



## Questions and Answers: Listing Proposal for the Sonoyta Mud Turtle

Arizona Ecological Services Field Office

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### **Q: What action is the U.S. Fish and Wildlife Service (Service) taking?**

**A:** The Service is proposing to list the Sonoyta mud turtle *Kinosternon sonoriense longifemorale* as endangered under the Endangered Species Act (Act). The Service utilized a comprehensive Species Status Assessment (SSA) of the Sonoyta mud turtle current and future condition to arrive at a proposed determination that the subspecies is in danger of extinction throughout its range on the U.S.-Mexico border. A 60-day public comment period will begin upon publication of the proposal in the *Federal Register*.

### **Q: What is Sonoyta mud turtle and where is it found?**

**A:** The Sonoyta mud turtle is a less-than six-inch aquatic turtle with an olive brown to dark brown upper shell (carapace) and a hinged the lower shell (plastron). Long barbels (whisker-like organs) are typically present on the chin, and its feet are webbed. The Sonoyta mud turtle is an isolated endemic subspecies. The subspecies is closely related to the more populous and widely distributed Sonora mud turtle (*K. s. sonoriense*).

Sonoyta mud turtles require aquatic habitat to survive in an otherwise extremely arid environment, but are not strictly aquatic, using riparian vegetation and corresponding moist soil for nesting, moving between spatially intermittent sources of water, and estivating during drought.

### **Q: Where is the Sonoyta mud turtle found?**

**A:** The Sonoyta mud turtle was historically localized in (endemic to) the Rio Sonoyta basin in Arizona and Sonora, Mexico – an extremely arid environment. Today, there are five known populations of Sonoyta mud turtle – one in the U.S. on the Organ Pipe Cactus National Monument in Arizona and four in Sonora, Mexico (one of which is in the Rio Guadalupe basin). These populations occupy less than 20 percent of the subspecies' historical range.

### **Q: What are the primary threats to the subspecies?**

**A:** The most significant stressors for the Sonoyta mud turtle are the loss of aquatic and riparian habitat related to agricultural and municipal groundwater pumping, and long-term drought. Groundwater pumping and drought affect the amount of surface water and subsurface moisture available for the Sonoyta mud turtle. Reductions in riparian habitat further decrease subsurface moisture, due to loss of shade, needed for nesting sites and drought refuge for hatchlings, juvenile and adult turtles. Reduction in aquatic habitat also affects the invertebrate prey and space available for mud turtles. Some of the aquatic habitat in Mexico's Sonoyta basin is currently supplied by human waste-water effluent, resulting water quality and permanency concerns. A complete discussion of threats is in the SSA and the proposed rule.

**Q: Are there any conservation efforts focused on the Sonoyta mud turtle?**

**A:** The National Park Service staff at Organ Pipe Cactus National Monument continues to implement actions to stabilize the water levels in the pond at Quitobaquito Springs, where the sole U.S. population occurs. The inter-agency Quitobaquito Rio Sonoyta Work Group is currently maximizing conservation actions for this population. The working group consists of biologists and managers from the National Park Service (NPS), Arizona Game and Fish Department, Service, University of Arizona, Arizona Sonora Desert Museum, the National Commission of Natural Protected Areas in Mexico, and private citizens interested in conservation of aquatic native species in the Rio Sonoyta basin of Arizona and Sonora. (Members of the group participated in developing the species status assessment.)

Quitobaquito Rio Sonoyta Working Group management actions in Mexico have included defining the ecological status and distribution of the Sonoyta mud turtle in Sonora, creating new habitat to replace lost habitat, removing nonnative aquatic species, and outreach. Primary actions included nonnative removal and fencing to prevent livestock. However, the fencing has been removed and nonnatives have been reintroduced by the locals. These management actions have not yet addressed most of the risks to the four populations of the Sonoyta mud turtle in Mexico.

The working group is dedicated to completing an ongoing conservation assessment and conservation agreement for five aquatic species including the Sonoyta mud turtle. These five species depend on the aquatic and riparian habitats of the Rio Sonoyta watershed. The agreement would take the form of a Candidate Conservation Agreement. The Act supports and inspires such cooperative conservation efforts.

**Q: Is the proposing to designate critical habitat for the Sonoyta mud turtle?**

**A:** Not at this time. However, we will be providing a proposal to designate critical habitat for the Sonoyta mud turtle in the near future. In our efforts to develop a proposed critical habitat designation that includes the best scientific and commercial data available, we are presently soliciting relevant information. (See items 6-7 in the information solicited question below.) Please note: critical habitat designations are limited to lands within the U.S. only.

**Q: What information is the Service requesting?**

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

(1) The Sonoyta mud turtle's biology, range, and population trends, including:

(a) Biological or ecological requirements of the species, including habitat requirements for feeding, breeding, and sheltering;

(b) Genetics and taxonomy;

(c) Historical and current range including distribution patterns;

(d) Historical and current population levels, and current and projected trends; and

(e) Past and ongoing conservation measures for the species, its habitat or both.

(2) Factors that may affect the continued existence of the species, which may include habitat modification or destruction, overutilization, disease, predation, the inadequacy of existing regulatory mechanisms, or other natural or manmade factors.

(3) Biological, commercial trade, or other relevant data concerning any threats (or lack thereof) to this species and existing regulations that may be addressing those threats.

(4) Additional information concerning the historical and current status, range, distribution, and population size of this species, including the locations of any additional populations of this species.

(5) Information related to climate change within the range the Sonoyta mud turtle and how it may affect the species' habitat.

(6) The reasons why areas should or should not be designated as critical habitat as provided by section 4 of the Act.

(7) The following specific information on:

(a) The amount and distribution of habitat for the Sonoyta mud turtle.

(b) What areas, that are currently occupied and that contain the physical and biological features essential to the conservation of the Sonoyta mud turtle, should be included in a critical habitat designation and why.

(c) Special management considerations or protection that may be needed for the essential features in potential critical habitat areas, including managing for the potential effects of climate change.

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

**Q: How can the public submit information on the listing and critical habitat proposals?**

**A:** The Service is requesting comments or information from the public, other concerned governmental agencies, the scientific community, industry, or any other interested parties concerning the proposed rule.

Comments must be received within 60 days, on or before November 21, 2016. You may submit comments by one of the following methods:

(1) *Electronically*: Go to the Federal eRulemaking Portal: <http://www.regulations.gov>. In the Search box, enter FWS–R2–ES–2016-1003, which is the docket number for this rulemaking. Then, in the Search panel on the left side of the screen, under the Document Type heading, click on the Proposed Rules link to locate this document. You may submit a comment by clicking on “Comment Now!”

(2) *By hard copy*: Submit by U.S. mail or hand-delivery to: Public Comments Processing, Attn: FWS–R2–ES–2016-1003; U.S. Fish & Wildlife Headquarters, MS: BPHC, 5275 Leesburg Pike, Falls Church, VA 22041-3803.

For additional information, contact Steve Spangle, Field Supervisor, U.S. Fish and Wildlife Service, Arizona Ecological Services Field Office, 9828 North 31st Ave #C3, Phoenix, AZ 85051-2517, by telephone 602–242–0210 or by facsimile 602–242–2513. Persons who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 800–877–8339.