat characteristics that support ephemeral or dynamic habitat conditions. Features may also be expressed in terms relating

to principles of conservation biology, such as patch size, distribution distances, and connectivity.

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. The implementing regulations at 50 CFR 424.12(b)(2) further delineate unoccupied critical habitat by setting out three specific parameters: (1) When designating critical habitat, the Secretary will first evaluate areas occupied by the species; (2) the Secretary will only consider unoccupied areas to be essential where a critical habitat designation limited to geographical areas occupied by the species would be inadequate to ensure the conservation of the species; and (3) for an unoccupied area to be considered essential, the Secretary must determine that there is a reasonable certainty both that the area will contribute to the conservation of the species and that the area contains one or more of those physical or biological features essential to 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 from the information developed during the listing process for the species. Additional information sources may include any generalized conservation strategy, criteria, or outline that may have been developed for the species; the recovery plan for the species; 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 continue to 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) the prohibitions found in section 9 of the Act. Federally funded or permitted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. These protections and conservation tools will continue to contribute to recovery of the 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 those planning efforts calls for a different outcome.

Physical or Biological Features Essential to the Conservation of the Species

In accordance with section 3(5)(A)(i) of the Act and regulations at 50 CFR 424.12, in determining which areas we will designate as critical habitat from within the geographical area occupied by the species at the time of listing, we consider the physical or biological features that are essential to the conservation of the species and that may require special management considerations or protection. The regulations at 50 CFR 424.02 define ''physical or biological features essential to the conservation of the species'' as the features that occur in specific areas and that are essential to support the life-history needs of the species, including, but not limited to, water characteristics, soil type, geological features, sites, prey, vegetation, symbiotic species, or other features. A feature may be a single habitat characteristic or a more complex combination of habitat characteristics. Features may include habitat characteristics that support ephemeral or dynamic habitat conditions. Features may also be expressed in terms relating to principles of conservation biology, such as patch size, distribution distances, and connectivity. For example, physical features essential to the conservation of the species might include gravel of a particular size required for spawning, alkaline soil for seed germination, protective cover for migration, or susceptibility to flooding or fire that maintains necessary early-successional habitat characteristics. Biological features might include prey species, forage grasses, specific kinds or ages of trees for roosting or nesting, symbiotic fungi, or a particular level of nonnative species consistent with conservation needs of the listed species. The features may also be combinations of habitat characteristics and may encompass the relationship between characteristics or the necessary amount of a characteristic essential to support the life history of the species.

In considering whether features are essential to the conservation of the species, we may consider an appropriate quality, quantity, and spatial and temporal arrangement of habitat characteristics in the context of the life-history needs, condition, and status of the species. These characteristics include, but are not limited to, space for individual and population growth and for normal behavior; food, water, air, light, minerals, or other nutritional or physiological requirements; cover or shelter; sites for breeding, reproduction, or rearing (or development) of offspring; and habitats that are protected from disturbance.

Summary of Essential Physical or Biological Features

We derive the specific physical or biological features essential to the conservation of the narrow-headed gartersnake from studies of the species' habitat, ecology, and life history as described below. Additional information can be found in the proposed and final listing rules published in the **Federal Register** on July 10, 2013 (78 FR 41500), and July 8, 2014 (79 FR 38678), respectively. The physical or biological features identified here focus primarily on foraging and dispersal habitat and secondarily on thermoregulation, shelter, and brumation habitat because most of the habitat relationship research data derived from studies of these activities for the narrow-headed gartersnake.

We define the stream flow regimes that provide stream habitat for the narrow-headed gartersnake based on stream flow definitions in Levick *et al.* (2008, p. 6) and Stromberg *et al.* (2009, p. 330). A perennial stream or portion of a stream is defined as having surface flow continuously year-round, except for infrequent periods of severe drought (Levick *et al.* 2008, p. 6). An intermittent stream is a stream where portions flow continuously only at certain times of the year (Levick *et al.* 2008, p. 6). An intermittent stream flows when it receives water from a spring, a ground-water source, or a surface source (such as melting snow (*i.e.,* seasonal)). During the dry seasons, frequently compounded by high evapotranspiration of watershed vegetation, the groundwater table may drop below the elevation of the streambed, causing surface flow to cease or reduce to a series of separate pools or short areas of flow (Gordon *et al.* 2004, p. 51). An ephemeral stream is usually dry except for brief periods immediately following precipitation, and its channel is at all times above the groundwater table (Levick *et al.* 2008, p. 6). In the range of the narrow-headed gartersnake, many streams have reaches with year-round water that are separated by intermittent or ephemeral reaches of flow, as a result of differences in geology along the stream. This variation of flow along a stream is common enough in the Southwest that hydrologists use the terms ''interrupted,'' ''perennial interrupted,'' or ''spatially intermittent'' to describe the spatial segmentation of a dryland stream into reaches that are perennial, intermittent, or ephemeral (Levick *et al.* 2008, p. 6; Stromberg *et al.* 2009, p. 330; Stromberg *et al.* 2013, p. 413). A stream that is interrupted, perennially interrupted, or spatially intermittent has perennial flow occurring in areas with shallow bedrock or high hydraulic connectivity to regional aquifers, and ephemeral to intermittent flow occurring in areas with deeper alluvial basins or greater distance from the headwaters (Stromberg *et al.* 2009, p. 330). The spatial patterning of wet and dry reaches on spatially intermittent streams changes through time in response to climatic fluctuations and to human modifications of the landscape (Stromberg *et al.* 2009, p. 331). In the remainder of this document, we use the terms ''perennial,'' ''spatially intermittent,'' and ''ephemeral'' in accordance with the above definitions.

Narrow-headed gartersnakes are primarily found in rocky stretches of canyon-bound headwater streams that have perennial flow or limited spatially intermittent flow that is primarily perennial. Narrow-headed gartersnakes have been documented in pools and shallow portions of an intermittent flow reach of the Blue River with wet areas separated by dry segments of 0.6 to 1.2 miles (1 to 2 km) in length (Cotten *et al.* 2017, p. 687). The wetted areas where gartersnakes were detected also had abundant native prey of the narrow-headed gartersnake, indicating that these areas may provide greater foraging opportunities during low flow periods (Cotten *et al.* 2017, p. 687). However, ephemeral reaches of streams do not provide habitat for narrow-headed gartersnakes. Within the range of the narrow-headed gartersnake, perennial streams become ephemeral as they approach their headwaters. Narrow-headed gartersnakes have not been found in these ephemeral reaches because their fish prey base is likely absent and there is no upstream perennial habitat, so the ephemeral reaches do not provide connectivity.

Narrow-headed gartersnakes depend on terrestrial and aquatic habitat for all of their life-history functions, so it is important that hydrologic processes are present to maintain both the terrestrial and aquatic components of habitat for the species. Hydrologic processes are the flow regime and physical hydrologic and geomorphic connection that create and maintain a stream channel and continuously redefine the boundary between aquatic and terrestrial habitat used by the narrow-headed gartersnake.

We have determined that the following physical or biological features are essential to the conservation of the narrow-headed gartersnake:

1. Perennial streams or spatially intermittent streams that provide both aquatic and terrestrial habitat that allows for immigration, emigration, and maintenance of population connectivity of narrow-headed gartersnakes and contain:

(A) Pools, riffles, and cobble and boulder substrate, with a low amount of fine sediment and substrate embeddedness;

(B) Organic and natural inorganic structural features (*e.g.,* cobble bars, rock piles, large boulders, logs or stumps, aquatic vegetation, vegetated islands, logs, and debris jams) in the stream channel for basking, thermoregulation, shelter, prey base maintenance, and protection from predators;

(C) Water quality that meets or exceeds applicable State surface water quality standards; and

(D) Terrestrial habitat up to 328 feet (100 meters) from the active stream channel (water's edge) that includes flood debris, rock piles, and rock walls containing cracks and crevices, small mammal burrows, downed woody debris, and streamside vegetation (*e.g.,* alder, willow, sedges, and shrubs) for thermoregulation, shelter, brumation, and protection from predators throughout the year.

2. Hydrologic processes that maintain aquatic and riparian habitat through:

(A) A natural flow regime that allows for periodic flooding, or if flows are modified or regulated, a flow regime that allows for the movement of water, sediment, nutrients, and debris through the stream network, as well as maintenance of native fish populations; and

(B) Physical hydrologic and geomorphic connection between the active stream channel and its adjacent terrestrial areas.

3. A combination of native fishes, and soft-rayed, nonnative fish species such that prey availability occurs across seasons and years.

4. An absence of nonnative aquatic predators, such as fish species of the families Centrarchidae and Ictaluridae, American bullfrogs (*Lithobates catesbeianus*), and/or crayfish (*Orconectes virilis, Procambarus clarki,* etc.), or occurrence of these nonnative species at low enough levels such that recruitment of narrow-headed gartersnakes is not inhibited and maintenance of viable prey populations is still occurring.

5. Elevations of 2,300 to 8,200 feet (700 to 2,500 meters).

Special Management Considerations or Protection

When designating critical habitat, we assess whether the specific areas within the geographical area occupied by the species at the time of listing contain features which are essential to the conservation of the species and which may require special management considerations or protection.

A detailed discussion of activities influencing the narrow-headed gartersnake and its habitat can be found in the final listing rule (79 FR 38678; July 8, 2014). All areas of critical habitat will require some level of management to address the current and future threats to the narrow-headed gartersnake and to maintain or restore the PBFs. Special management within critical habitat will be needed to ensure these areas provide adequate water quantity, quality, and permanence or near permanence; cover (particularly in the presence of nonnative aquatic predators); an adequate prey base; and absence of or low numbers of nonnative aquatic

predators that can affect population persistence. Activities that may be considered adverse to the conservation benefits of critical habitat include those which: (1) Completely dewater or reduce the amount of water to unsuitable levels in critical habitat; (2) result in a significant reduction of protective cover within critical habitat when nonnative aquatic predator species are present; (3) remove or significantly alter structural terrestrial features of critical habitat that alter natural behaviors such as thermoregulation, brumation, gestation, and foraging; (4) appreciably diminish the prey base for a period of time determined to likely cause population-level effects; and (5) directly promote increases in nonnative aquatic predator populations, result in the introduction of nonnative aquatic predators, or result in the continued persistence of nonnative aquatic predators. Common examples of these activities may include, but are not limited to, various types of development, channelization, diversions, road construction, erosion control, bank stabilization, wastewater discharge, enhancement or expansion of human recreation opportunities, fish community renovations, and stocking of nonnative, spiny-rayed fish species or promotion of policies that directly or indirectly introduce nonnative aquatic predators as bait. The activities listed above are just a subset of examples that have the potential to affect critical habitat and PBFs if they are conducted within designated units; however, some of these activities, when conducted appropriately, may be compatible with maintenance of adequate PBFs or even improve upon their value over time. For activities planned within critical habitat, we encourage interested parties to contact the local Ecological Services field office (see **FOR FURTHER INFORMATION CONTACT**).

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. In accordance with the Act and our implementing regulations at 50 CFR 424.12(b), we review available information pertaining to the habitat requirements of the species and identify specific areas within the geographical area occupied by the species at the time of listing and any specific areas outside the geographical area occupied by the species to be considered for designation as critical habitat. We are not designating any areas as critical habitat outside the geographical area occupied by the species at the time of listing because we have not identified any unoccupied areas that meet the definition of critical habitat. Sites within the Gila River, San Francisco River, Salt River, and Verde River watersheds were previously occupied by the narrow-headed gartersnake. While we know the conservation of the species will depend on increasing the number and distribution of populations of the narrow-headed gartersnake, not all of its historical range will be essential to the conservation of the species, and we are unable to delineate any specific unoccupied areas that are essential at this time. A number of areas within these watersheds continue to contain some or could develop many of the physical and biological features upon which the species depends, although the best available scientific data indicate all these areas are currently unoccupied. Some areas in these watersheds with the potential to support the physical and biological features are likely important to the overall conservation strategy for the narrow-headed gartersnake. Any specific areas essential to the species' conservation within these watersheds are not currently identifiable due to our limited understanding regarding the ideal configuration for the development of future habitat to support the narrow-headed gartersnake's persistence, the ideal size, number, and configuration of these habitats. Finally, the specific areas needed for conservation will depend in part on landowner willingness to restore and maintain the species' habitat in these areas. Therefore, although there may be a future need to expand the area occupied by the narrow-headed gartersnake species to reach recovery, there are no unoccupied areas that are currently essential to the species conservation and that should be designated as critical habitat.

To identify areas for critical habitat for the narrow-headed gartersnake, we used a variety of sources for species data including fish species survey reports, museum records, heritage data from State wildlife agencies, peer-reviewed literature, agency reports, and incidental sight records accompanied by photo vouchers and other supporting documentation verified by interviews with species experts. Holycross *et al.* (2020, entire) was a key source of information for vouchered historical and current records of the narrow-headed gartersnake species across its range. Other sources for current records of the narrow-headed gartersnake included Christman and Jennings (2017, entire), Hellekson (2012, entire), Jennings *et al.* (2017, entire), Jennings and Christman (2019, entire), and Jennings *et al.* (2018). In addition to reviewing gartersnake-specific survey reports, we also focused on survey reports and heritage data from State wildlife agencies for fish as they captured important data on the existing community ecology that affects the status of the narrow-headed gartersnake within its range. In addition to species data sources, we used publicly available geospatial datasets depicting water bodies, stream flow, elevation, and aerial imagery to identify areas for critical habitat designation.

We determined that a stream or stream reach was occupied at the time of listing for narrow-headed gartersnake if it is within the historical range of the species, contains all PBFs for the species (although the PBFs concerning prey availability and presence of nonnative predators are often in degraded condition), and has a last known record of occupancy between 1998 and 2019. We determined occupancy at the time of listing for the narrow-headed gartersnake by reviewing all records for the species in conjunction with expected survivorship of the species, subsequent surveys in areas that had no detection of the species, and changes in threats over time that may have prevented occupancy at time of listing. Understanding longevity of a species can inform how long we can reasonably expect a species is still extant in an area, regardless of detection probability. Narrow-headed gartersnakes may live up to 10 years or longer in the wild (Rosen and Schwalbe 1988, p. 38). An individual narrow-headed gartersnake captured in the wild as an adult was kept in captivity for 11 years and is estimated to be 16 years old (Ryan 2020, pers. comm.). Based on this information, we estimate maximum longevity for the narrow-headed gartersnake is 15 years, so that it is reasonable to conclude that a gartersnake detected between 1998 and 2019 represents a population that could still be present at the time of listing in 2014, depending on the extent of threats in the area. Although it is possible that gartersnakes are still extant in areas where they were detected prior to 1998, we have determined that the best available information reflecting occupancy at the time of listing supports a more recent date of records since 1998.

Based on our analyses in the final listing rule (79 FR 38678; July 8, 2014), we conclude that there has been a significant decline in the species over the past 50 years. This decline appeared to accelerate during the two decades immediately before listing occurred.

From this observation, we conclude that many areas that were occupied by the species in surveys during the 1980s are likely no longer occupied because those populations have disappeared. To determine where loss of populations was likely, we reviewed survey efforts after 1989 that did not detect gartersnakes to determine whether the cryptic nature of the species was a valid argument for considering areas that only have gartersnake records from the 1980s as still occupied at the time of listing in 2014. All of the surveys conducted since the 1980s included at least the same amount or more search effort than those surveys that detected each species in the 1980s. Since 1998, researchers have detected narrow-headed gartersnakes in many areas where they were found in the 1980s. Areas where the species was found after 1997 are included in this final rule. Additionally, comparable surveys did detect gartersnakes in other areas where the species was present in the 1980s. Finally, we would expect that some populations would be lost during the decades preceding listing when numbers of gartersnakes were declining. These declines are what eventually led to the need to list the narrow-headed gartersnake.

As explained in the final listing rule (79 FR 38678, July 8, 2014, pp. 38688–38702), aquatic vertebrate survey efforts throughout the range of the narrow-headed gartersnake indicate that native prey species of narrow-headed gartersnakes have decreased or are absent, while nonnative predators of gartersnakes and their prey, including bullfrogs, crayfish, and spiny-rayed fish, continue to increase in many of the areas where narrow-headed gartersnakes were present in the 1980s (Emmons and Nowak 2012, pp. 11–14; Gibson *et al.* 2015, pp. 360–364, Jennings *et al.* 2020, p. 15). We acknowledge that narrow-headed gartersnakes are extant in some areas that have abundant nonnative aquatic predators, some of which also are prey for gartersnakes, so presence of nonnative aquatic predators is not always indicative of absence of these gartersnakes (Emmons and Nowak 2012, p. 31). We also acknowledge that we do not have a good understanding of why gartersnake populations are able to survive in some areas with nonnative aquatic predators and not in other areas. However, we think it is reasonable to conclude that streams and stream reaches were not occupied at the time of listing if they have only gartersnake records older than 1998 and have experienced a rapid decline in native prey species coupled with an increase in nonnative aquatic predators since gartersnakes were detected in these areas in the 1980s.

We included detections of the narrow-headed gartersnake that occurred after the species was listed because these areas were likely occupied at the time of listing in 2014. As stated earlier, the species is cryptic in nature and may not be detected without intensive surveys. Because populations of this species are generally small, isolated, and in decline, it is not likely that the species has colonized new areas since 2014; these areas were most likely occupied at the time of listing, but either had not been surveyed or the species was present but not detected during surveys. However, we did not include streams where narrow-headed gartersnakes were released for recovery purposes after the species was listed that had not been historically occupied by the species.

Stream reaches that lack PBFs include areas where water flow became completely ephemeral along an otherwise perennial or spatially intermittent stream, hydrologic processes needed to maintain streams could not be recovered, nonnative aquatic predators outnumbered native prey species, or streams were outside the elevation range. In addition, reaches with multiple negative surveys without a subsequent positive survey or reaches that have no records of the narrow-headed gartersnake species are not included. We do include stream reaches that lack survey data for the species, if they have positive observation records of the species dated 1998 or later both upstream and downstream of the stream reach and have all of the PBFs.

We also reviewed the best available information we have on home range size and potential dispersal distance for the narrow-headed gartersnake species to inform upstream and downstream boundaries of each unit and subunit of critical habitat. The maximum longitudinal distance measured across home range areas of a male narrow-headed gartersnake tracked for 51 days over 3 years during the dry and wet seasons was approximately 1,312 ft (400 m) (Jennings and Christman 2012, p. 10). The maximum longitudinal distance measured across home ranges areas ranged from 82 to 656 ft (25 to 200 m) for eight other narrow-headed gartersnakes tracked at least 6 days over 1 to 2 years (Jennings and Christman 2012, pp. 9–10). These longitudinal home range distances were all determined from adult gartersnakes and did not inform how juvenile gartersnakes are dispersing along a stream. Juvenile dispersal is important because snakes of different age classes behave differently, and juvenile gartersnakes may move farther along a stream as they search for and establish suitable home ranges than do adults with established home ranges. Because we have no information on how juvenile narrow-headed gartersnakes disperse, we used information from a long-term dispersal study on neonate, juvenile, and adult age classes of the Oregon gartersnake (*Thamnophis atratus hydrophilus*) in a free-flowing stream environment in northern California (Welsh *et al.* 2010, entire). This is the only dispersal study available for another aquatic *Thamnophis* species in the United States, so we used it as a surrogate for determining upstream and downstream movements of narrow-headed gartersnakes. The greatest movement was made by a juvenile recaptured as an adult 2.2 mi (3.6 km) upstream from the initial capture location (Welsh *et al.* 2010, p. 79). Therefore, in this final rule, we delineate upstream and downstream critical habitat boundaries of a stream reach at 2.2 mi (3.6 km) from a known narrow-headed gartersnake observation record.

In this final rule, we modified the lateral extent of critical habitat to include areas of brumation habitat since we inadvertently left out brumation habitat as part of PBF 1(D) in the revised proposed rule (85 FR 23608; April 28, 2020). We now incorporate the best information available on brumation habitat and other terrestrial habitat use of the narrow-headed gartersnake to inform lateral boundaries of each unit and subunit of critical habitat. There are three reported narrow-headed gartersnakes using brumation sites on steep slopes in Oak Creek Canyon, Arizona (Nowak 2006, pp. 19–20). Horizontal distances from stream centerline to these brumation sites ranged between 276 and 328 ft (84 and 101 m) (Nowak 2015, pers. comm.). There were also at least five other individual narrow-headed gartersnakes overwintering at brumation sites that were not on steep slopes at 66 to 98 ft (20 to 30 m) from the water's edge (Nowak 2006, pp. 20–21). The distance from the stream appeared to be dependent on the adjacent terrestrial topography so that gartersnakes were found farther from the stream in steeper terrain. The Nowak (2006) study is the only study that has documented brumation sites of telemetered narrow-headed gartersnakes.

