



Questions and Answers: Northern Mexican Gartersnake and Narrow-headed Gartersnake Proposed Listing with Critical Habitat

Arizona Ecological Services Field Office

www.fws.gov/southwest/es/arizona

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Q: What action is the U.S. Fish and Wildlife Service taking?

A: The U.S. Fish and Wildlife Service is proposing to classify the northern Mexican gartersnake and the narrow-headed gartersnake as threatened under the Endangered Species Act (Act). The Service has also identified areas in which Federal agencies can assist in the conservation of the species through habitat management. In total, approximately 421,423 acres, including 912 stream miles are being proposed as critical habitat for the northern Mexican gartersnake and 210,189 acres, along 1,503 stream miles are being proposed for the narrow-headed gartersnake in seven counties in Arizona and four counties in New Mexico. There is overlap in the proposed critical habitat for these species.

Q: What is the northern Mexican gartersnake?

A: The northern Mexican gartersnake (*Thamnophis eques megalops*) is a subspecies of Mexican gartersnake and can grow to 44 inches, is olive to olive-brown to olive-gray and has three stripes that run the length of the body with a yellow stripe down the back that darkens toward the tail. A light-colored crescent extends behind the corners of its mouth. Northern Mexican gartersnakes physically resemble other native striped gartersnake species and training may be required to accurately identify the species. They feed mainly in water on native fish and frogs and supplement their diet with organisms such as earthworms, lizards and small rodents. Females give live birth to their young.

Q: Where is the northern Mexican gartersnake found?

A: Northern Mexican gartersnakes live in dense vegetation along the banks or in the shallows of wetlands (cienegas and stock tanks) and along streams (riparian) in several types of habitat.

Historically, the snake occurred in all major watersheds of Arizona, and the upper Gila watershed of extreme southwestern New Mexico. It is also associated with the Sierra Madre Occidental and Mexican Plateau in Mexico. In the United States, northern Mexican gartersnakes

occurred at elevations ranging from 130 to 6,150 feet. In Mexico, they have been found at elevations as high as 8,497 feet.

The current distribution of the northern Mexican gartersnake within the United States has been greatly reduced. We have concluded that 83 percent of northern Mexican gartersnake populations are likely not viable and may exist at low population densities that could be threatened with extirpation or may already be extirpated.

Q: What is the northern narrow-headed gartersnake?

A: The narrow-headed gartersnake (*Thamnophis rufipunctatus*) is one of the most aquatic of the gartersnakes. The narrow-headed gartersnake is a small to medium-sized gartersnake with a maximum total length of 34 inches. Its eyes are set high on its unusually elongated head, and it lacks striping on its back and sides which distinguishes its appearance from other gartersnake species with which it may co-occur. The base color is usually tan or grey-brown with conspicuous brown, black or reddish spots that become indistinct towards the posterior. Narrow-headed gartersnakes specialize on fish as their primary prey item. Native fishes preyed upon include Sonora and desert suckers, speckled dace, and roundtail, headwater, and Gila chub. Narrow-headed gartersnakes also prey on native and nonnative trout.

Q: Where is the narrow-headed gartersnake found?

A: The narrow-headed gartersnake is strongly associated with clear, rocky streams using predominantly pool and riffle habitat that includes cobbles and boulders but has also been observed using lake shoreline habitat in New Mexico. Narrow-headed gartersnakes occur at elevations from 2,300 – 8,200-foot elevation in four types of biotic communities: Petran Montane Conifer Forest, Great Basin Conifer Woodland, Interior Chaparral, and the Arizona Upland subdivision of Sonoran Desertscrub.

Historically, narrow-headed gartersnakes occupied perennial drainages across the Mogollon Rim from northern and eastern Arizona, southeast into southwestern New Mexico. Currently, 76 percent of narrow-headed gartersnake populations are likely not viable and may exist at low population densities that could be threatened with extirpation or may already be extirpated. The status of several populations remains uncertain because survey access is restricted and/or survey data are unavailable or insufficient.