Although we have no information on brumation sites in New Mexico, we have information on how narrow-headed gartersnakes moved in three different stream channels during the active season. A telemetry study of

narrow-headed gartersnakes on the Tularosa River, Gila River, and Whitewater Creek during two active (wet and dry) seasons of narrow-headed gartersnakes found individuals an average of 58.7 ft (17.9 m) from water across four different sites on the three streams with a sample size of 69 individuals (Jennings and Chirstman 2012, pp. 9–10). Narrow-headed gartersnakes were found with lowest average distance of 22.7 ft (6.9 m) during the dry season of 2010, and highest average distance of 88.3 ft (26.9 m) during the wet season in 2010 (Jennings and Chirstman 2012, pp. 9–10). While narrow-headed gartersnakes in New Mexico have been documented up to 285 ft (87 m) from water, most snakes are found within 3.28 ft (1 m) of the water's edge during both active seasons (Jennings and Christman 2012, pp. 9–10). During the active season, individual narrow-headed gartersnakes were most often found outside of water under boulders, small rocks, and broken concrete slabs located less than 328 ft (100 m) from the water in Oak Creek and West Fork Oak Creek (Nowak 2006, p. 26).

Sites much farther from water where gartersnakes were found in both Arizona and New Mexico during the active season may provide lower predation risk, protection from flooding, and warmer temperatures that are advantageous during gestation, after a large meal, or when snakes are more vulnerable prior to molting (Jennings and Christman 2012, p. 21). Brumation sites documented in Arizona by Nowak (2006) are likely higher in steeper terrain because of the thermal gradient in canyon habitats during winter: Temperatures increase dramatically in areas hit by sun at the tops of these canyons that get some amount of direct sunlight in winter. Higher brumation sites may also prevent the gartersnakes from being flooded out of these sites during high stream flow events.

Therefore, in this final rule, we delineate lateral extent of critical habitat boundaries of a stream to fall within 328 ft (100 m) of the active channel of a stream. Lateral extent varies based on topography as explained above. The active channel effectively defines a river or stream as a feature on the landscape (Mersel and Lichvar 2014, pp. 11–12). The active channel is established and maintained by flows that occur with some regularity (several times per year to several times per decade), but not by very rare and extremely high flood events. The outer limits of the active channel can generally be defined by three primary indicators that together form a discernable mark on the landscape: A topographic break in slope, change in vegetation characteristics, and change in sediment characteristics (Mersel and Lichvar 2014, pp. 13–14). The active channel is often a fairly obvious and easy feature to identify in the field, allowing for rapid and consistent identification (Mersel and Lichvar 2014, p. 14). Further, the active channel can be consistently recognized by the public. Any area that was added in this final rule as a result of increasing the lateral extent of critical habitat units was included in the 2013 original proposed critical habitat rule for the narrow-headed gartersnake (78 FR 41550; July 10, 2013).

The maps define the critical habitat designation, as modified by any accompanying regulatory text, presented at the end of this document under Regulation Promulgation. We include more detailed information on the boundaries of the critical habitat designation in the preamble of this document.

In summary, for areas within the geographic area occupied by the species at the time of listing, we delineated critical habitat unit boundaries using the following criteria:

1. We mapped records of the narrow-headed gartersnake from 1998 to 2019. We then examined these areas to determine if narrow-headed gartersnakes could still occur in them, as described below.

2. We identified the streams in which narrow-headed gartersnakes were found since 1998 (used flowline layer in the U.S. Geological Survey (USGS) National Hydrography Dataset to represent stream centerlines).

3. We identified and removed upstream and downstream ends of streams that were below 2,300 ft or above 8,200 ft in elevation using USGS National Elevation Dataset.

4. We identified perennial, intermittent, and ephemeral reaches of streams. We removed upstream end reaches of streams that are ephemeral or intermittent based on FCode attribute of the flowline layer in the USGS National Hydrography Dataset or information from peer review and public comments.

5. We identified native and nonnative prey species along each stream using geospatial datasets, literature, peer review, and public comments. We removed stream reaches that did not have prey species.

6. We identified and removed stream reaches with an abundance of nonnative aquatic predators including fish, crayfish, or bullfrogs. (We used a combination of factors to determine nonnative presence and impact to the species. This evaluation included records from 1980 by looking at subsequent negative survey data for narrow-headed gartersnakes along with how the nonnative aquatic predator community had changed since those gartersnakes were found, in addition to the habitat condition and complexity. Most of the areas surveyed in the 1980s that had been re-surveyed with negative results for gartersnakes had significant changes to the nonnative aquatic predator community, which also decreased prey availability for the gartersnakes.) These areas were removed in our revised proposed critical habitat rule (85 FR 23608; April 28, 2020).

7. We identified and removed stream reaches where stocking or management of nonnative fish species of the families Centrarchidae and Ictaluridae is a priority and is conducted on a regular basis.

8. We identified and included those stream reaches on private land without public access that lack survey data but that have positive narrow-headed gartersnake survey records from 1998 forward both upstream and downstream of the private land and have stream reaches with PBFs 1 and 2.

9. We used a surrogate species to determine potential neonate dispersal along a stream, which is 2.2 mi (3.6 km). We then identified the most upstream and downstream records of narrow-headed gartersnake along each continuous stream reach determined by criteria 1 through 8, above, and extended the reach to include this dispersal distance.

10. After identifying the stream reaches that met the above parameters, we then connected those reaches between that have the PBFs. We consider these areas between survey records occupied because the species occurs upstream and downstream and multiple PBFs are present that allow the species to move through these stream reaches.

11. We identified the range of the maximum distance that narrow-headed gartersnakes have been documented from the water's edge in streams, which is 98 to 328 ft (30 to 100 m), to capture the upper limit of terrestrial habitat needed by the species for brumation, thermoregulation, and protection from predators. We used the USGS National Hydrography Dataset, wetland layer of the Service's National Wetlands Inventory dataset, and aerial photography in Google Earth Pro to identify the water's edge in streams (active channel).

12. We removed terrestrial areas between 30 m and 100 m lateral extent of the active channel that do not contain

PBFs and areas beyond steep walled canyons that are not accessible to the species.

When determining critical habitat boundaries, we made every effort to avoid including developed areas such as lands covered by buildings, pavement, and other structures because such lands lack PBFs necessary for the narrow-headed gartersnake. 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 rule have been excluded by text in the rule and are not designated as critical habitat. Therefore, a Federal action involving these lands will not trigger section 7 consultation with respect to critical habitat and the requirement of no adverse modification unless the specific action will affect the PBFs in the adjacent critical habitat. However, constructed fish barriers in streams within the designated critical habitat are part of the designation and are needed to manage the exclusion of nonnative species. Accordingly, section 7 consultation applies to actions involving such fish barriers.

We are designating as critical habitat lands that we have determined were occupied at the time of listing in 2014 and that contain one or more of the PBFs that are essential to support life-history processes of the species. As described above, we are not designating any areas outside the geographical area occupied by the species at the time of listing.

Units are designated based on one or more of the PBFs being present to support the narrow-headed gartersnake's life-history processes. Some units contain all of the identified PBFs and support multiple life-history processes. Some units contain only some of the PBFs necessary to support the narrow-headed gartersnake's use of that habitat.

The critical habitat designation is defined by the map or maps, as modified by any accompanying regulatory text, presented at the end of this document under Regulation Promulgation. We include more detailed information on the boundaries of the critical habitat designation in the preamble of this document. 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–2020–0011, on our internet site *https://www.fws.gov/southwest/es/Arizona/,* and upon request from the field office responsible for the designation (see **FOR FURTHER INFORMATION CONTACT**).

Final Critical Habitat Designation

We are designating eight units as critical habitat for the narrow-headed gartersnake. The critical habitat areas we describe below constitute our current best assessment of areas that meet the definition of critical habitat for the narrow-headed gartersnake.

The eight areas we designate as critical habitat for the narrow-headed gartersnake are: (1) Upper Gila River Subbasin; (2) San Francisco River Subbasin; (3) Blue River Subbasin; (4) Eagle Creek; (5) Black River Subbasin; (6) Canyon Creek; (7) Tonto Creek Subbasin; and (8) Verde River Subbasin. Table 1 shows the critical habitat units and the approximate area of each unit. All units are considered occupied at the time of listing.

TABLE 1—CRITICAL HABITAT UNITS FOR NARROW-HEADED GARTERSNAKE

[Area estimates reflect all land within critical habitat unit boundaries]

Unit	Subunit	Land ownership by type acres (hectares)				Size of unit
		Federal	State	Tribal	Private	
1. Upper Gila River Subbasin.	Gila River	1,191 (482)	315 (127)		2,267 (917)	3,773 (1,527)
	West Fork Gila River	615 (249)	228 (92)		21 (8)	864 (350)
	Little Creek	281 (114)	9 (4)			291 (118)
	Middle Fork Gila River	978 (396)				978 (396)
	Iron Creek	111 (45)				111 (45)
	Gilita Creek	376 (152)				376 (152)
	Black Canyon	300 (121)			8 (3)	308 (125)
	Diamond Creek	231 (93)			73 (29)	303 (123)
Unit Total		4,084 (1,653)	553 (224)		2,368 (958)	7,005 (2,835)
2. San Francisco River Subbasin.	San Francisco River	2,128 (861)			1,194 (483)	3,322 (1,344)
	Whitewater Creek	254 (103)	3 (1)		125 (51)	382 (155)
	Saliz Creek	194 (78)			68 (27)	261 (106)
	Tularosa River	444 (180)			471 (191)	915 (370)
	Negrito Creek	543 (220)			90 (36)	632 (256)
	South Fork Negrito Creek.	362 (147)			20 (8)	382 (155)
Unit Total		3,924 (1,588)	3 (1)		1,967 (796)	5,895 (2,386)
3. Blue River Subbasin	Blue River	2,595 (1,050)			430 (174)	3,025 (1,224)
	Campbell Blue Creek	200 (81)			21 (8)	220 (89)
	Dry Blue Creek	122 (50)				122 (50)
Unit Total		2,918 (1,181)			450 (182)	3,368 (1,363)
4. Eagle Creek		84 (34)			0.4 (0.2)	84 (34)
Unit Total		84 (34)			0.4 (0.2)	84 (34)
5. Black River Subbasin	Black River	796 (322)				796 (322)
	Bear Wallow Creek	183 (74)				183 (74)
	North Fork Bear Wallow Creek.	80 (32)				80 (32)
	Reservation Creek	149 (60)				149 (60)
	Fish Creek	135 (55)				135 (55)
	East Fork Black River	436 (176)				436 (176)

TABLE 1—CRITICAL HABITAT UNITS FOR NARROW-HEADED GARTERSNAKE—Continued

[Area estimates reflect all land within critical habitat unit boundaries]

Unit	Subunit	Land ownership by type acres (hectares)				Size of unit
		Federal	State	Tribal	Private	
Unit Total		1,780 (720)				1,780 (720)
6. Canyon Creek		204 (82)				204 (82)
Unit Total		204 (82)				204 (82)
7. Tonto Creek Subbasin.	Tonto Creek	1,673 (677)			91 (37)	1,764 (714)
	Houston Creek	30 (12)			1 (0.4)	31 (12)
	Haigler Creek	473 (191)			26 (10)	499 (202)
Unit Total		2,176 (881)			117 (47)	2,293 (928)
8. Verde River Subbasin	Verde River	1,439 (583)			180 (73)	1,619 (655)
	Oak Creek	634 (256)	109 (44)		422 (171)	1,165 (471)
	West Fork Oak Creek	372 (151)				372 (151)
Unit Total	2,446 (990)	109 (44)		602 (244)	3,156 (1,277)	
Total		17,614 (7,128)	665 (269)		5,505 (2,228)	23,785 (9,625)

Note: Area sizes may not sum due to rounding.

We present brief descriptions of all units, and reasons why they meet the definition of critical habitat for the narrow-headed gartersnake, below.

Unit 1: Upper Gila River Subbasin Unit

Unit 1 consists of 7,005 ac (2,835 ha) in eight subunits along 104 stream mi (167 km): 46 stream mi (74 km) of the Gila River, 12 stream mi (20 km) of West Fork Gila River, 7 stream mi (11 km) of Little Creek, 14 stream mi (23 km) of Middle Fork Gila River, 6 stream mi (10 km) of Gilita Creek, 2 stream mi (3 km) of Iron Creek, 10 stream mi (16 km) of Black Canyon, and 6 stream mi (9 km) of Diamond Creek. The Upper Gila River Subbasin Unit is located in southwestern New Mexico, east of the town of Glenwood, and west and north of Silver City in Grant and Hidalgo Counties. The Upper Gila River Subbasin Unit occurs on lands managed by the USFS on Gila National Forest; Bureau of Land Management (BLM) within Lower Box and Middle Gila Box Areas of Critical Environmental Concern and Gila Lower Box Wilderness Study Area; National Park Service (NPS) on Gila Cliff Dwellings National Monument; New Mexico Department of Game and Fish on Bill Evans Fishing Area, Heart Bar Wildlife Area, Redrock State Wildlife Experimental Area, and Gila Bird Area; State Trust lands; and private entities.

Unit 1 is designated as critical habitat because it was occupied at the time of listing and as a whole, this unit contains PBFs 1, 2 and 5, with PBFs 3 and 4 may be in degraded condition. The Gila River, West Fork Gila River, Little Creek, Iron Creek, Black Canyon, and Diamond Creek subunits have PBFs 1, 2, 3, and 5, but PBF 4 is in degraded condition. The Middle Fork Gila River Subunit has PBF 1, 2, 4, and 5 with PBF 3 in degraded condition. Gilita Creek Subunit has all PBFs.

This unit requires special management to address the threats; some reaches of the Gila River have been adversely affected by channelization and water diversions. Populations of bullfrogs and nonnative, spiny-rayed fish dominate the aquatic community in some reaches of the West Fork and Middle Fork Gila River. Fish barriers on many streams are in place to limit upstream movement of some nonnative fish into areas that are managed for native fish. Crayfish densities are currently high in Diamond Creek. Wildfires have burned at both moderate and high severity within the unit and resulted in significant flooding with excessive ash and sediment loads in Middle Fork Gila River. These sediment and ash-laden floods can temporarily reduce populations of both nonnative aquatic predatory species and native prey species for narrow-headed gartersnakes in affected streams. The PBFs in this unit may require special management due to competition with, and predation by, nonnative species that are present in this unit; water diversions; channelization; potential for high-intensity wildfires; and human development of areas adjacent to critical habitat.

Unit 2: San Francisco River Subbasin Unit

Unit 2 consists of 5,895 ac (2,386 ha) in six subunits along 129 stream mi (207 km): 71 stream mi (115 km) of San Francisco River, 9 stream mi (14 km) of Whitewater Creek, 8 stream mi (13 km) of Saliz Creek, 20 stream mi (33 km) of Tularosa River, 13 stream mi (20 km) of Negrito Creek, and 8 stream mi (13 km) of South Fork Negrito Creek. The San Francisco River Subbasin Unit is generally located in southwestern New Mexico near the towns of Glenwood and Reserve, and east of Luna, in Catron County. The San Francisco River Subbasin Unit consists of lands managed primarily by the U.S. Forest Service on Gila National Forest and private landowners.

Unit 2 is designated as critical habitat because it was occupied at the time of listing and as a whole, this unit contains PBFs 1, 2, and 5, but PBFs 3 and 4 may be in degraded condition. San Francisco River Subunit has PBFs 1, 2, and 5, but PBFs 3 and 4 are in degraded condition. Whitewater Creek Subunit has PBFs 1, 2, 4, and 5, but PBF 3 is in degraded condition. Tularosa River, Saliz Creek, and Negrito Creek subunits have PBFs 1, 2, 3, and 5, but PBF 4 is in degraded condition. South Fork Negrito Creek Subunit has adequate PBFs. Water diversions have dewatered sections of the San Francisco River Subunit in the upper Alma Valley and at Pleasanton, New Mexico. The San Francisco River Subunit also has populations of bullfrogs, crayfish, and nonnative, spiny-rayed fish at various densities along its course. Wildfires have burned at both moderate and high severity within the unit and likely resulted in significant flooding with excessive ash and sediment loads. These sediment and ash-laden floods can temporarily reduce populations of both nonnative aquatic predatory species and native prey species for narrow-headed gartersnakes in affected streams. The PBFs in this unit may require special management due to competition with,

and predation by, nonnative species that are present in this unit; water diversions; potential for high-intensity wildfires; and human recreation and development of areas adjacent to critical habitat.

Unit 3: Blue River Subbasin Unit

Unit 3 consists of a total of 3,368 ac (1,363 ha) in three subunits along 64 stream mi (102 km): 52 stream mi (84 km) of Blue River, 7 stream mi (12 km) of Campbell Blue Creek, and 4 stream mi (7 km) of Dry Blue Creek. The Blue River Subbasin Unit is generally located near the east-central border of Arizona northeast of Clifton in Greenlee County, and just into west-central New Mexico in Catron County. Blue River Subbasin Unit consists of lands managed primarily by the U.S. Forest Service on Gila and Apache-Sitgreaves National Forests, and private landowners.

Unit 3 is designated as critical habitat because it was occupied at the time of listing and as a whole, this unit contains PBFs 1, 2, and 5, but PBFs 3 and 4 may be in degraded condition. The Blue River and Dry Blue Creek subunits have PBFs 1, 2, 3, and 5, but PFB 4 is in degraded condition. Campbell Blue Creek Subunit has PBFS 1, 2, 4, and 5, but PBF 3 may be in degraded condition. The fish community of the Blue River is highly diverse and largely native, but nonnative fish are present. Native fish restoration is actively occurring in the Blue River, including construction of a fish barrier, mechanical removal of nonnative fish, and repatriation and monitoring of federally listed warm-water fishes (Robinson and Crowder 2015, p. 24; Robinson and Love-Chezem 2015, entire). Native fish species persist in Campbell Blue Creek and Dry Blue Creek (Riley and Clarkson 2005, p. 10; Humphrey *et al.* 2015, Table 2). Crayfish and brown trout are present in Campbell Blue Creek (Humphrey *et al.* 2015, Table 2; Bergamini *et al.* 2016a, p. 1; Nowak *et al.* 2017, Table 3; Pittenger 2017, Table 3). Wildfires have burned at both moderate and high severity within the unit and likely resulted in significant flooding with excessive ash and sediment loads. These sediment and ash-laden floods can temporarily reduce populations of both nonnative aquatic predatory species and native prey species for narrow-headed gartersnakes in affected streams. The PBFs in this unit may require special management to prevent reinvasion of nonnative species and continue to reestablish native prey species.

Unit 4: Eagle Creek Unit

Unit 4 consists of a total of 84 ac (34 ha) along 2 stream mi (4 km) of Eagle Creek. The Eagle Creek Unit is generally located in eastern Arizona near Morenci and includes portions of Greenlee County. The majority of lands within this unit are managed by the U.S. Forest Service on the Gila National Forest.

Unit 4 is designated as critical habitat because it was occupied at the time of listing and as a whole, this unit contains PBFs 1, 2, 3, 4, and 5, but PBF 4 is in degraded condition. Narrow-headed gartersnakes have been found in Eagle Creek at its confluence with Sheep Wash in 2013 (Ehlo *et al.* 2013, p. 3; Holycross *et al.* 2020, p. 717). The PBFs in this unit may require special management to eliminate or reduce crayfish and nonnative, spiny-rayed fish, as well as maintain adequate base flow in Eagle Creek.

We have excluded 236 ac (96 ha) of lands owned by the San Carlos Apache Tribe in the Eagle Creek Unit (see Consideration of Impacts under Section 4(b)(2) of the Act, below).

Unit 5: Black River Subbasin Unit

Unit 5 consists of a total of 1,780 ac (720 ha) in six subunits along 45 stream mi (72 km): 19 stream mi (30 km) of Black River, 5 stream mi (7 km) of Bear Wallow Creek, 2 stream mi (3 km) of North Fork Bear Wallow Creek, 3 stream mi (6 km) of Reservation Creek, 4 stream mi (6 km) of Fish Creek, and 12 stream mi (19 km) of East Fork Black River. The Black River Subbasin Unit is generally located along the Mogollon Rim in east-central Arizona, east of Maverick and west of Hannigan Meadow, and includes portions of Apache and Greenlee Counties. All lands within this unit are managed by the U.S. Forest Service on Apache-Sitgreaves National Forest.

Unit 5 is designated as critical habitat because it was occupied at the time of listing and as a whole, this unit contains PBFs 1, 2, 3, and 5, but PBF 4 is in degraded condition. Crayfish, bullfrogs, and nonnative, spiny-rayed fish are present in some of this unit, and crayfish persist at high densities in the Black River (Lopez 2014d, p. 4; Nowak and Drost 2015, p. 5; Nowak *et al.* 2017, p. 8). Water in the Black River Subbasin is diverted for use at the Morenci Mine, which may affect base flow. Wildfires have burned at both moderate and high severity within the unit and have likely resulted in significant flooding with excessive ash and sediment loads (Lopez 2014d, p. 5). These sediment and ash-laden floods can temporarily reduce populations of both nonnative aquatic predatory species and native prey species for narrow-headed gartersnakes in affected streams. The PBFs in this unit may require special management due to competition with, and predation by, nonnative species that are present in this unit; water diversions; potential for high-intensity wildfires; and human development of areas adjacent to critical habitat.

We have excluded 195 ac (79 ha) of lands owned by the White Mountain Apache and San Carlos Apache Tribes along the Black River, Bear Wallow Creek, and Reservation Creek of the Black River Subbasin Unit (see Consideration of Impacts under Section 4(b)(2) of the Act, below).

Unit 6: Canyon Creek Unit

Unit 6 consists of 204 ac (82 ha) along 5 stream mi (8 km) of Canyon Creek. The Canyon Creek Unit is generally located along the Mogollon Rim in east-central Arizona, and falls within Gila County. The Tonto National Forest manages all lands within this unit.

Unit 6 is designated as critical habitat because it was occupied at the time of listing and as a whole, this unit contains all PBFs. The fish community is primarily native and includes specked dace (*Rhinichthys osculus*), desert sucker (*Catostomus clarkii*), and brown trout (Burger 2015a, p. 4). The PBFs in this unit may require special management due to potential invasion by nonnative aquatic predatory species as well as the potential for high-intensity wildfires.

We have excluded 77 ac (31 ha) of lands owned by the White Mountain Apache Tribe in the Canyon Creek Unit (see Consideration of Impacts under Section 4(b)(2) of the Act, below).

Unit 7: Tonto Creek Subbasin Unit

Unit 7 consists of a total of 2,293 ac (928 ha) in three subunits along 41 stream mi (66 km): 28 stream mi (46 km) of Tonto Creek, 0.7 stream mi (1.2 km) of Houston Creek, and 12 stream mi (19 km) of Haigler Creek. The Tonto Creek Subbasin Unit is generally located southeast of Payson, Arizona, and northeast of the Phoenix metropolitan area, in Gila County. Land ownership or land management within this unit consists of lands managed by the U.S. Forest Service on Tonto National Forest in the Hellsgate Wilderness and privately owned lands.

Unit 7 is designated as critical habitat because it was occupied at the time of listing and as a whole, this unit contains PBFs 1, 2, 3, and 5, but PBF 4 is in degraded condition. The PBFs in this unit may require special management due to competition with, and predation

by, nonnative species that are present in this unit; water diversions; flood-control projects; potential for high-intensity wildfires; and development of areas adjacent to or within critical habitat.

Unit 8: Verde River Subbasin Unit

Unit 8 consists of 3,156 ac (1,277 ha) in three subunits along 58 stream mi (93 km): 27 stream mi (43 km) of Verde River, 24 stream mi (39 km) of Oak Creek, and 7 stream mi (11 km) of West Fork Oak Creek. The Verde River Subbasin Unit is generally located near Perkinsville and Sedona, Arizona, west of Paulden, Arizona, in Coconino and Yavapai Counties. Verde River Subbasin Unit occurs on lands managed by the U.S. Forest Service on Prescott and Coconino National Forests, Arizona State Parks at Redrock State Park, and private entities.

Unit 8 is designated as critical habitat because it was occupied at the time of listing and as a whole, this unit contains PBFs 1, 2, 3, and 5, but PBF 4 is in degraded condition. The PBFs in this unit may require special management due to competition with, and predation by, nonnative species that are present; water diversions; groundwater pumping potentially resulting in drying of habitat; potential for high-intensity wildfires; and human recreation and human development of areas adjacent to critical habitat.

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.

We published a final rule revising the definition of destruction or adverse modification on August 27, 2019 (84 FR 44976). Destruction or adverse modification means a direct or indirect alteration that appreciably diminishes the value of critical habitat as a whole for the conservation of a listed 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 (Corps) 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, authorized, or carried out by a Federal agency—do not require section 7 consultation.

Compliance with the requirements of section 7(a)(2) is documented 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, and 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 Service 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 set forth requirements for Federal agencies to reinitiate formal consultation on previously reviewed actions. These requirements apply when the Federal agency has retained discretionary involvement or control over the action (or the agency's discretionary involvement or control is authorized by law) and, subsequent to the previous consultation: (1) If the amount or extent of taking specified in the incidental take statement is exceeded; (2) if new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered; (3) if the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the biological opinion; or (4) if a new species is listed or critical habitat designated that may be affected by the identified action.

In such situations, Federal agencies sometimes may need to request reinitiation of consultation with us, but the regulations also specify some exceptions to the requirement to reinitiate consultation on specific land management plans after subsequently listing a new species or designating new critical habitat. See the regulations for a description of those exceptions.

Application of the ''Adverse Modification'' Standard

The key factor related to the adverse modification determination is whether implementation of the proposed Federal action directly or indirectly alters the designated critical habitat in a way that appreciably diminishes the value of the critical habitat as a whole for the conservation of the listed species. As discussed above, the role of critical habitat is to support physical or biological features essential to the conservation of a listed 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 violate section 7(a)(2) of the Act by destroying or adversely modifying 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 narrow-headed gartersnake. Some of these activities may have short-term negative effects to designated critical habitat but may also result in long-term benefits to the gartersnake.

These activities include, but are not limited to:

(1) Actions that would alter the amount, timing, or frequency of flow within a stream or the quantity of available water within aquatic or wetland habitat such that the prey base for the narrow-headed gartersnake, or the gartersnake itself, are appreciably

diminished or threatened with extirpation. Such activities could include, but are not limited to: Water diversions; channelization; construction of any barriers or impediments within the active river channel; removal of flows in excess of those allotted under a given water right; construction of permanent or temporary diversion structures; groundwater pumping within aquifers associated with the river; or dewatering of isolated within-channel pools or stock tanks. These activities could result in the reduction of the distribution or abundance of important gartersnake prey species, as well as reduce the distribution and amount of suitable physical habitat on a regional landscape for the gartersnake itself.

(2) Actions that would significantly increase sediment deposition or scouring within the stream channel or pond that is habitat for the narrow-headed gartersnake, or one or more of their prey species within the range of the narrow-headed gartersnake. Such activities could include, but are not limited to: Livestock grazing that results in erosion contaminating waters; road construction; commercial or urban development; channel alteration; timber harvest; prescribed fires or wildfire suppression; off-road vehicle or recreational use; and other alterations of watersheds and floodplains. These activities could adversely affect the potential for gartersnake prey species to survive or breed. They may also reduce the likelihood that the gartersnake's prey species (*i.e.,* native fish) could move among subpopulations in a functioning metapopulation. This would, in turn, decrease the viability of metapopulations and their component local populations of prey species.

(3) Actions that would alter water chemistry beyond the tolerance limits of a gartersnake prey base. Such activities could include, but are not limited to: Release of chemicals, biological pollutants, or effluents into the surface water or into connected groundwater at a point source or by dispersed release (non-point source); aerial deposition of known toxicants, such as mercury, that are positively correlated to regional exceedances of water quality standards for these toxicants; livestock grazing that results in waters heavily polluted by feces; runoff from agricultural fields; roadside use of salts; aerial pesticide overspray; runoff from mine tailings or other mining activities; and ash flow and fire retardants from fires and fire suppression. These actions could adversely affect the ability of the habitat to support survival and reproduction of gartersnake prey species.

(4) Actions that would remove, diminish, or significantly alter the structural complexity of key natural structural habitat features in and adjacent to aquatic habitat. These features may be organic or inorganic, may be natural or constructed, and include (but are not limited to) boulders and boulder piles, cliff faces, rocks such as river cobble, downed trees or logs, debris jams, small mammal burrows, or leaf litter. Such activities could include, but are not limited to: Construction projects; flood control projects; vegetation management projects; or any project that requires a 404 permit from the U.S. Army Corps of Engineers. These activities could result in a reduction of the amount or distribution of these key habitat features that are important for gartersnake thermoregulation, shelter, protection from predators, and foraging opportunities.

(5) Actions and structures that would physically block movement of gartersnakes or their prey species within or between regionally proximal populations or suitable habitat. Such actions and structures include, but are not limited to: Urban, industrial, or agricultural development; reservoirs stocked with predatory fishes, bullfrogs, or crayfish; highways that do not include reptile and amphibian fencing and culverts; and walls, dams, fences, canals, or other structures that could physically block movement of gartersnakes. These actions and structures could reduce or eliminate immigration and emigration among gartersnake populations, or that of their prey species, reducing the long-term viability of populations.

(6) Actions that would directly or indirectly result in the introduction, spread, or augmentation of predatory nonnative species in gartersnake habitat, or in habitat that is hydrologically connected, even if those segments are occasionally intermittent, or introduction of other species that compete with or prey on the narrow-headed gartersnake or its prey base, or introduce pathogens. Possible actions could include, but are not limited to: Introducing or stocking nonnative, spiny-rayed fishes, bullfrogs, crayfish, or other predators of the prey base of narrow-headed gartersnakes; creating or sustaining a sport fishery that encourages use of nonnative live fish or crayfish as bait; maintaining or operating reservoirs that act as source populations for predatory nonnative species within a watershed; constructing water diversions, canals, or other water conveyances that move water from one place to another and through which inadvertent transport of predatory nonnative species into narrow-headed gartersnake habitat may occur; and moving water, mud, wet equipment, or vehicles from one aquatic site to another, through which inadvertent transport of pathogens may occur. These activities directly or indirectly cause unnatural competition with and predation from nonnative aquatic predators on the narrow-headed gartersnake, leading to reduced recruitment within gartersnake populations and diminishment or extirpation of their prey base.

(7) Actions that would deliberately remove, diminish, or significantly alter the native or nonnative, soft-rayed fish component of the narrow-headed gartersnake prey base within occupied habitat. In general, these actions typically occur in association with fisheries management, such as the application of piscicides in conjunction with fish barrier construction.

Exemptions

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

Section 4(a)(3)(B)(i) of the Act (16 U.S.C. 1533(a)(3)(B)(i)) provides that the Secretary shall not designate as critical habitat any lands or other geographical areas owned or controlled by the Department of Defense, or designated for its use, that are subject to an integrated natural resources management plan (INRMP) 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 (DoD) lands with a completed INRMP within the final critical habitat designation.

Consideration of Impacts and Exclusions Under 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 we determine that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless we determine, 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 the determination to

exclude a particular area, 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.

On December 18, 2020, we published a final rule in the **Federal Register** (85 FR 82376) revising portions of our regulations concerning excluding areas of critical habitat under section 4(b)(2) of the Act. These final regulations became effective on January 19, 2021, and apply to critical habitat rules for which a proposed rule was published after January 19, 2021. Consequently, these new regulations do not apply to this final rule.

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 discretion to exclude the area only if such exclusion would not result in the extinction of the species. We describe below the process that we undertook for taking into consideration each category of impacts and our analyses of the relevant impacts.

As discussed below, based on the information provided by entities seeking exclusion, as well as any additional public comments received, we evaluated whether certain lands in the proposed critical habitat were appropriate for exclusion from this final designation pursuant to section 4(b)(2) of the Act. The Act affords a great degree of discretion to the Service in implementing section 4(b)(2). This discretion is applicable to a number of aspects of section 4(b)(2) including whether to enter into the discretionary 4(b)(2) exclusion analysis and the weights assigned to any particular factor used in the analysis. Most significant is that the decision to exclude is always discretionary, as the Act states that the Secretary ''may'' exclude any areas. Under no circumstances is exclusion required under the second sentence of section 4(b)(2). There is no requirement to exclude, or even to enter into a discretionary 4(b)(2) exclusion analysis for any particular area identified as critical habitat. Accordingly, per our discretion, we have only done a full discretionary exclusion analysis when we received clearly articulated and reasoned rationale to exclude the area from this critical habitat designation.

Consideration of Economic Impacts

Section 4(b)(2) of the Act and its implementing regulations require that we consider the economic impact that may result from a designation of critical habitat. In order to consider economic impacts, we prepared an incremental effects memorandum (IEM) and screening analysis which, together with our narrative and interpretation of effects, we consider our draft economic analysis (DEA) of the critical habitat designation and related factors (IEc 2019, entire). The analysis, dated October 10, 2019, was made available for public review from April 28, 2020, through June 29, 2020 (see 85 FR 23608; April 28, 2020). The DEA addressed probable economic impacts of critical habitat designation for the narrow-headed gartersnake. Following the close of the comment period, we reviewed and evaluated all information submitted during the comment period that may pertain to our consideration of the probable incremental economic impacts of this critical habitat designation. The DEA was updated in March 2021 to reflect changes made to critical habitat units from the revised proposed rule; however, the total incremental costs are not expected to change (IEc 2021, entire). Additional information relevant to the probable incremental economic impacts of the critical habitat designation for the narrow-headed gartersnake is summarized below and available in the screening analysis for the narrow-headed gartersnake (IEc 2021, entire), available at *http://www.regulations.gov.*

In our IEM, we attempted to clarify the distinction between the effects that will result from the species being listed and those attributable to the critical habitat designation (*i.e.,* difference between the jeopardy and adverse modification standards) for the narrow-headed gartersnake's critical habitat. The following specific circumstances help to inform our evaluation: (1) The essential PBFs identified for critical habitat are the same features essential for the life requisites of the species; and (2) any actions that would result in sufficient harm or harassment to constitute jeopardy to the narrow-headed gartersnake would also likely adversely affect the essential PBFs of critical habitat. The IEM outlines our rationale concerning this limited distinction between baseline conservation efforts and incremental impacts of the designation of critical habitat for this species. This evaluation of the incremental effects has been used as the basis to evaluate the probable incremental economic impacts of this designation of critical habitat.

The critical habitat designation for the narrow-headed gartersnake totals 23,784 ac (9,625 ha) comprising eight units. Land ownership within critical habitat for the narrow-headed gartersnake in acres is broken down as follows: Federal (74 percent), State (Arizona and New Mexico) (3 percent), and private (23 percent) (see Table 1, above). All units are occupied.

In these areas, any actions that may affect the species would also affect designated critical habitat because the species is so dependent on habitat to fulfill its life-history functions. Therefore, any conservation measures to address impacts to the species would be the same as those to address impacts to critical habitat. Consequently, it is unlikely that any additional conservation efforts would be recommended to address the adverse modification standard over and above those recommended as necessary to avoid jeopardizing the continued existence of the narrow-headed gartersnake. Further, every unit of critical habitat overlaps with the ranges of a number of currently listed species and designated critical habitats. Therefore, the actual number of section 7 consultations is not expected to increase. The consultation would simply have to consider an additional species or critical habitat unit. While this additional analysis will require time and resources by the Federal action agency, the Service, and third parties, the probable incremental economic impacts of the critical habitat designation are expected to be limited to additional administrative costs and would not be significant (IEc 2021, entire). This is due to all units being occupied by the narrow-headed gartersnake.

Based on consultation history for the gartersnake, the number of future consultations, including technical assistances, is likely to be no more than 21 per year. The additional administrative cost of addressing adverse modification in these consultations is likely to be less than $61,000 in a given year, including costs to the Service, the Federal action agency, and third parties (IEc 2021, p. 14), with approximately $28,000 for formal consultations, $32,000 for informal consultations, and $1,100 for technical assistances. This is based on an individual technical assistance costing $410, informal consultation costing $2,500, and formal consultation

costing $9,600. Therefore, the incremental costs associated with critical habitat are unlikely to exceed $100 million in any single year and, therefore, would not be significant (see Executive Order (E.O.) 12866 Regulatory Planning and Review).

Exclusions Based on Economic Impacts

The Service considered the economic impacts of the critical habitat designation. We are not exercising our discretion to exclude any areas from this designation of critical habitat for the narrow-headed gartersnake based on economic impacts.

Consideration of Impacts on National Security and Homeland Security

Section 4(a)(3)(B)(i) of the Act may not cover all DoD lands or areas that pose potential national-security concerns (*e.g.,* a DoD installation that is in the process of revising its INRMP for a newly listed species or a species previously not covered). If a particular area is not covered under section 4(a)(3)(B)(i), then national-security or homeland-security concerns are not a factor in the process of determining what areas meet the definition of ''critical habitat.'' However, the Service must still consider impacts on national security, including homeland security, on those lands or areas not covered by section 4(a)(3)(B)(i), because section 4(b)(2) requires the Service to consider those impacts whenever it designates critical habitat. Accordingly, if DoD, Department of Homeland Security (DHS), or another Federal agency has requested exclusion based on an assertion of national-security or homeland-security concerns, or we have otherwise identified national-security or homeland-security impacts from designating particular areas as critical habitat, we generally have reason to consider excluding those areas.

However, we cannot automatically exclude requested areas. When DoD, DHS, or another Federal agency requests exclusion from critical habitat on the basis of national-security or homeland-security impacts, it must provide a reasonably specific justification of an incremental impact on national security that would result from the designation of that specific area as critical habitat. That justification could include demonstration of probable impacts, such as impacts to ongoing border-security patrols and surveillance activities, or a delay in training or facility construction, as a result of compliance with section 7(a)(2) of the Act. If the agency requesting the exclusion does not provide us with a reasonably specific justification, we will contact the agency to recommend that it provide a specific justification or clarification of its concerns relative to the probable incremental impact that could result from the designation. If we conduct an exclusion analysis because the agency provides a reasonably specific justification or because we decide to exercise the discretion to conduct an exclusion analysis, we will defer to the expert judgment of DoD, DHS, or another Federal agency as to: (1) Whether activities on its lands or waters, or its activities on other lands or waters, have national-security or homeland-security implications; (2) the importance of those implications; and (3) the degree to which the cited implications would be adversely affected in the absence of an exclusion. In that circumstance, in conducting a discretionary section 4(b)(2) exclusion analysis, we will give great weight to national-security and homeland-security concerns in analyzing the benefits of exclusion.

Exclusions Based on Impacts on National Security and Homeland Security

We have determined that the lands within the designation of critical habitat for the narrow-headed gartersnake are not owned or managed by DoD or DHS. We did not receive any requests for exclusion based on impacts to national security or homeland security. Therefore, we anticipate no impact on national security or homeland security, and we are not exercising our discretion to exclude any lands based on impacts to national security or homeland security.

Consideration of 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 discussed above. Other relevant impacts may include, but are not limited to, impacts to Tribes, States, local governments, public health and safety, community interests, the environment (such as increased risk of wildfire or pest and invasive species management), Federal lands, and conservation plans, agreements, or partnerships. To identify other relevant impacts that may affect the exclusion analysis, we consider a number of factors, including whether there are permitted conservation plans covering the species in the area—such as HCPs, safe harbor agreements (SHAs), or candidate conservation agreements with assurances (CCAAs)—or whether there are non-permitted conservation agreements and partnerships that may be impaired by designation of, or exclusion from, critical habitat. In addition, we look at whether Tribal conservation plans or partnerships, Tribal resources, or government-to-government relationships of the United States with Tribal entities may be affected by the designation. We also consider any State, local, public-health, community-interest, environmental, or social impacts that might occur because of the designation.

When analyzing other relevant impacts of including a particular area in a designation of critical habitat, we weigh those impacts relative to the conservation value of the particular area. To determine the conservation value of designating a particular area, we consider a number of factors, including, but not limited to, the additional regulatory benefits that the area would receive due to the protection from destruction or adverse modification as a result of actions with a Federal nexus, the educational benefits of mapping essential habitat for recovery of the listed species, and any benefits that may result from a designation due to State or Federal laws that may apply to critical habitat.

In the case of the narrow-headed gartersnake, the benefits of critical habitat include public awareness of the presence of the species and the importance of habitat protection, and, where a Federal nexus exists, increased habitat protection for the gartersnake due to the protection from destruction or adverse modification of critical habitat. Continued implementation of an ongoing management plan that provides conservation equal to or more than the protections that result from a critical habitat designation would reduce those benefits of including that specific area in the critical habitat designation.

Exclusions Based on Other Relevant Impacts

Based on the information provided by entities seeking exclusion, any additional public comments we received, and the best scientific data available, we evaluated whether certain lands in the critical habitat were appropriate for exclusion from this final designation under section 4(b)(2) of the Act. If the analysis indicated that the benefits of excluding lands from the final designation outweigh the benefits of designating those lands as critical habitat, then we identified those areas for the Secretary to exercise her discretion to exclude the lands from the final designation, unless exclusion would result in extinction.