Q: What are the threats to the northern Mexican gartersnake and narrow-headed gartersnake?

A: Northern Mexican gartersnake and narrow-headed gartersnake populations have declined primarily from interactions with nonnative bullfrogs, crayfish, and nonnative spiny-rayed fish. The nonnative species prey upon, or compete with, the gartersnakes and the native prey species that are vital to their existence. Human activities that diminish surface water or degrade streamside (riparian) vegetation are also significant threats, but particularly where they co-occur in the presence of nonnative species.

Q: What is critical habitat?

A: Critical habitat is a term in the ESA. It identifies geographic areas that contain features essential for the conservation of a threatened or endangered species and that may require special management considerations or protection. Federal agencies that undertake, fund, or permit activities that may affect critical habitat are required to consult with the Service to ensure that such actions do not adversely modify or destroy designated critical habitat. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. Critical habitat designation does not impose restrictions on private lands unless federal funds, permits, or activities are involved.

Q: How will listing of the northern Mexican gartersnake affect ranchers' ability to maintain stock tanks?

A: Some northern Mexican gartersnakes occupy stock tanks, or impoundments maintained by cattlemen as livestock watering holes. Today's proposal includes a special rule under Section 4(d) of the Act exempting operation and maintenance of livestock tanks on private, State, and tribal lands from the Act's prohibitions on "take" of listed species. Landowners will not be in violation of the Act should they or their livestock harass, harm or kill a gartersnake during normal use, operation and maintenance of their livestock tanks.

Q: Are there efforts underway to conserve these gartersnakes?

A: Agency personnel and private entities continue to partner together in efforts to control nonnative bullfrogs, nonnative fish, and crayfish in some areas currently or historically occupied by the northern Mexican gartersnake and narrow-headed gartersnake. The State of Arizona prohibits the transport of live crayfish (except in Yuma County) to deter the spread of this nonnative

competitor, has prohibited live possession of bullfrogs, and established current bag limits for bullfrogs as unlimited-dead. Efforts to control nonnative predators and restore native aquatic and riparian communities could significantly benefit both gartersnakes and a suite of other imperiled native fish and amphibian species throughout their range. At the species level, the Mexican gartersnake is listed by the Mexican government as threatened throughout Mexico.

Q: How can you participate in conservation of these gartersnake?

A: Individual and groups can initiate or participate in on-going projects to 1) control the spread of nonnative species (eg. the transport of live bait); and 2) support policies that favor native aquatic and riparian communities within the range of the northern Mexican gartersnake and narrow-headed gartersnake. We also encourage the public to **refrain from harming snakes** they see as they may be one of these two rare species. Land owners or managers with wetlands (cienegas and stock tanks) and streamside (riparian) woodlands on their property can conserve or improve habitat on their land to benefit the snake. The Service's Partners in Fish and Wildlife Program can provide technical and financial assistance. Information regarding the northern Mexican gartersnake, its habitat, conservation efforts and threats should be submitted to the Field Supervisor, Arizona Ecological Services Office, 2321 West Royal Palm Road, Suite 103, Phoenix, Arizona 85021-4951.

Q: How can the public submit information on the proposal?

A: Comments on the proposals to list the gartersnakes and designate critical habitat must be received by COB September 9, 2013 and can be submitted by one of the following methods:

- Federal eRulemaking Portal: <http://www.regulations.gov>. Follow the instructions for submitting comments on the critical habitat proposal and associated draft analyses to Docket No. FWS-R2-ES-2013-0022; or
- U.S. mail or hand-delivery: Public Comments Processing, Attn: FWS-R2-ES-2013-0022; Division of Policy and Directives Management; U.S. Fish and Wildlife Service; 4401 N. Fairfax Drive, MS 2042-PDM; Arlington, VA 22203.

More information on the proposed rule, maps, and other details about the gartersnakes are available online at: <http://www.fws.gov/southwest/es/arizona/>.