In the paragraphs below, we provide a detailed balancing analysis of the areas we evaluated for exclusion from critical habitat under section 4(b)(2) of the Act.

Private or Other Non-Federal Conservation Plans or Agreements and Partnerships, in General

We sometimes exclude specific areas from critical habitat designations based in part on the existence of private or other non-Federal conservation plans or agreements and their attendant partnerships. A conservation plan or agreement describes actions that are designed to provide for the conservation needs of a species and its habitat, and may include actions to reduce or mitigate negative effects on the species caused by activities on or adjacent to the area covered by the plan. Conservation plans or agreements can be developed by private entities with no Service involvement, or in partnership with the Service, sometimes through the permitting process under Section 10 of the Act.

When we undertake a discretionary section 4(b)(2) analysis, we evaluate a variety of factors to determine how the benefits of any exclusion and the benefits of inclusion are affected by the existence of private or other non-Federal conservation plans or agreements and their attendant partnerships when we undertake a discretionary section 4(b)(2) exclusion analysis. A non-exhaustive list of factors that we will consider for non-permitted plans or agreements is shown below (see Policy Regarding Implementation of Section 4(b)(2) of the Endangered Species Act (81 FR 7226; February 11, 2016)). These factors are not required elements of plans or agreements, and all items may not apply to every plan or agreement.

(i) The degree to which the plan or agreement provides for the conservation of the species or the essential physical or biological features (if present) for the species.

(ii) Whether there is a reasonable expectation that the conservation management strategies and actions contained in a management plan or agreement will be implemented.

(iii) The demonstrated implementation and success of the chosen conservation measures.

(iv) The degree to which the record of the plan supports a conclusion that a critical habitat designation would impair the realization of benefits expected from the plan, agreement, or partnership.

(v) The extent of public participation in the development of the conservation plan.

(vi) The degree to which there has been agency review and required determinations (*e.g.,* State regulatory requirements), as necessary and appropriate.

(vii) Whether NEPA compliance was required.

(viii) Whether the plan or agreement contains a monitoring program and adaptive management to ensure that the conservation measures are effective and can be modified in the future in response to new information.

Non-Permitted Conservation Plans, Agreements, or Partnerships

I. Gila River Subunit Within the Upper Gila River Subbasin Unit—Freeport-McMoRan Management Plan

Critical habitat for gartersnakes was identified for the Gila River (563 ac (228 ha)) on Freeport-McMoRan privately owned lands where the narrow-headed gartersnake occurs.

FMC completed their Spikedace and Loach Minnow Management Plan for the Upper Gila River (FMC management plan), including Bear Creek and Mangas Creek in Grant County, New Mexico, in 2011. The FMC management plan was created in response to a proposed rule to designate critical habitat for the spikedace and loach minnow along reaches of the Gila River, Mangas Creek, and Bear Creek (75 FR 66482; October 28, 2010) owned by FMC. Water rights are also included in these land holdings. The majority of these lands are owned by Pacific Western Land Company (PWLC) and included the U-Bar Ranch, which has been managed under a rest-rotation livestock grazing strategy since approximately 1992. The focus of management actions pertaining to spikedace and loach minnow occur along the middle section of the upper Gila River, the perennial portion of Mangas Creek, and lower portion of Bear Creek near the village of Gila within the Gila-Cliff Valley of New Mexico. Collectively and through existing water diversions, these lands and associated water rights support mining operations at the Tyrone Mine as well as livestock operations along the Gila River.

Livestock operations within the U-Bar Ranch consider the needs of the southwestern willow flycatcher and are considered to provide indirect benefits to spikedace and loach minnow under the FMC management plan. For the purposes of this analysis, we reviewed the commitments made in the FMC management plan that pertain to spikedace and loach minnow, not the southwestern willow flycatcher, due to their ecological needs, which more closely overlap those of the narrow-headed gartersnake. In the past, FMC has funded fish surveys within the U-Bar Ranch along the Gila River, as well as Mangas and Bear Creeks. The FMC management plan established a framework for cooperation and coordination with the Service in connection with future resource management activities based on adaptive management principles. FMC lands are closed to public use, which eliminates potential concerns for effects to riparian and streambed habitat from off-highway vehicle use, camping, and hiking. Access to FMC lands are provided for wildlife survey needs.

The FMC management plan also commits to maintaining base flow in the Gila River within its planning area, through a cessation of water diversions at the Bill Evans Reservoir diversion, provided two conditions are met: (1) The Gila River is flowing at less than 25 cubic feet per second (cfs) per day at USGS Gage 09431500, near Redrock, New Mexico (the nearest gage downstream from FMC's point of diversion); and (2) the water level in Bill Evans Reservoir is at least 4,672 ft above sea level. In the event that the first condition is satisfied but the reservoir level is below 4,672 ft above sea level, FMC will confer with NMDGF (which owns Bill Evans Reservoir) regarding temporary curtailment of water diversions. Therefore, maintaining minimum flow in the Gila River is not under the sole discretion of FMC. In the event water use changes become necessary, FMC provides us with notice of any significant changes in its water uses and diversions and will confer about impacts of such changes on spikedace and loach minnow habitat.

FMC has also committed to funding biennial fish surveys and the maintenance of survey locations, fisheries biologists, techniques, and protocols along the lands associated with the Gila River and to providing subsequent data to us. Lastly, FMC committed to make reasonable efforts to coordinate and encourage adjacent landowners, as well as confer with us on opportunities to increase local public awareness, to assist in their conservation management and, when appropriate, assist other landowners to these ends. The FMC management plan considers adaptive management, which includes, if necessary, the development of alternative conservation measures at a total cost of $500,000, for habitat protection. Summarized, the FMC management plan commits to ongoing grazing using rest-rotation at moderate levels, the prohibition of public trespass unless for the purposes of surveys and

monitoring for covered species (the narrow-headed gartersnake is not covered), limiting water diversion withdrawals from the Gila River provided certain criteria are met (dependent upon discretion of a third party), and a commitment to make reasonable efforts to coordinate with other landowners in the area on voluntary implementation of conservation measures.

Benefits of Inclusion—FMC Management Plan

As discussed above under Effects of Critical Habitat Designation, *Section 7 Consultation,* Federal agencies, in consultation with the Service, must ensure that their actions are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of any designated critical habitat of such species. The difference in the outcomes of the jeopardy analysis and the adverse modification analysis represents the regulatory benefit and costs of critical habitat. It is possible that in the future, Federal funding or permitting could occur on this privately owned land where a critical habitat designation may benefit narrow-headed gartersnake habitat. The implementation of potential conservation measures or conservation recommendations could provide important benefits to the continued conservation and recovery of the species in this area.

Because the narrow-headed gartersnake occurs in this area, the benefits of a critical habitat designation are reduced to the possible incremental benefit of critical habitat because the designation would not be the sole catalyst for initiating section 7 consultation. However, should a catastrophic event such as disease, drought, wildfire, chemical spill, etc., result in potential or actual extirpation of the gartersnake population in this area, designation of critical habitat will ensure future Federal actions do not result in adverse modification of critical habitat, allowing for future recovery actions to occur.

Another important benefit of including lands in a critical habitat designation is that it can serve to educate landowners, agencies, Tribes, and the public regarding the potential conservation value of an area, and may help focus conservation efforts on areas of high value for certain species. Any information about the narrow-headed gartersnake that reaches a wide audience, including parties engaged in conservation activities, is valuable. The designation of critical habitat may also affect the implementation of Federal laws, such as the Clean Water Act. These laws analyze the potential for projects to significantly affect the environment. Critical habitat may signal the presence of important sensitive habitat that could otherwise be missed in the review process for these other environmental laws.

Despite its benefits to the spikedace and loach minnow, the FMC management plan does not provide adequate conservation of the narrow-headed gartersnake because:

- The management plan does not commit to any conservation measures that directly address the leading threat facing the narrow-headed gartersnake across its range: The presence of predatory nonnative aquatic species.
- Within the FMC management plan area, livestock have sustained access to the riparian corridor, which negatively impacts narrow-headed gartersnakes because gartersnakes require adequate cover for protection from predators and to assist with thermoregulation.
- The decision to change the amount of diverted Gila River water in the event of flows reaching 25 cfs or below are contingent upon an external entity to the FMC management plan and their desires for management of the Bill Evans Reservoir, adding uncertainty to this measure in terms of its implementation.
- Benefits of an unquantifiable and therefore unknown effort associated with enhancing cooperative conservation with adjacent landowners yields high uncertainty pertaining to both implementation of the measure and potential benefits realized by its implementation.

Benefits of Exclusion—FMC Management Plan

One benefit from excluding FMC-owned lands as narrow-headed gartersnake critical habitat is the maintenance and strengthening of ongoing conservation partnerships. FMC has demonstrated a willingness to partner with the Service in conservation planning for several species in Arizona and New Mexico. Examples include becoming a conservation partner in the development and implementation of the Southwestern Willow Flycatcher Recovery Plan, and by solidifying their conservation actions in management plans submitted to us for the southwestern willow flycatcher, and for the spikedace and loach minnow (2007 and 2011). They have also demonstrated a willingness to conserve southwestern willow flycatcher and western yellow-billed cuckoo (*Coccyzus americanus*) habitat at Pinal Creek and to partner with us by exploring the initial stages of a habitat conservation plan.

Our collaborative relationship with FMC in the conservation arena makes a difference in our partnership with the numerous stakeholders involved in aquatic species recovery and management and influences our ability to form partnerships with others. Concerns over perceived, added regulation potentially imposed by critical habitat could harm this collaborative relationship.

Because important areas for gartersnake conservation can occur on private lands, collaborative relationships with private landowners can be important in order to further recovery. The narrow-headed gartersnake and its habitat could benefit in some cases, from voluntary landowner management actions that implement appropriate and effective conservation strategies. Where consistent with the discretion provided by the Act, it is beneficial to implement policies that provide positive incentives to private landowners to voluntarily conserve natural resources and that remove or reduce disincentives to conservation (Wilcove *et al.* 1996, pp. 1–15; Bean 2002, pp. 1–7). Thus, it is important for narrow-headed gartersnake conservation to seek out continued conservation partnerships such as these with a proven partner, and to provide positive incentives for other private landowners who might be considering implementing voluntary conservation activities, but who have concerns about incurring incidental regulatory or economic impacts should a Federal nexus occur.

Benefits of Inclusion Outweigh the Benefits of Exclusion—FMC Management Plan

We have determined that the benefits of inclusion of the Gila River on private lands managed by FMC outweigh the benefits of exclusion based on several factors. Above, we outlined several instances where management actions set forth in the plan either do not pertain directly to the needs of narrow-headed gartersnake critical habitat, do not have the necessary assurances that beneficial actions will indeed occur, or provide minimal benefits to gartersnake conservation and recovery in general. However, we will continue to work with FMC in the conservation arena as they are an important partner of the Service in conservation planning for several species in Arizona and New Mexico.

After weighing the benefits of inclusion as narrow-headed gartersnake critical habitat against the benefits of exclusion, we have concluded that the

benefits of including FMC privately owned lands on the Gila River (563 ac (228 ha)) outweigh those that would result from excluding these areas from critical habitat designation. Therefore, we did not exclude these lands from the final designation.

II. Whitewater Creek Subunit—NMDGF's Glenwood State Fish Hatchery Management

Critical habitat for the narrow-headed gartersnake was identified for Whitewater Creek that includes 2.9 ac (1.2 ha) of lands that are part of the Glenwood State Fish Hatchery owned by NMDGF. NMDGF established the Glenwood State Fish Hatchery adjacent to Whitewater Creek in 1938. The hatchery currently raises female sterile rainbow trout (*Oncorhynchus mykiss*) and a renovation to the facility to propagate Gila trout (*O. gilae*) is planned. The portion of Whitewater Creek that flows through the hatchery property is considered dispersal habitat for narrow-headed gartersnakes moving between the Catwalk Recreation Area upstream of the hatchery to the San Francisco River.

We received a comment from NMDGF requesting that this area within the Glenwood State Fish Hatchery be excluded from the final designation of critical habitat. NMDGF's rationale for requesting exclusion was that there are no records of the species within the hatchery boundary and Whitewater Creek is not perennial at the hatchery. NMDGF further explains that the Service's Memorandum for the Intra-Service Section 7 Endangered Species Act Consultation for the Proposed Operation and Maintenance of Hatchery Facilities NM F–66 Project concurred with a ''no effect'' determination for the narrow-headed gartersnake because the snake is not currently present.

In the revised proposed critical habitat rule (85 FR 23608; April 28, 2020), we reviewed narrow-headed gartersnake occupancy to determine that a stream or stream reach was occupied at the time of listing for narrow-headed gartersnake if it is within the historical range of the species, contains PBFs for the species (although the PBFs concerning prey availability and presence of nonnative aquatic predators are often in degraded condition), and has a last known record of occupancy between 1998 and 2019 (see Occupancy Records, 85 FR 23608, p. 23617–23619) (see Criteria Used To Identify Critical Habitat). Although narrow-headed gartersnakes have not been detected at the hatchery, the segment of Whitewater Creek included in the critical habitat designation for the narrow-headed gartersnake, including where the creek flows through the hatchery, meets this definition.

In the revised proposed critical habitat rule (85 FR 23608; April 28, 2020) and this rule, we also define perennial, intermittent, and ephemeral as related to stream flow included in PBF 1 for the narrow-headed gartersnake and clarify the spectrum of stream flow regimes that provide stream habitat for the species based on scientifically accepted stream flow definitions (Levick *et al.* 2008, p. 6; Stromberg *et al.* 2009, p. 330) (see ''Stream Flow'' in 85 FR 23608, April 28, 2020, p. 23613; see also Physical or Biological Features Essential to the Conservation of the Species, below). Although Whitewater Creek is ephemeral at the Glenwood State Fish Hatchery, it is perennial upstream of the hatchery and downstream at its confluence with the San Francisco River, so the entire stream segment meets our definition of critical habitat.

In regard to NMDGF's assertion that the hatchery should not be listed as critical habitat because of the Service's previous concurrence with a ''no effect'' determination under a Section 7 Intra-Service consultation, a critical habitat determination is not synonymous with a determination that an area is occupied for the purposes of a jeopardy analysis under Section 10 of the Act. Under section 7 of the Act, Federal agencies are required to consult with the Service to ensure that the actions they carry out, fund, or authorize are not likely to jeopardize the continued existence of the species, or destroy or adversely modify critical habitat. For a jeopardy or ''take'' analysis, we analyze effects to a species if the species is present in the action area during the time of the action. For an adverse modification analysis, we analyze effects to critical habitat if critical habitat for a species is present in the action area. Therefore, an effect determination is different than a critical habitat designation. A critical habitat determination depends on the best available information at the time of the analysis, and the likely effects and likelihood of take depend on the action under consideration. NMDGF does not have a management plan for the narrow-headed gartersnake at the hatchery, but has stated that if a population became established at the hatchery in the future, they would implement conservation actions such as identifying and protecting hibernacula, foraging sites, and corridors within the limits of hatchery operations; maintaining or improving existing habitat for the species; and conducting regular monitoring of the population (NMDGF 2020, p. 1). Regardless of the absence of narrow-headed gartersnake on a very small portion of Whitewater Creek in the hatchery boundary, as discussed above, Whitewater Creek, including the hatchery property, meets the Service's definition of critical habitat. There are no current management actions set forth that pertain directly to the needs of narrow-headed gartersnake critical habitat, and without a plan we lack the necessary assurances that beneficial actions will occur. We are committed to working with the NMDGF to further narrow-headed gartersnake conservation, and we expect the continuation of our conservation partnership help foster the maintenance and development of narrow-headed gartersnake habitat in the vicinity of the Glenwood State Fish Hatchery.

Under section 4(b)(2) of the Act, we can exclude specific areas from critical habitat designations based in part on the existence of private or other non-Federal conservation plans or agreements and their attendant partnerships. A conservation plan or agreement describes actions that are designed to provide for the conservation needs of a species and its habitat, and may include actions to reduce or mitigate negative effects on the species caused by activities on or adjacent to the area covered by the plan. However, there are no current management actions set forth that pertain directly to the needs of narrow-headed gartersnake critical habitat.

With respect to NMDGF's request to exclude the Glenwood State Fish Hatchery along Whitewater Creek, we are not excluding the area from this final rule for the reasons mentioned above. NMDGF has demonstrated a willingness to partner with the Service in conservation planning for several species in New Mexico, including recovery actions for listed fish species that occur in the Gila River subbasin. Our collaborative relationship with NMDGF in the conservation arena makes a difference in our partnership with the numerous stakeholders involved in aquatic species recovery and management, and influences our ability to form partnerships with others, and we will continue to collaborate on conservation efforts now and into the future.

Private or Other Non-Federal Conservation Plans Related to Permits Under Section 10 of the Act

HCPs for incidental take permits under section 10(a)(1)(B) of the Act provide for partnerships with non-Federal entities to minimize and mitigate impacts to listed species and

their habitat. In some cases, HCP permittees agree to do more for the conservation of the species and their habitats on private lands than designation of critical habitat would provide alone. We place great value on the partnerships that are developed during the preparation and implementation of HCPs.

CCAAs and SHAs are voluntary agreements designed to conserve candidate and listed species, respectively, on non-Federal lands. In exchange for actions that contribute to the conservation of species on non-Federal lands, participating property owners are covered by an ''enhancement of survival'' permit under section 10(a)(1)(A) of the Act, which authorizes incidental take of the covered species that may result from implementation of conservation actions, specific land uses, and, in the case of SHAs, the option to return to a baseline condition under the agreements. The Service also provides enrollees assurances that we will not impose further land-, water-, or resource-use restrictions, or require additional commitments of land, water, or finances, beyond those agreed to in the agreements.

When we undertake a discretionary section 4(b)(2) exclusion analysis based on permitted conservation plans such as CCAAs, SHAs, and HCPs, we consider the following three factors:

(i) Whether the permittee is properly implementing the conservation plan or agreement;

(ii) Whether the species for which critical habitat is being designated is a covered species in the conservation plan or agreement; and

(iii) Whether the conservation plan or agreement specifically addresses the habitat of the species for which critical habitat is being designated and meets the conservation needs of the species in the planning area.

We are not excluding any areas under private or other non-Federal conservation plans related to permits under section 10 of the Act.

Tribal Lands

Several Executive Orders, Secretarial Orders, and policies concern working with Tribes. These guidance documents generally confirm our trust responsibilities to Tribes, recognize that Tribes have sovereign authority to control Tribal lands, emphasize the importance of developing partnerships with Tribal governments, and direct the Service to consult with Tribes on a government-to-government basis. When we undertake a discretionary 4(b)(2) exclusion analysis, we will always consider exclusion of Tribal lands, and give great weight to Tribal concerns in analyzing the benefits of exclusion. However, Tribal concerns are not a factor in determining what areas, in the first instance, meet the definition of ''critical habitat.''

A joint Secretarial Order that applies to both the Service and the National Marine Fisheries Service (NMFS)—Secretarial Order 3206, *American Indian Tribal Rights, Federal–Tribal Trust Responsibilities, and the Endangered Species Act* (June 5, 1997) (S.O. 3206)—is the most comprehensive of the various guidance documents related to Tribal relationships and Act implementation, and it provides the most detail directly relevant to the designation of critical habitat. In addition to the general direction discussed above, the Appendix to S.O. 3206 explicitly recognizes the right of Tribes to participate fully in any listing process, including designation of critical habitat. S.O. 3206 also states that critical habitat shall not be designated on Indian lands unless such areas are determined essential to conserve a listed species. In designating critical habitat, the Service and NMFS shall evaluate and document the extent to which the conservation needs of the listed species can be achieved by limiting the designation to other lands. In light of this instruction, when we undertake a discretionary section 4(b)(2) exclusion analysis, we will always consider exclusions of Tribal lands under section 4(b)(2) of the Act prior to finalizing a designation of critical habitat, and will give great weight to Tribal concerns in analyzing the benefits of exclusion (see Policy Regarding Implementation of Section 4(b)(2) of the Endangered Species Act (81 FR 7226; February 11, 2016)).

However, S.O. 3206 does not preclude us from designating Tribal lands or waters as critical habitat, nor does it state that Tribal lands or waters cannot meet the Act's definition of ''critical habitat.'' We are directed by the Act to identify areas that meet the definition of ''critical habitat'' (*i.e.,* areas occupied at the time of listing that contain the essential PBFs that may require special management or protection and unoccupied areas that are essential to the conservation of a species), without regard to landownership. While S.O. 3206 provides important direction, it expressly states that it does not modify the Secretaries' statutory authority. Our Policy Regarding Implementation of Section 4(b)(2) of the Endangered Species Act (81 FR 7226; February 11, 2016) similarly makes clear that while giving great weight to Tribal concerns, such concerns are not a factor in determining what areas, in the first instance, meet the definition of ''critical habitat.''

I. Eagle Creek Unit, Black River Subunit, and Bear Wallow Creek Subunit—San Carlos Apache Tribe Fishery Management Plan

We identified approximately 339 ac (137 ha) of narrow-headed gartersnake critical habitat that occurs on San Carlos Apache Tribe lands within portions of the Eagle Creek Unit (236 ac (96 ha)), Black River Subunit (55 ac (22 ha)), and Bear Wallow Creek Subunit (48 ac (19 ha)).

The San Carlos Apache Tribe manages a land area over 1.8 million ac (≤728,435 ha) in size, ranging in elevation from 2,400 ft (732 m) to 8,000 ft (2,440 m), in the east-central region of Arizona. In 2005, the San Carlos Apache Recreation and Wildlife Department finalized the San Carlos Apache Tribe Fishery Management Plan (SCAT FMP; San Carlos Apache Tribe 2005, entire), which prescribes fisheries management objectives across their reservation. The SCAT FMP addresses both management of nonnative sportfish (a source of revenue for the Tribe) in reservoirs, stock tanks, and streams, but also contains management objectives for native fish. With respect to nonnative sportfish, primary management areas include San Carlos Reservoir, Talkalai Lake, Seneca Lake, Point of Pines Lake, and Dry Lake (San Carlos Apache Tribe 2005, p. 4). Stock tanks of larger size are also managed for sportfish. Approximately 30 stock tanks on the reservation support recreational sport fishing activities. However, erosion and lack of maintenance of these tanks have rendered many tanks too shallow to support this use, and many tanks have gone dry (San Carlos Apache Tribe 2005, p. 5). Approximately 170 miles (273 kilometers) of perennial rivers occur on the reservation where sport fishing is managed, including the Black, Salt, Gila, San Carlos, and Blue Rivers, as well as Eagle, Willow, Bear Wallow, and Bonita Creeks (San Carlos Apache Tribe 2005, pp. 5–6). Of these streams on the reservation, narrow-headed gartersnakes are known to occur along the Black River, Eagle Creek, and Bear Wallow Creek.

In general, natural resource management on the San Carlos Apache Reservation is guided by a collection of resolutions and management plans that cover such topics as wildland fire, forest, and range, including specific management plans for southwestern willow flycatchers and Mexican spotted owls (*Strix occidentalis lucida*) (San Carlos Apache Tribe 2005, p. 50). The

SCAT FMP is tiered off the Tribe's integrated resource management plan, which is further tiered to their strategic plan (San Carlos Apache Tribe 2005, p. 50).

The SCAT FMP ''sets the framework to conserve, enhance, and restore nongame, threatened and endangered native fish and their habitats as part of the overall natural diversity found on the Reservation for the enjoyment by present and future generations'' (San Carlos Apache Tribe 2005, p. 63). The SCAT FMP has six goals relevant to native fish management, each of which has identified objectives, actions, and evaluations (San Carlos Apache Tribe 2005, pp. 63–71).

The first goal is to develop and implement integrated, watershed-based approaches to fishery resource management. The primary objective of this goal is to identify native fish management units within each of the six subbasins on the Reservation and develop initial management recommendations for each management unit (San Carlos Apache Tribe 2005, p. 64). Implementing this objective requires the identification of needs for native fish within each management unit. Evaluation for meeting this objective includes considering which native fish occur and where, developing decision-based criteria, comparing the value of native fish to that of its relative sport fish value, and determining future management recommendations for the best overall use of each management unit (San Carlos Apache Tribe 2005, p. 64).

The second goal under the SCAT FMP is to ''conserve, enhance, and maintain existing native fish populations and their habitats as part of the natural diversity of the Reservation as a home and abiding place for Tribal members'' (San Carlos Apache Tribe 2005, p. 65). Five objectives are identified to implement this goal: Developing a survey program, determining the status of natives fishes within streams on the Reservation and possible corrective actions to improve their status where necessary, prioritizing research needs, developing an ''Adopt a Stream'' program to facilitate monitoring and protection of aquatic and riparian resources, and developing a contingency plan to address catastrophic drought and wildfire events (San Carlos Apache Tribe 2005, p. 67).

The third goal of the SCAT FMP is to restore extirpated fishes and degraded natural habitats when appropriate and economically feasible. To accomplish this goal, the Tribe develops and implements guidelines for reintroduction, translocation, and reestablishment of native fishes and their habitats by completing a needs assessment for native fishes on the Reservation (San Carlos Apache Tribe 2005, pp. 67–68).

The fourth goal of the SCAT FMP is to prevent, minimize, or mitigate adverse impacts to all native fishes, particularly threatened or endangered species, and their habitats when consistent with the Reservations values as a home and abiding place for Tribal members. Five actions are listed to achieve this goal: Participation in section 7 consultations; participation in the Tribal integrated resource management planning process; literature reviews pertaining to best practices and alternative uses; education and demonstrations to benefit Tribal Cattle Association members; and the review and recommendation of land use practices, policies, and plans to minimize adverse impacts to native fish and their habitats (San Carlos Apache Tribe 2005, pp. 68–69).

The fifth goal of the SCAT FMP includes education to increase Tribal awareness of native fish conservation and values through identification of Tribal perceptions and attitudes regarding native fish. A minimum of once per year, the Tribe plans and participates in public workshops that discuss native fish biology, conservation, and management. In addition to these topics, at these workshops the Tribe discusses how to reduce impacts and improve status of native fishes (San Carlos Apache Tribe 2005, pp. 69–70).

The final goal of the SCAT FMP requires the Tribe to pursue funding to support all previously stated goals and objectives outlined in the SCAT FMP (San Carlos Apache Tribe 2005, p. 70).

Benefits of Inclusion—San Carlos Apache Tribe Fishery Management Plan

As discussed above under Effects of Critical Habitat Designation, *Section 7 Consultation,* Federal agencies, in consultation with the Service, must ensure that their actions are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of any designated critical habitat of such species. The difference in the costs or outcomes of the jeopardy analysis and the adverse modification analysis represents the regulatory benefit of critical habitat. A critical habitat designation requires Federal agencies to consult on whether their activity would destroy or adversely modify critical habitat to the point where recovery could not be achieved.

Because the species occurs in Eagle Creek, Black River, and Bear Wallow Creek, the benefits of a critical habitat designation are reduced to the possible incremental benefit of critical habitat because the designation would not be the sole catalyst for initiating section 7 consultation. However, should a catastrophic event such as disease, drought, wildfire, chemical spill, etc., result in potential or statistically-proven, actual extirpation of the gartersnake population in this area, designation of critical habitat would ensure future Federal actions do not result in adverse modification of critical habitat, allowing for future recovery actions to occur.

Were we to designate critical habitat on these Tribal lands, our section 7 consultation history indicates that there may be some, but few, regulatory benefits to the narrow-headed gartersnake. As described above, even with narrow-headed gartersnakes occurring on these Tribal lands, no formal section 7 consultations have yet to occur. When we review future projects addressing the narrow-headed gartersnake pursuant to section 7 of the Act in Arizona, we will examine conservation measures associated with the project for their value in the conservation of narrow-headed gartersnakes or their habitat. Where there is consistency with managing habitat and implementing suitable conservation measures, it would be unlikely that a consultation would result in a determination of adverse modification of critical habitat. Therefore, when the threshold for adverse modification is not reached, only additional conservation recommendations could result from a section 7 consultation, but such measures would be discretionary on the part of the Federal agency.

Another important benefit of including lands in a critical habitat designation is that the designation can serve to inform and educate landowners and the public regarding the potential conservation value of an area, and may help focus management efforts on areas of high value for certain species. The Tribe, through their Recreation and Wildlife Department, surveys all proposed home and construction projects, and provides information from the SCAT FMP for use in negotiating water exchanges and in determining mitigation measures for projects that may impact listed species or their habitat. Therefore, the Recreation and Wildlife Department has an opportunity to provide information regarding the species and its habitat across the Reservation. In addition, the Tribe has

adopted an interdisciplinary team approach to all natural resources matters. The team works together to provide an ecosystem management approach in developing strategic plans and management plans. Through this team, Tribal members can be informed of steps necessary to conserve native fish and their habitat as the prey base for narrow-headed gartersnakes.

Another possible benefit of the designation of critical habitat is that it may also affect the implementation of Federal laws, such as NEPA or the Clean Water Act. These laws require analysis of the potential for proposed projects to significantly affect the environment. Critical habitat may signal the presence of sensitive habitat that could otherwise be missed in the review process for these other environmental laws.

Therefore, because of the development and implementation of a management plan, ongoing habitat conservation, the rare initiation of formal section 7 consultations, the occurrence of narrow-headed gartersnakes on Tribal lands, and the Service's coordination with Tribes on gartersnake-related issues, it is expected that there may be some, but limited, benefits from including these Tribal lands in a narrow-headed gartersnake critical habitat designation. The principal benefit of any designated critical habitat is that activities in and affecting such habitat require consultation under section 7 of the Act. Such consultation would ensure that adequate protection is provided to avoid destruction or adverse modification of critical habitat.

Benefits of Exclusion—San Carlos Apache Tribe Fishery Management Plan

The benefits of excluding San Carlos Apache Tribe lands from designated critical habitat in portions of Eagle Creek, Black River, and Bear Wallow Creek include: (1) Demonstrating our commitment to defer to the Tribe to develop and implement conservation and natural resource management plans for their lands and resources, which includes benefits to the narrow-headed gartersnake and its habitat that might not otherwise occur; (2) the continuance and strengthening of our effective working relationships with the Tribe to promote conservation of narrow-headed gartersnakes through that of native fish and their habitat, as well as other federally listed species; and (3) promoting continued meaningful collaboration and cooperation in working toward recovering native aquatic communities, including narrow-headed gartersnake habitat.

Because the Tribe is the entity that enforces protective regulations on Tribal trust reservation land, and because we have a working relationship with them, we believe exclusion of these lands will yield a significant partnership benefit. The Tribe is coordinating with the AGFD and the Service on surveys and captive propagation plans for native fish, which furthers conservation of narrow-headed gartersnakes. We continue to work cooperatively with the Tribe on efforts to conserve spikedace and loach minnow on the Reservation, which benefits other native fish as the primary prey base for narrow-headed gartersnakes.

During this rulemaking process, we have communicated with the San Carlos Apache Tribe to discuss how they might be affected by the regulations associated with listing and designating critical habitat for the narrow-headed gartersnake. We have determined that the San Carlos Apache Nation should be the governmental entity to manage and promote narrow-headed gartersnake conservation on their lands. During our coordination efforts with the San Carlos Apache Tribe, we recognized and endorsed their fundamental right to provide for Tribal resource management activities, including those relating to aquatic habitat that supports narrow-headed gartersnakes. As outlined above, the San Carlos Apache Tribe has developed and implemented a fisheries management plan specific to needs of prey and habitat for narrow-headed gartersnakes. Overall, the commitments toward management of narrow-headed gartersnake habitat by the San Carlos Apache Tribe will likely accomplish greater conservation than would be available through a designation of critical habitat.

The designation of critical habitat would be viewed as an intrusion and impact the Tribe's sovereign ability to manage natural resources in accordance with their own policies, customs, and laws. These impacts include, but are not limited to: (1) Limiting the San Carlos Apache Tribe's ability to protect and control its own resources on its lands; (2) undermining the positive and effective government-to-government relationship between the Tribe and the Service—a relationship that serves to protect federally listed species and their habitat; and (3) hampering or confusing the Tribe's own long-standing protections for the Eagle Creek, Black River, and Bear Wallow Creek. The perceived restrictions of a critical habitat designation could have a damaging effect on coordination efforts, possibly preventing actions that might maintain, improve, or restore habitat for the narrow-headed gartersnake and other species. We view this as a substantial benefit since we have developed a cooperative working relationship with the Tribe for the mutual benefit of the gartersnake and other endangered and threatened species.

In addition, we anticipate that future management plans, including additional conservation efforts for other listed species and their habitats, may be hampered if critical habitat is designated on Tribal lands already being managed for sensitive species conservation. We have determined that many Tribes are willing to work cooperatively with us and others to benefit other listed and sensitive species, but only if they view the relationship as mutually beneficial. Consequently, the development of future voluntary management actions for other listed species may be compromised if these Tribal lands are designated as critical habitat for the narrow-headed gartersnake. Thus, a benefit of excluding these lands would be future conservation efforts that would benefit other listed or sensitive species.

Benefits of Exclusion Outweigh the Benefits of Inclusion—San Carlos Apache Tribe Fishery Management Plan

The benefits of including San Carlos Apache Tribal lands in the critical habitat designation are limited to the incremental benefits gained through the regulatory requirement to consult under section 7, the consideration of the need to avoid adverse modification of critical habitat, and interagency and educational awareness. However, due to the rarity of Federal actions resulting in formal section 7 consultations, the benefits of a critical habitat designation are minimized. In addition, the benefits of consultation are further minimized because any conservation measures that may have resulted from consultation are already provided through the conservation benefits to the narrow-headed gartersnake and its habitat from implementation of the SCAT FMP.

The Tribe has indicated a commitment to traditional ecological knowledge (TEK), which uses an ecosystem-based approach to land and species management and preservation. In addition, they have developed the Fisheries Management Plan, which benefits spikedace and loach minnow specifically and, by extension, all native fish, by discontinuing nonnative fish stocking in areas important for their conservation. Further, the Tribe is working with both the Service and the AGFD to these ends.

The Tribe has focused on known areas of concern for the species' management and has discontinued stocking of nonnative fishes in some areas, including the Eagle Creek watershed. The Fisheries Management Plan contains goals of conserving and enhancing native fishes on the Reservation; restoring native fishes and their habitats; and preventing, minimizing, or mitigating impacts to native fishes, among others. In addition, the Tribe has indicated that, through TEK, they practice an ecosystem-based approach to land- and species-based management and preservation. We conclude that the benefits to be gained through the Fisheries Management Plan, coordination with the Service and AGFD, discontinuance of sportfish stocking, and proactive measures for native fish all indicate that the Tribe has committed to conservation measures that exceed benefits to be gained through a critical habitat designation. Collectively, these measures help secure native fish communities on the Reservation, which are critical to the continued survival of the narrow-headed gartersnake. As a result, we have determined that the benefits of excluding these Tribal lands from critical habitat designation outweigh the benefits of including these areas.

Exclusion Will Not Result in Extinction of the Species—San Carlos Apache Tribe Fisheries Management Plan

We have determined that exclusion of San Carlos Apache Tribe lands from the critical habitat designation will not result in the extinction of the narrow-headed gartersnake. We base this determination on several points. First, as discussed above under Effects of Critical Habitat Designation, *Section 7 Consultation,* if a Federal action or permitting occurs, the known presence of narrow-headed gartersnakes would require evaluation under the jeopardy standard of section 7 of the Act, even absent the designation of critical habitat, and thus will protect the species against extinction. Second, the San Carlos Apache Tribe has a long-term record of conserving species and habitat and is committed to protecting and managing narrow-headed gartersnake habitat according to their cultural history, management plans, and natural resource management objectives. We have determined that this commitment accomplishes greater conservation than would be available through a designation of critical habitat. For these reasons, we have determined that our working relationships with the Tribe would be better maintained if we excluded their lands from the designation of narrow-headed gartersnake critical habitat. With the implementation of these conservation measures, based upon strategies developed in the SCAT FMP, we have concluded that the benefits of excluding the San Carlos Apache Tribe lands outweigh the benefits of their inclusion, and the exclusion of these lands from the designation will not result in the extinction of the species. As a result, we are excluding San Carlos Apache Tribe lands within the Eagle Creek Unit (236 ac (96 ha)), Black River Subunit (55 ac (22 ha)), and Bear Wallow Creek Subunit (48 ac (19 ha)).

II. Canyon Creek Unit, and Black River, Bear Wallow Creek, and Reservation Creek Subunits—White Mountain Apache Tribe Native Fishes Management Plan

We identified approximately 169 ac (68 ha) of narrow-headed gartersnake critical habitat that occurs on White Mountain Apache Tribe lands within portions of the Black River Subunit (56 ac (23 ha)), Bear Wallow Creek Subunit (<0.01 ac (<0.01 ha)), Reservation Creek Subunit (36 ac (15 ha)), and Canyon Creek Unit (77 ac (31 ha)).

The White Mountain Apache Tribe's Fort Apache Indian Reservation encompasses approximately 1,680,000 acres in east-central Arizona, ranging in elevation from 11,590 to 2,640 ft (White Mountain Apache Tribe 2014, p. 1). A total of 23 artificial reservoirs were created on the Reservation to provide recreational opportunities such as fishing, boating, and camping permits (White Mountain Apache Tribe 2014, p. 1). The White Mountain Apache Tribe Native Fishes Management Plan (WMAT NFMP) identified native fish species that are historically known from the Reservation and provides available information on their current status and distribution. The WMAT NFMP also identified significant stressors to native fish, which include dewatering, sedimentation, mechanical stream channel alteration, and interactions with nonnative aquatic species. The WMAT NFMP lists guidance- and direction-related documents, management plans, ordinances and codes, and Tribal resolutions that help address these issues and many others which could affect natural resources on the Reservation and are currently in effect (White Mountain Apache Tribe 2014, pp. 11–15). These guidance documents include the Tribe's 2000 Loach Minnow Management Plan and Resolution #89–149, which designates streams and riparian zones as Sensitive Fish and Wildlife areas, requiring that authorized programs ensure these zones remain productive for fish and wildlife.

The primary purpose of the WMAT NFMP is to ''promote the practical and effective long-term conservation of all native fish populations and their habitats found on the Reservation'' (White Mountain Apache Tribe 2014, p. 19). The WMAT NFMP ''sets the framework to conserve, enhance, and if possible, restore non-game, threatened and endangered native fish and their habitats as part of the overall natural diversity found on the Reservation for the enjoyment of present and future generations of Apache people'' (White Mountain Apache Tribe 2014, p. 19). To accomplish this, four primary goals are set forth in the WMAT NFMP.

The first goal of the WMAT NFMP is to conserve and maintain existing native fish populations and their habitats as part of the natural diversity of the Reservation when consistent with the Reservation as a homeland for White Mountain Apache Tribal members (White Mountain Apache Tribe 2014, p. 20). To accomplish this, via literature review and expert consultation, the Tribe developed a protocol for standardized sampling and data analysis specific to the inventory, survey, population modeling, monitoring, and other management techniques for all native fishes and their habitats. This protocol will be used to determine the current distribution and relative abundance of all native fishes and their habitats, with an emphasis on rare or sensitive species in order to identify native fish management units within each of the watersheds on the Reservation to develop initial management recommendations for each (White Mountain Apache Tribe 2014, p. 20). The Tribe has also committed to updating the Loach Minnow Management Plan as well as follow the management strategies in the Apache Trout Recovery Plan. These actions will help develop research needs and implement research in the field. Under this first goal, the Tribe also intends to develop an ''Adopt-a-Lake/Stream'' program, where Tribal members volunteer to help monitor and protect aquatic riparian resources (White Mountain Apache Tribe 2014, p. 23).

The second goal of the WMAT NFMP is to enhance native fish populations and degraded natural habitats when appropriate and economically feasible by: (1) Developing guidelines for enhancing native fish populations and their habitats; (2) investigating available funding opportunities and requirements to support all Tribal conservation and management activities for all native fishes, their habitats, and other listed

aquatic and riparian obligate species and their habitats; (3) developing proposals to secure funding necessary to continue conservation and management activities that will benefit all existing native fishes, their habitats, and other listed aquatic and riparian obligate species and their habitats; and (4) restoring and enhancing native fish habitats and populations according to guidance developed (White Mountain Apache Tribe 2014, pp. 24–25).

The third goal of the WMAT NFMP is to prevent, minimize, or mitigate adverse impacts to all native fishes, especially threatened or endangered, and their habitats when consistent with the purpose of the Reservation as a permanent homeland for White Mountain Apache Tribal members by: (1) Identifying species and habitat types that are declining or imperiled, or likely to become imperiled, in the foreseeable future and the threats causing decline; (2) identifying possible corrective actions needed to limit or mitigate adverse impacts to native fish and their habitats where appropriate and economically feasible, including consideration of threats and mitigation measures to multiple listed candidate or proposed aquatic or riparian obligate species; and (3) collaborating with others to maintain or enhance native fish populations and their habitats or prevent avoidable and mitigate unavoidable losses (White Mountain Apache Tribe 2014, pp. 25–27).

The fourth and final goal of the WMAT NFMP focuses on increasing Tribal awareness of native fish conservation and values. The WMAT NFMP proposes to accomplish this by: (1) Identifying Tribal perceptions and attitudes regarding nongame, threatened, and endangered native fishes; (2) annually developing, sponsoring, and participating in educational workshops and presentations pertaining to the biology, conservation, and management of nongame, threatened, or endangered native fishes and their habitats; and (3) informing the Tribe of the status of nongame, threatened, and endangered native fishes and threats to their protection and maintenance, and Tribal actions to reduce or eliminate such adverse impacts (White Mountain Apache Tribe 2014, pp. 28–29).

The White Mountain Apache Tribe has a process to review and approve all development activities on the Reservation. The Tribal Plan and Project Review Panel, among other things, investigates impacts to sensitive habitats and species, and provides for the implementation of mitigation measures to avoid adverse impacts to those resources. To assist, the White Mountain Apache Tribe has a full-time Sensitive Species Coordinator and Technician who coordinates and participates in protection, research, management, and administrative activities involving Federally listed sensitive species on the Reservation.

The White Mountain Apache Tribe's Loach Minnow Management Plan also provides transitory benefits to narrow-headed gartersnake conservation. The goals of the Loach Minnow Management Plan are to determine and quantify the full extent of loach minnow distribution on the Reservation; continue to develop and strengthen management actions that effectively address species threats and that provide adequate protection for, and sustainability of, existing Reservation loach minnow populations and habitats; complete the development and ongoing maintenance of Tribal data, information, and mapping for this and other native fish species; and evaluate and refine the application of Plan management practices, over time, in a manner that promotes the practical and effective long-term conservation of all Reservation native fish populations and assemblages, including those of loach minnow (White Mountain Apache Tribe 2000).

The Loach Minnow Management Plan provides an action and strategy outline with eight steps that provide additional detail on how they will be carried out. The eight steps of the management plan that may affect PBFs of the narrow-headed gartersnake include:

- Determining the distribution of loach minnow within Reservation boundaries;
- Continuing routine surveys and expanding efforts to include habitat assessment;
- Continuing to monitor and refine existing management treatments involving irrigation uses and activities to develop adequate mitigation against related threats;
- Continuing to apply and refine existing monitoring and mitigation protocols involving low water and/or drought conditions to provide sustainable protection of loach minnow populations;
- Developing contingency plans with responses to potential catastrophic events;
- Evaluating and refining existing nonnative fish management and mitigation practices to provide sustainable protection of loach minnow populations and habitat;
- Organizing data collection, handling, storage, and maintenance among partners; and
- Continuing to monitor and refine existing Tribal Plan and Project Review Process, management plans, and practices to meet loach minnow and native fish management goals.

Benefits of Inclusion—White Mountain Apache Tribe Native Fishes Management Plan

As discussed above under Effects of Critical Habitat Designation, *Section 7 Consultation,* Federal agencies, in consultation with the Service, must ensure that their actions are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of any designated critical habitat of such species. The difference in the costs or outcomes of the jeopardy analysis and the adverse modification analysis represents the regulatory benefit of critical habitat. A critical habitat designation requires Federal agencies to consult on whether their activity would destroy or adversely modify critical habitat to the point where recovery could not be achieved.

Because the species occurs in the area, the benefits of a critical habitat designation are reduced to the possible incremental benefit of critical habitat because the designation would not be the sole catalyst for initiating section 7 consultation. However, should a catastrophic event such as disease, drought, wildfire, chemical spill, etc., result in potential or statistically-proven, actual extirpation of the gartersnake population in this area, designation of critical habitat would ensure future Federal actions do not result in adverse modification of critical habitat, allowing for future recovery actions to occur.

Were we to designate critical habitat on these Tribal lands, our section 7 consultation history indicates that there may be some, but few, regulatory benefits to the narrow-headed gartersnake. As described above, even with narrow-headed gartersnakes occurring on these Tribal lands, formal section 7 consultations have yet to occur. When we review future projects addressing the narrow-headed gartersnake pursuant to section 7 of the Act in Arizona, we examine conservation measures associated with the project for their value in the conservation of narrow-headed gartersnakes or their habitat. Where there is consistency with managing habitat and implementing suitable conservation measures, it would be unlikely that a consultation would result in a determination of adverse modification of critical habitat. Therefore, when the threshold for

adverse modification is not reached, only additional conservation recommendations could result from a section 7 consultation, but such measures would be discretionary on the part of the Federal agency.

Another important benefit of including lands in a critical habitat designation is that the designation can serve to inform and educate landowners and the public regarding the potential conservation value of an area, and may help focus management efforts on areas of high value for certain species. The White Mountain Apache Tribe has developed management plans for the loach minnow and native fish in general, and currently employs a Sensitive Species Coordinator through which education of Tribal members can occur without critical habitat designation. In addition, Tribal fisheries biologists participate in review of development projects and timber sales and can work to educate project proponents of the species' needs.

Another possible benefit of the designation of critical habitat is that it may also affect the implementation of Federal laws, such as NEPA or the Clean Water Act. These laws require analysis of the potential for proposed projects to significantly affect the environment. Critical habitat may signal the presence of sensitive habitat that could otherwise be missed in the review process for these other environmental laws.

Therefore, because of the development and implementation of a native fish management plan, ongoing habitat conservation, the rare initiation of formal section 7 consultations, the occurrence of narrow-headed gartersnakes on Tribal lands, and the Service's coordination with Tribes on gartersnake-related issues, it is expected that there may be some, but limited, benefits from including these Tribal lands in a narrow-headed gartersnake critical habitat designation. The principal benefit of any designated critical habitat is that activities in and affecting such habitat require consultation under section 7 of the Act. Such consultation would ensure that adequate protection is provided to avoid destruction or adverse modification of critical habitat.

Benefits of Exclusion—White Mountain Apache Tribe Native Fishes Management Plan

The benefits of excluding White Mountain Apache Tribe lands from designated critical habitat in portions of Black River, Bear Wallow Creek, and Reservation Creek subunits, and in Canyon Creek Unit include: (1) Our deference to the Tribe to develop and implement conservation and natural resource management plans for their lands and resources, which includes benefits to the narrow-headed gartersnake and its habitat that might not otherwise occur; (2) the continuance and strengthening of our effective working relationships with the Tribe to promote conservation of narrow-headed gartersnakes through that of native fish and their habitat, as well as other federally listed species; and (3) promoting continued meaningful collaboration and cooperation in working toward recovering native aquatic communities, including narrow-headed gartersnake habitat.

Taken individually or collectively, the White Mountain Apache Tribe's commitments to the conservation of riparian and aquatic habitats and the native fishes that depend on them offers a strong foundation for future conservation of the narrow-headed gartersnake. As we have carefully detailed in this and previous rulemakings pertaining to the narrow-headed gartersnake, the protection, conservation, and recovery of native fish communities is of utmost importance to the continued existence of the narrow-headed gartersnake because this species is a predatory specialist which preys only on fish. Therefore, the conservation of native fish communities will provide the suite of protections required to sustain its prey base and maintain gartersnake populations on the Reservation and elsewhere such protections are afforded.

During this rulemaking process, we have communicated with the White Mountain Apache Tribe to discuss how they might be affected by the regulations associated with listing and designating critical habitat for the narrow-headed gartersnake. We have determined that the White Mountain Apache Tribe should be the governmental entity to manage and promote narrow-headed gartersnake conservation on their lands. During our coordination efforts with the White Mountain Apache Tribe, we recognized and endorsed their fundamental right to provide for Tribal resource management activities, including those relating to aquatic habitat that supports narrow-headed gartersnakes. As outlined above, the White Mountain Apache Tribe has developed and implemented a native fishes management plan specific to needs of prey and habitat for narrow-headed gartersnakes. Overall, the commitments toward management of narrow-headed gartersnake habitat by the White Mountain Apache Tribe will likely accomplish greater conservation than would be available through a designation of critical habitat.

The designation of critical habitat would be viewed as an intrusion and impact their sovereign abilities to manage natural resources in accordance with the Tribe's own policies, customs, and laws. These impacts include, but are not limited to: (1) Limiting the White Mountain Apache Tribe's ability to protect and control its own resources on its lands; (2) undermining the positive and effective government-to-government relationship between the Tribe and the Service—a relationship that serves to protect federally listed species and their habitat; and (3) hampering or confusing the Tribe's own long-standing protections for the Black River, Reservation Creek, Bear Wallow Creek, and Canyon Creek. The perceived restrictions of a critical habitat designation could have a damaging effect on coordination efforts, possibly preventing actions that might maintain, improve, or restore habitat for the narrow-headed gartersnake and other species. Our working relationships with the Tribe would be better maintained if we excluded their lands from the designation of narrow-headed gartersnake critical habitat. We view this as a substantial benefit since we have developed a cooperative working relationship with the White Mountain Apache Tribe for the mutual benefit of the narrow-headed gartersnake and other endangered and threatened species.

Benefits of Exclusion Outweigh the Benefits of Inclusion—White Mountain Apache Tribe Native Fishes Management Plan

The benefits of including White Mountain Apache Tribal lands in the critical habitat designation are limited to the incremental benefits gained through the regulatory requirement to consult under section 7, the consideration of the need to avoid adverse modification of critical habitat, and interagency and educational awareness. However, due to the rarity of Federal actions resulting in formal section 7 consultations, the benefits of a critical habitat designation are minimized. In addition, the benefits of consultation are further minimized because any conservation measures that may have resulted from consultation are already provided through the conservation benefits to the narrow-headed gartersnake and its habitat from implementation of the White Mountain Apache Tribe Native Fishes Management Plan.

The White Mountain Apache Tribe clearly explained their sovereign

authority to promulgate regulations and management plans to protect and manage Tribal trust lands, wildlife, forests, and other natural resources, and cited numerous authorities that confirm their authority over wildlife and other natural resources existing within their ancestral lands. In addition, they have shown a commitment to other federally listed species, such as the loach minnow and Mexican spotted owl.

Based on our working relationship with the White Mountain Apache Tribe, their demonstration of conservation through past efforts, and the protective provisions of the WMAT NFMP and Loach Minnow Management Plan, we have determined that the benefits of excluding these Tribal lands from critical habitat designation outweigh the benefits of including these areas.

Exclusion Will Not Result in Extinction of the Species—White Mountain Apache Tribe Native Fishes Management Plan

We have determined that exclusion of White Mountain Apache Tribe lands from the critical habitat designation will not result in the extinction of the narrow-headed gartersnake. We base this determination on several points. First, as discussed above under Effects of Critical Habitat Designation, *Section 7 Consultation,* if a Federal action or permitting occurs, the known presence of narrow-headed gartersnakes would require evaluation under the jeopardy standard of section 7 of the Act, even absent the designation of critical habitat, and thus will protect the species against extinction. Second, the White Mountain Apache Tribe has a long-term record of conserving species and habitat and is committed to protecting and managing narrow-headed gartersnake habitat according to their cultural history, management plans, and natural resource management objectives. We have determined that this commitment accomplishes greater conservation than would be available through a designation of critical habitat. With the implementation of these conservation measures, based upon strategies developed in the WMAT NFMP and Loach Minnow Management Plan, we have determined that the benefits of excluding the White Mountain Apache Tribe lands outweigh the benefits of their inclusion, and the exclusion of these lands from the designation will not result in the extinction of the species. As a result, we are excluding White Mountain Apache Tribe lands within the Black River Subunit (56 ac (23 ha)), Bear Wallow Creek Subunit (<0.01 ac (<0.01 ha)), Reservation Creek Subunit (36 ac (15 ha)), and Canyon Creek Unit (77 ac (31 ha)).

Summary of Exclusions Under 4(b)(2) of the Act

Table 2 below presents areas of lands that meet the definition of critical habitat but for which we are excluding from this final critical habitat designation for the narrow-headed gartersnake.

TABLE 2—AREAS EXCLUDED FROM CRITICAL HABITAT DESIGNATION BY CRITICAL HABITAT UNIT FOR THE NARROW-HEADED GARTERSNAKE

Unit subunit	Landowner, property name	Proposed critical habitat (ac (ha))	Area excluded (ac (ha))	Final critical habitat (ac (ha))
		Eagle Creek Unit		
Eagle Creek	San Carlos Apache Tribe	336 (136)	236 (96)	100 (41)
Unit total being excluded			236 (96)	
		Black River Subbasin Unit		
Black River	San Carlos Apache Tribe	763 (309)	55 (22)	652 (264)
	White Mountain Apache Tribe		56 (23).	
Bear Wallow Creek	San Carlos Apache Tribe	174 (71)	48 (19)	126 (51)
	White Mountain Apache Tribe		<.01 (<.01)	
Reservation Creek	White Mountain Apache Tribe	132 (54)	36 (15)	96 (39)
Unit total being excluded			195 (79)	
		Canyon Creek Unit		
Canyon Creek	White Mountain Apache Tribe	232 (94)	77 (31)	155 (63)
Unit total being excluded			77 (31)	
Grand Total			508 (206).	

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. OIRA has determined that this rule is not significant.

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

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

Under the Regulatory Flexibility Act (RFA; 5 U.S.C. 601 *et seq.*), as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA; 5 U.S.C. 801 *et seq.*), whenever an agency is required to publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that

describes the effects of the rule on small entities (*i.e.,* 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 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 agricultural businesses with annual sales less than $750,000. To determine if potential economic impacts to these small entities are significant, we considered 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.

Under the RFA, as amended, and as understood in light of recent court decisions, Federal agencies are required to evaluate only the potential incremental impacts of rulemaking on those entities directly regulated by the rulemaking itself; in other words, the RFA does not require agencies to evaluate the potential impacts to indirectly regulated 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 out by the agency is not likely to destroy or adversely modify critical habitat. Therefore, under section 7, only Federal action agencies are directly subject to the specific regulatory requirement (avoiding destruction and adverse modification) imposed by critical habitat designation. Consequently, it is our position that only Federal action agencies will be directly regulated by this designation. There is no requirement under the RFA to evaluate the potential impacts to entities not directly regulated. Moreover, Federal agencies are not small entities. Therefore, because no small entities will be directly regulated by this rulemaking, the Service certifies that this final critical habitat designation will not have a significant economic impact on a substantial number of small entities.

During the development of this final rule, we reviewed and evaluated all information submitted during the comment period that may pertain to our consideration of the probable incremental economic impacts of this critical habitat designation. Based on this information, we affirm our certification that this final critical habitat designation will not have a significant economic impact on a substantial number of small entities, and a regulatory flexibility analysis is not required.

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. In our economic analysis, we did not find that this critical habitat designation will significantly affect energy supplies, distribution, or use. Therefore, this action is not a significant energy action, and no Statement of Energy Effects is required.

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 finding:

(1) This rule will 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 will significantly or uniquely affect small governments because the lands being designated for critical habitat are owned by private landowners, the States of New Mexico and Arizona, and the Federal Government (USFS, NPS, BLM, and Service). In addition, based in part on an analysis conducted for the previous proposed designation of critical habitat and extrapolated to this designation, we do not expect this rule to significantly or uniquely affect small governments. Small governments will be affected only to the extent that any

programs or actions requiring or using Federal funds, permits, or other authorized activities must ensure that their actions will not adversely affect the critical habitat. Further, we do not believe that this rule will significantly or uniquely affect small governments because it will not produce a Federal mandate of $100 million or greater in any year, that is, it is not a ''significant regulatory action'' under the Unfunded Mandates Reform Act. The designation of critical habitat imposes no obligations on State or local governments. Therefore, a Small Government Agency Plan is not required.

Takings—Executive Order 12630

In accordance with E.O. 12630 (Government Actions and Interference with Constitutionally Protected Private Property Rights), we have analyzed the potential takings implications of designating critical habitat for the narrow-headed gartersnake in a takings implications assessment. The Act does not authorize the Service to regulate private actions on private lands or confiscate private property as a result of critical habitat designation. Designation of critical habitat does not affect land ownership, or establish any closures, or restrictions on use of or access to the designated areas. Furthermore, the designation of critical habitat does not affect landowner actions that do not require Federal funding or permits, nor does it preclude development of habitat conservation programs or issuance of incidental take permits to permit actions that do require Federal funding or permits to go forward. However, Federal agencies are prohibited from carrying out, funding, or authorizing actions that would destroy or adversely modify critical habitat. A takings implications assessment has been completed and concludes this designation of critical habitat for the narrow-headed gartersnake does not pose significant takings implications for lands within or affected by the designation.

Federalism—Executive Order 13132

In accordance with E.O. 13132 (Federalism), this 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 critical habitat designation with, appropriate State resource agencies. From a federalism perspective, the designation of critical habitat directly affects only the responsibilities of Federal agencies. The Act imposes no other duties with respect to critical habitat, either for States and local governments, or for anyone else. As a result, the final rule does not have substantial direct effects either on the States, or on the relationship between the national government and the States, or on the distribution of powers and responsibilities among the various levels of government. The final designation may have some benefit to these governments because the areas that contain the features essential to the conservation of the species are more clearly defined, and the physical or biological features of the habitat necessary for 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 State and local governments in long-range planning because they no longer have to 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) of the Act will 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 will not unduly burden the judicial system and that it meets the requirements of sections 3(a) and 3(b)(2) of the Order. We are designating critical habitat in accordance with the provisions of the Act. To assist the public in understanding the habitat needs of the species, this rule identifies the physical or biological features essential to the conservation of the narrow-headed gartersnake. The designated areas of 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 information collection requirements, and a submission to the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*) is not required. We may not conduct or sponsor and you are not required to respond to a collection of information unless it displays a currently valid OMB control number.

National Environmental Policy Act (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 the NEPA 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)). However, when the range of the species includes States within the Tenth Circuit, such as that of the narrow-headed gartersnake, under the Tenth Circuit ruling in *Catron County Board of Commissioners* v. *U.S. Fish and Wildlife Service,* 75 F.3d 1429 (10th Cir. 1996), we undertake a NEPA analysis for critical habitat designation.

We performed the NEPA analysis, and the draft environmental assessment was made available for public comment with publication of the revised proposed critical habitat designation (85 FR 23608; April 28, 2020). We invited the public to comment on the extent to which the proposed critical habitat designation may have a significant impact on the human environment, or fall within one of the categorical exclusions for actions that have no individual or cumulative effect on the quality of the human environment. We received five comments during the comment period for the environmental assessment. Our environmental assessment found that the impacts of the revised proposed critical habitat designation would be minor and not rise to a significant level, so preparation of an environmental impact statement is not required. The final environmental assessment and finding of no significant impact has been completed and is available for review with the publication of this final rule. You may obtain a copy of the final environmental assessment online at *http://www.regulations.gov,* by contacting the Field Supervisor of the (see **FOR FURTHER INFORMATION CONTACT**), or on the Service's website at *https://www.fws.gov/southwest/es/arizona/*.

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 directly contacted GRIC, the White Mountain Apache Tribe, and the San Carlos Apache Tribe during the rulemaking process. We will continue to work on a government-to-government basis with Tribal entities on conservation of habitat after the designation of critical habitat for the narrow-headed gartersnake.

References Cited

A complete list of references cited in this rulemaking is available on the internet at *http://www.regulations.gov* and upon request from the Arizona Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

Authors

The primary authors of this final rule are the staff members of the Fish and Wildlife Service's Species Assessment Team and the Arizona Ecological Services Field Office.

List of Subjects in 50 CFR Part 17

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

Regulation Promulgation

Accordingly, we 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; and 4201–4245, unless otherwise noted.

■ 2. Amend § 17.11(h), the List of Endangered and Threatened Wildlife, by revising the entry for ''Gartersnake, narrow-headed'' under REPTILES to read as follows:

§ 17.11 Endangered and threatened wildlife.

* * * * *

(h) * * *

Common name	Scientific name	Where listed	Status	Listing citations and applicable rules
*	*	*	*	*
REPTILES				
*	*	*	*	*
Gartersnake, narrow-headed	*Thamnophis rufipunctatus*	Wherever found	T	79 FR 38678, 7/8/2014; 50 CFR 17.95(c).[CH]
*	*	*	*	*

■ 3. Amend § 17.95(c) by adding an entry for ''Narrow-headed Gartersnake (*Thamnophis rufipunctatus*)'' immediately following the entry for ''American Crocodile (*Crocodylus acutus*)'' to read as follows:

§ 17.95 Critical habitat—fish and wildlife.

* * * * *

(c) * * *

* * * * *

Narrow-headed Gartersnake (*Thamnophis rufipunctatus*)

(1) Critical habitat units are depicted for Greenlee, Apache, Yavapai, Gila, and Coconino Counties in Arizona, as well as in Grant, Hidalgo, and Catron Counties in New Mexico, on the maps in this entry.

(2) Within these areas, the physical or biological features essential to the conservation of narrow-headed gartersnake consist of the following components:

(i) Perennial streams or spatially intermittent streams that provide both aquatic and terrestrial habitat that allows for immigration, emigration, and maintenance of population connectivity of narrow-headed gartersnakes and contain:

(A) Pools, riffles, and cobble and boulder substrate, with a low amount of fine sediment and substrate embeddedness;

(B) Organic and natural inorganic structural features (*e.g.,* cobble bars, rock piles, large boulders, logs or stumps, aquatic vegetation, vegetated islands, logs, and debris jams) in the stream channel for basking, thermoregulation, shelter, prey base maintenance, and protection from predators;

(C) Water quality that meets or exceeds applicable State surface water quality standards; and

(D) Terrestrial habitat up to 328 feet (100 meters) from the active stream channel (water's edge) that includes flood debris, rock piles, and rock walls containing cracks and crevices, small mammal burrows, downed woody debris, and streamside vegetation (*e.g.,* alder, willow, sedges, and shrubs) for thermoregulation, shelter, brumation and protection from predators throughout the year.

(ii) Hydrologic processes that maintain aquatic and riparian habitat through:

(A) A natural flow regime that allows for periodic flooding, or if flows are modified or regulated, a flow regime that allows for the movement of water, sediment, nutrients, and debris through the stream network, as well as maintenance of native fish populations; and

(B) Physical hydrologic and geomorphic connection between the active stream channel and its adjacent terrestrial areas.

(iii) A combination of native fishes, and soft-rayed, nonnative fish species such that prey availability occurs across seasons and years.

(iv) An absence of nonnative aquatic predators, such as fish species of the families Centrarchidae and Ictaluridae, American bullfrogs (*Lithobates catesbeianus*), and/or crayfish (*Orconectes virilis, Procambarus clarki,* etc.), or occurrence of these nonnative species at low enough levels such that recruitment of narrow-headed gartersnakes is not inhibited and maintenance of viable prey populations is still occurring.

(v) Elevations of 2,300 to 8,200 feet (700 to 2,500 meters).

(3) Critical habitat does not include manmade structures (such as buildings, aqueducts, runways, roads, and other paved areas) and the land on which they are located existing within the legal boundaries on November 22, 2021.

(4) Data layers defining map units were created using the U.S. Geological Survey's 7.5' quadrangles, National Hydrography Dataset and National Elevation Dataset; the Service's National Wetlands Inventory dataset; and aerial imagery from Google Earth Pro. Line locations for lotic streams (flowing water) and drainages are depicted as the ''Flowline'' feature class from the National Hydrography Dataset geodatabase. The active channel along a stream is depicted as the ''Wetlands'' feature class from the Service's National Wetlands Inventory dataset. Any discrepancies between the ''Flowline'' and ''Wetlands'' feature classes were resolved using aerial imagery from Google Earth Pro. Elevation range is masked using the ''Elev_Contour'' feature class of the National Elevation Dataset. The administrative boundaries for Arizona and New Mexico were obtained from the Arizona Land Resource Information Service and New Mexico Resource Geographic Information System, respectively. This includes the most current (as of November 22, 2021) geospatial data available for land ownership, counties, States, and streets. Locations depicting critical habitat are expressed as decimal degree latitude and longitude in the World Geographic Coordinate System projection using the 1984 datum (WGS84). 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 at *http://www.fws.gov/southwest/es/arizona/,* at *http://www.regulations.gov* at Docket No. FWS–R2–ES–2020–0011, and at the field office responsible for this designation. 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.

(5) Note: Index map follows:

Figure 1 to Narrow-headed Gartersnake paragraph (5)

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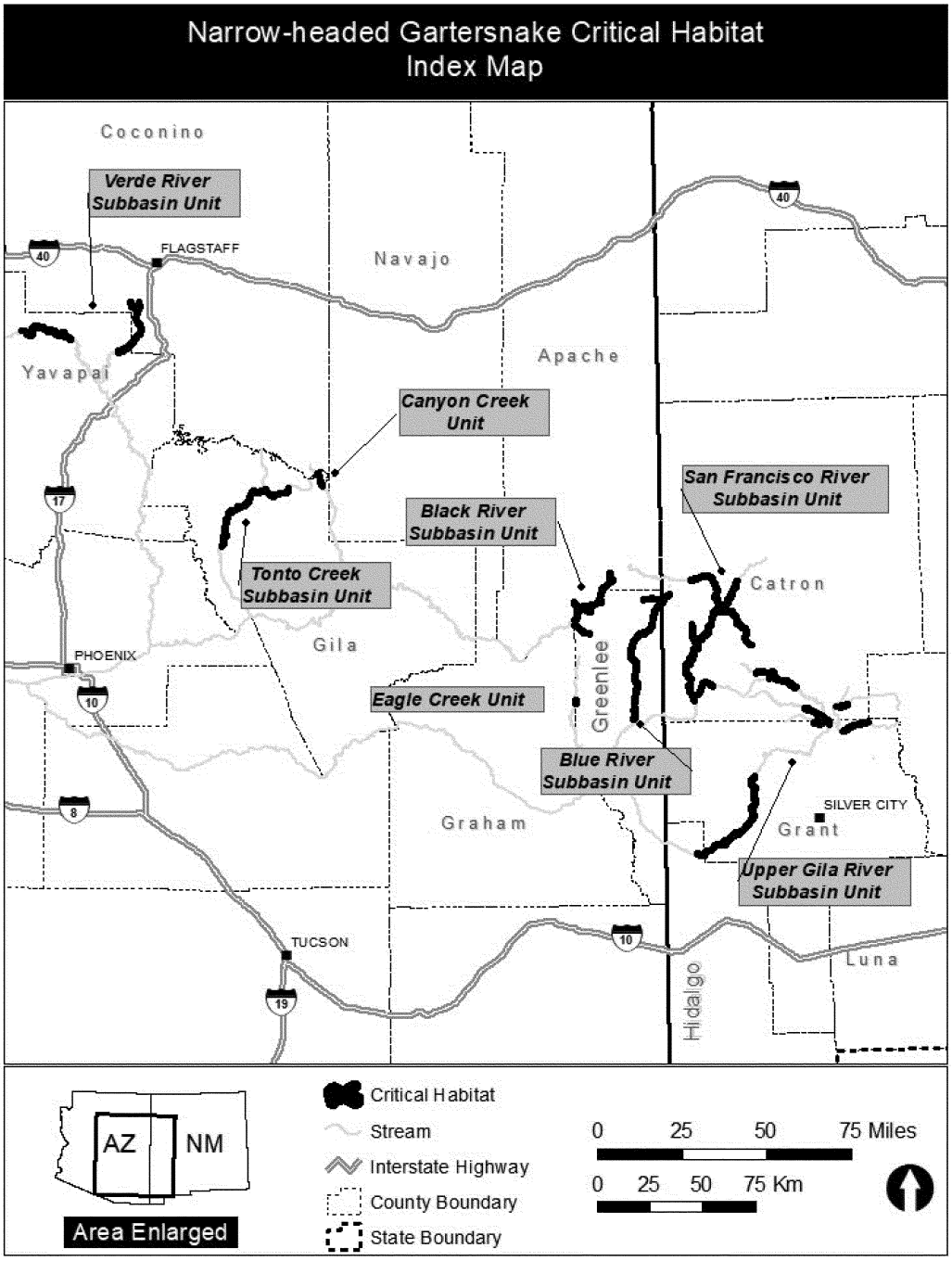
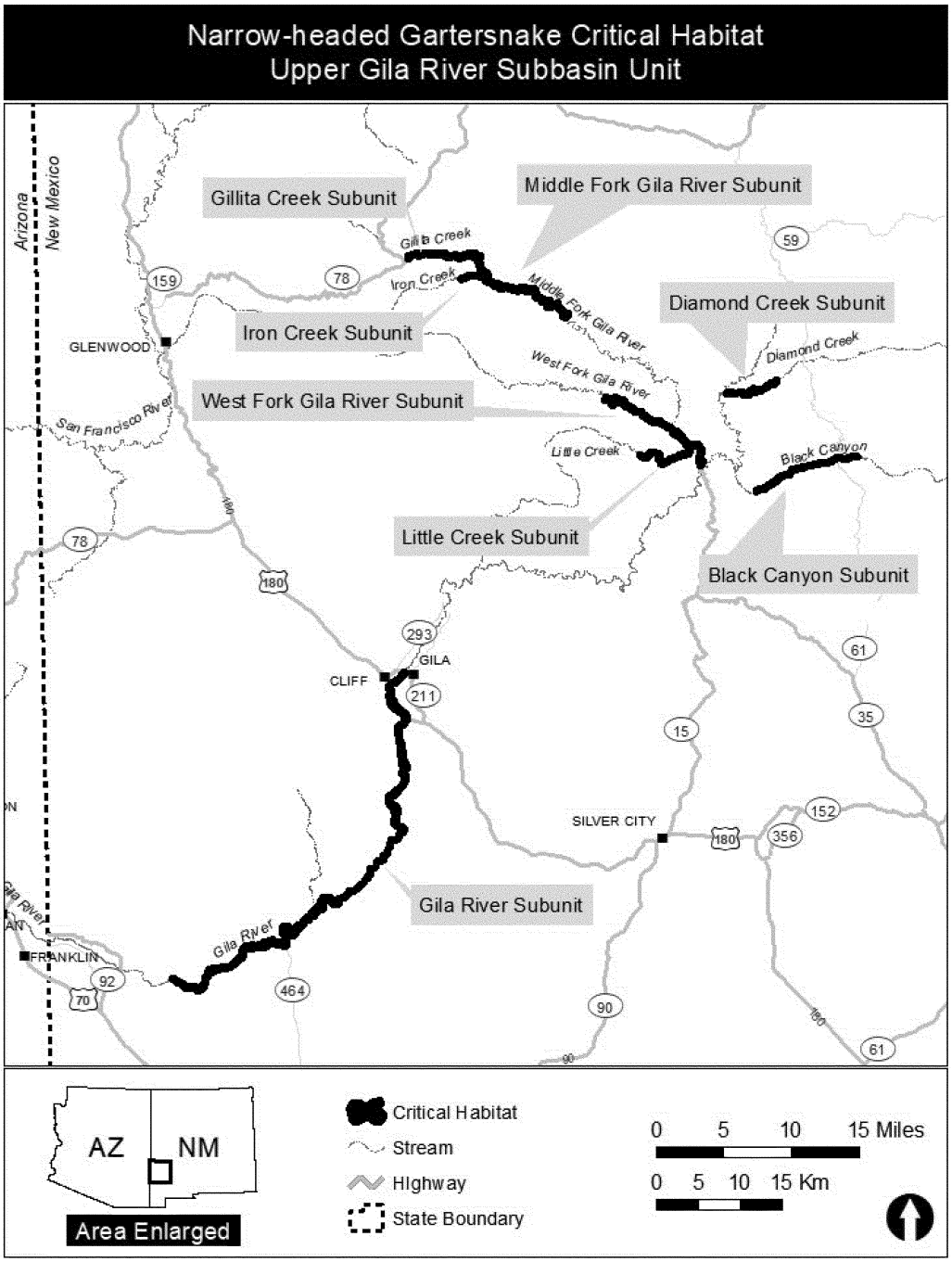


(6) Unit 1: Upper Gila River Subbasin Unit, Grant and Hidalgo Counties, New Mexico.

(i) Unit 1 consists of 7,005 acres (ac) (2,835 hectares (ha)) in Grant and Hidalgo Counties, and is composed of lands in Federal (4,084 ac (1,653 ha)), State (553 ac (224 ha)), and private (2,368 ac (958 ha)) ownership in eight subunits west of the town of Glenwood, north of Silver City, and South of Gila and Cliff.

(ii) Map of Unit 1 follows:

Figure 2 to Narrow-headed Gartersnake paragraph (6)(ii)

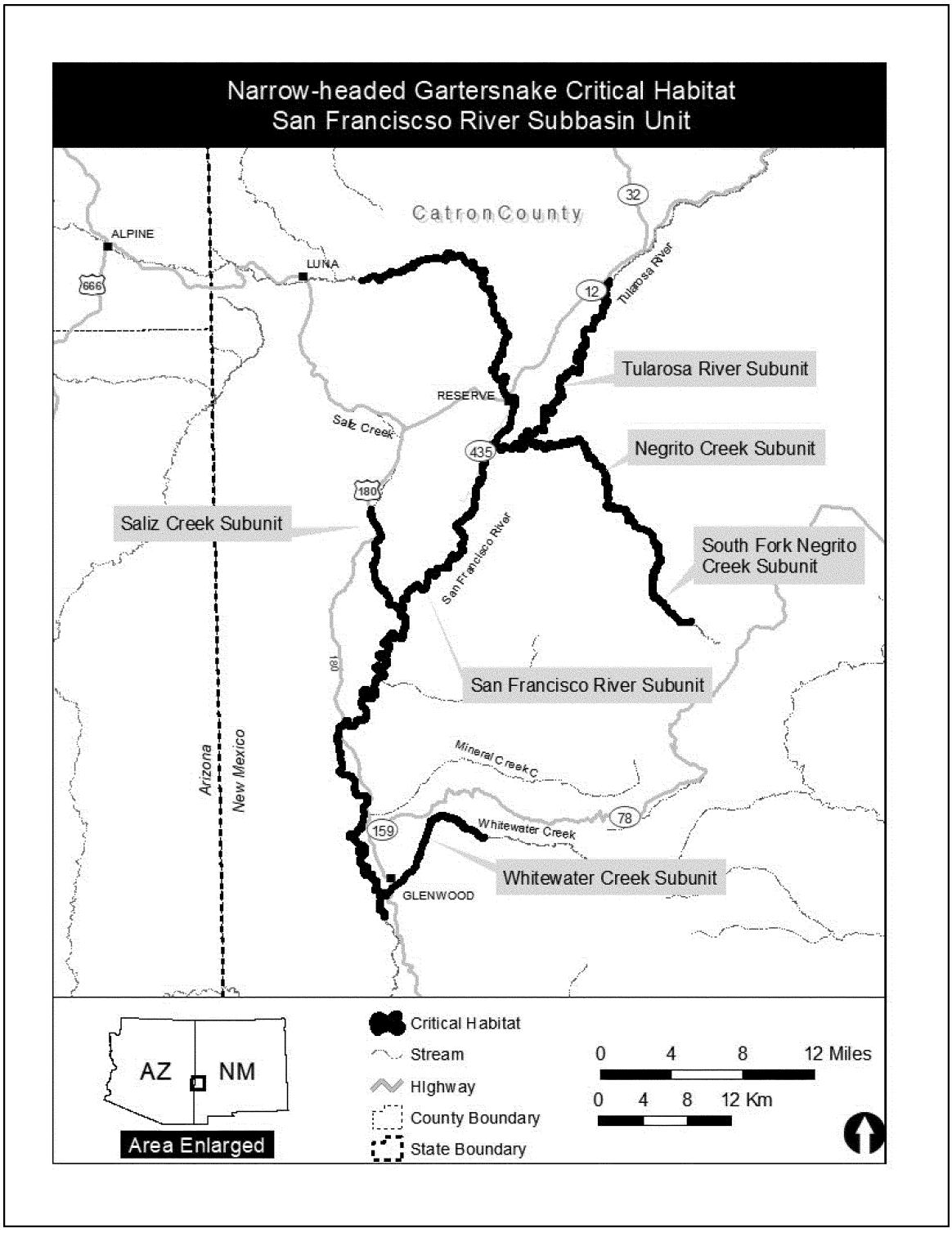


(7) Unit 2: San Francisco River Subbasin Unit, Catron County, New Mexico.

(i) Unit 2 consists of 5,895 ac (2,386 ha) in Catron County, and is composed of lands in Federal (3,924 ac (1,588 ha)), State (3 ac (1 ha)), and private (1,967 ac (796 ha)) ownership in six subunits near the towns of Glenwood and Reserve.

(ii) Map of Unit 2 follows:

Figure 3 to Narrow-headed Gartersnake paragraph (7)(ii)

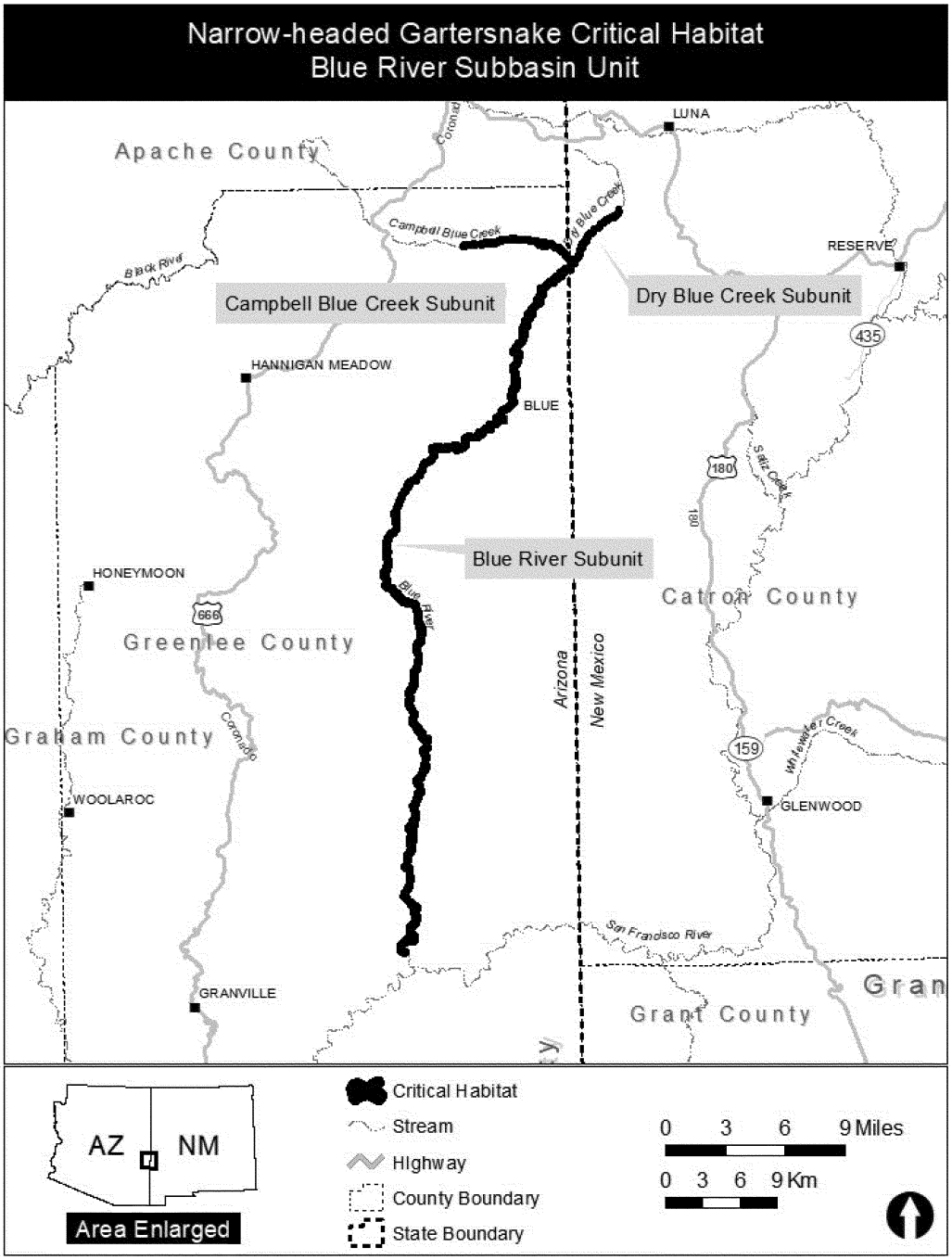


(8) Unit 3: Blue River Subbasin Unit, Greenlee County, Arizona, and Catron County, New Mexico.

(i) Unit 3 consists 3,368 ac (1,363 ha) in Greenlee County, Arizona, and Catron County, New Mexico, and is composed of lands in Federal (2,918 ac (1,181 ha)) and private (450 ac (182 ha)) ownership in three subunits near the towns of Blue, Arizona, and Luna, New Mexico.

(ii) Map of Unit 3 follows:

Figure 4 to Narrow-headed Gartersnake paragraph (8)(ii)

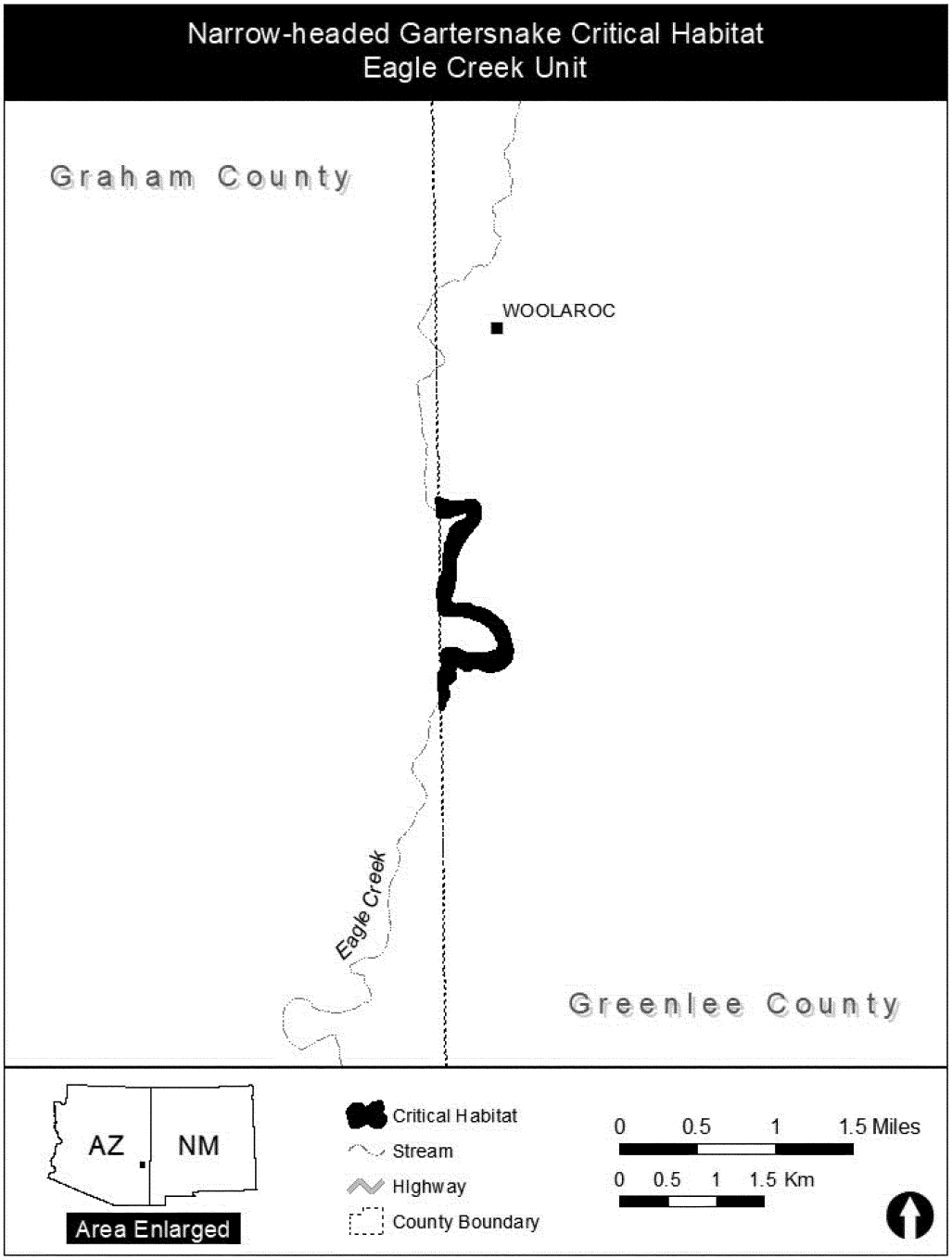


(9) Unit 4: Eagle Creek Unit, Greenlee County, Arizona.

(i) Unit 4 consists of 84 ac (34 ha) in Greenlee County, and is composed of lands in Federal (84 ac (34 ha)) and private (1 ac (<1 ha)) ownership near the town of Woolaroc.

(ii) Map of Unit 4 follows:

Figure 5 to Narrow-headed Gartersnake paragraph (9)(ii)

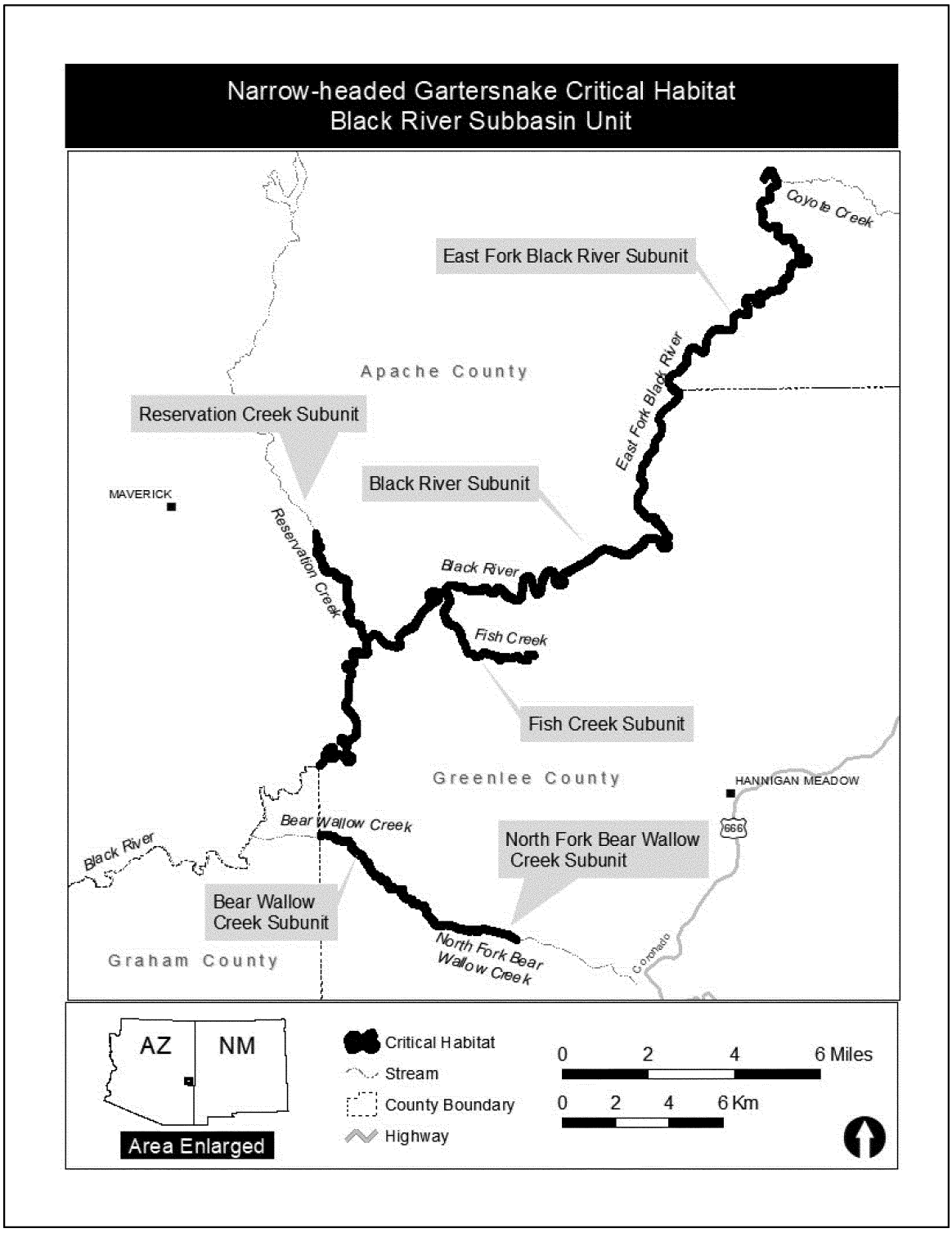


(10) Unit 5: Black River Subbasin Unit, Apache and Greenlee Counties, Arizona.

(i) Unit 5 consists of 1,780 ac (720 ha) in Apache and Greenlee Counties, and is composed of lands in Federal (1,780 ac (720 ha)) ownership in six subunits near the towns of Maverick and Hannigan Meadow.

(ii) Map of Unit 5 follows:

Figure 6 to Narrow-headed Gartersnake paragraph (10)(ii)

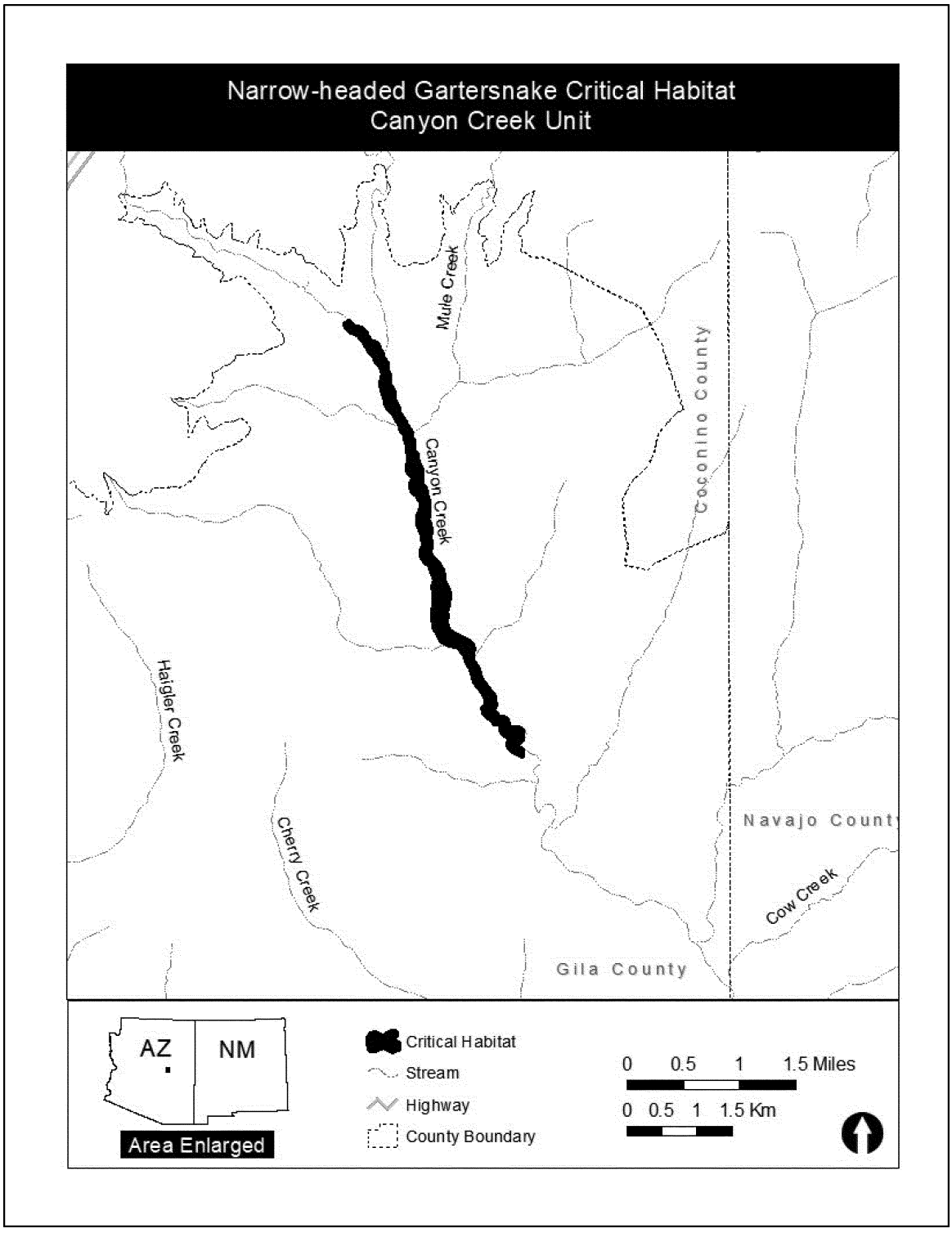


(11) Unit 6: Canyon Creek Unit, Gila County, Arizona.

(i) Unit 6 consists of 204 ac (82 ha) in Gila County, and is composed of lands in Federal (204 ac (82 ha)) ownership southwest of the town of Heber.

(ii) Map of Unit 6 follows:

Figure 7 to Narrow-headed Gartersnake paragraph (11)(ii)

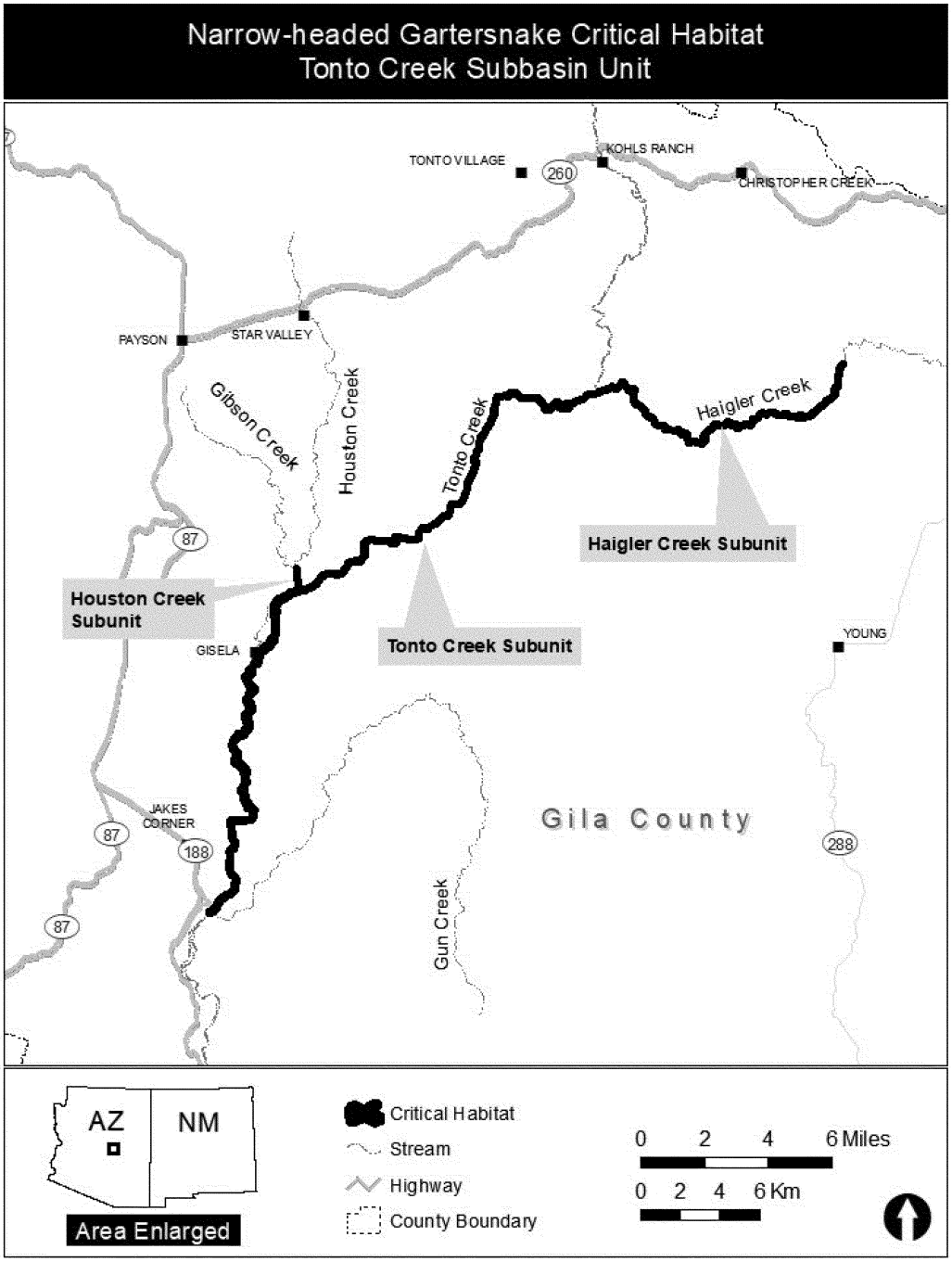


(12) Unit 7: Tonto Creek Subbasin Unit, Gila County, Arizona.

(i) Unit 7 consists of 2,293 ac (928 ha) in Gila County, and is composed of lands in Federal (2,176 ac (881 ha)) and private (117 ac (47 ha)) ownership in three subunits near the towns of Jakes Corner and Gisela.

(ii) Map of Unit 7 follows:

Figure 8 to Narrow-headed Gartersnake paragraph (12)(ii)

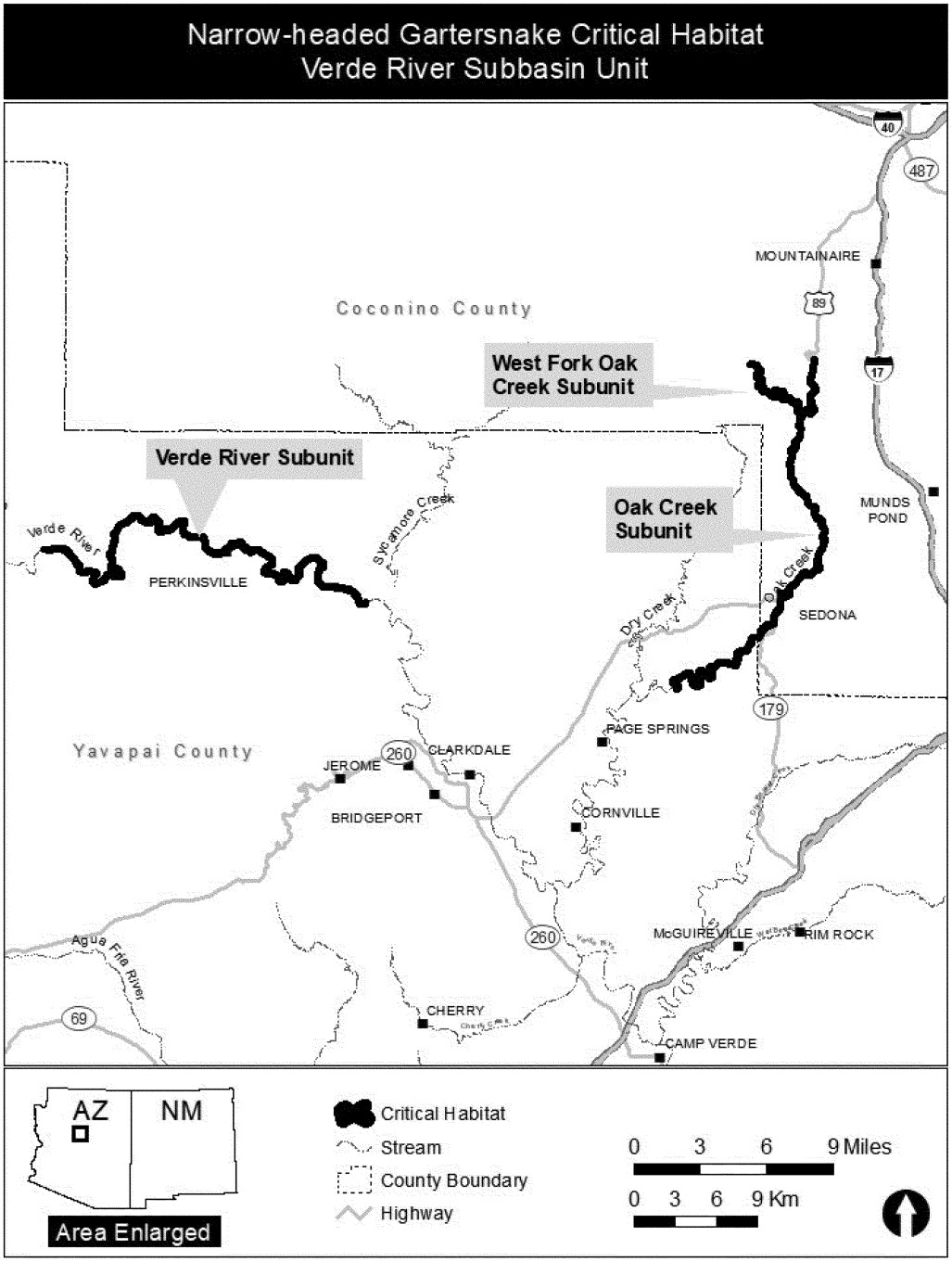


(13) Unit 8: Verde River Subbasin Unit, Coconino and Yavapai Counties, Arizona.

(i) Unit 8 consists of 3,156 ac (1,277 ha) in Coconino and Yavapai Counties, and is composed of lands in Federal (2,446 ac (990 ha)), State (109 ac (44 ha)), and private (602 ac (244 ha)) ownership in three subunits near the towns of Sedona and Perkinsville.

(ii) Map of Unit 8 follows:

Figure 9 to Narrow-headed Gartersnake paragraph (13)(ii)



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* * * * *

Martha Williams,

Principal Deputy Director, Exercising the Delegated Authority of the Director, U.S. Fish and Wildlife Service.

[FR Doc. 2021–20962 Filed 10–20–21; 8:45 am]

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