

# Lawsuit Threatened after ESA Protection Stalls for Mississippi Turtle

Kristina Alexander



In 2010, an environmental group filed a petition with the U.S. Fish and Wildlife Service (FWS) to protect 404 Southeast aquatic plants and animals under the Endangered Species Act (ESA). In 2011, FWS issued its 90-day finding under the act, finding that the petition demonstrated substantial scientific information that listing 374 of those 404 species was warranted. Some of those species had been brought to FWS's attention for protection as early as 1975. However, one species was not singled out until 2018. That species is the Pearl River map turtle (*Graptemys pearlensis*) of Mississippi.<sup>1</sup>

## Pearl River vs. Pascagoula Map Turtles

Map turtles (the genus *Graptemys*) are sometimes called sawbacks because they have ridges down their backs, often forming little spikes. They are not big turtles, although female Pearl River map turtles grow almost two-times as big as the males' maximum carapace length of 5 inches. Map turtles have simple needs: sandbars for nesting, snags for basking, and clean water with mollusks to eat. The Pearl River map turtle's exclusive habitat is the 444-mile Pearl River ([see map](#)). The Pearl River map turtle shares this habitat with the ringed map turtle, which is a

threatened species under the ESA. In 1990, FWS issued a conservation plan for the ringed map turtle, protecting 12 miles of the Pearl River north of the Ross Barnett reservoir.<sup>2</sup> The conservation plan did not end the Pearl River map turtle's population decline, however. According to an international organization that monitors species conservation, the turtle's population may have dropped by as much as 98 percent since 1950.<sup>3</sup>

At the time of the environmental group's April 2010 ESA petition to protect 404 species, including the Pascagoula map turtle, science did not demonstrate that the Pearl River map turtle was a different species than the Pascagoula map turtle (*G. gibbonsi*). It was believed, instead, that the Pascagoula map turtle's habitat spread across two rivers: the Pascagoula River and the Pearl River. Therefore, the theory was that the sawbacks in both rivers were *G. gibbonsi*. However, in June of that year, a study reported genetic and morphological differences between *G. gibbonsi* and *G. pearlensis*, providing the scientific basis for asserting a separate species. According to those scientists, the Pearl River map turtle (*G. pearlensis*) was an entirely different species than the Pascagoula turtle.

### The ESA Listing Process

The ESA requires FWS to respond to petitions to list species within 90 days "to the maximum extent practicable" under 16 U.S.C. § 1533(b)(3)(A). In the case of the petition to list 404 species, a 90-day deadline seems impracticable, and it proved to be. For the *G. gibbonsi*, the turtle species for which protection originally was sought, FWS responded to the April 2010 petition in September 2011, finding that the petition presented substantial scientific evidence that listing *may* be warranted.

The next step in the listing process requires FWS to determine whether listing is warranted or not, and to propose listing the species as either endangered (likely to become extinct throughout its significant range in the foreseeable future) or threatened (likely to become endangered in the foreseeable future). This is commonly known as a 12-month determination, and the decision is published in the *Federal Register* to allow public comment. If FWS finds listing is warranted, the ESA requires FWS to publish the final listing determination one year after publishing the 12-month determination. Each of these determinations must be supported by the best scientific evidence available.

The ESA allows people to sue FWS if the agency misses deadlines. FWS frequently misses them, in no small part due to the limited budgets Congress authorizes for the reviews. In November 2018, the environmental group that filed the petition gave notice that it intends to sue. The ESA requires a notice of suit before a private party can sue the agency. It gives FWS a chance to correct the alleged violation.

### How the Species' ID May Affect Listing

The environmental group argued in its notice of suit that *G. pearlensis* is a separate species from the taxon in the petition, *G. gibbonsi*. The group's original petition was filed just months before publication of the study concluding that the Pearl River turtle was a separate species. This may not be the first taxonomic name change in the middle of the ESA listing process. For example, FWS called attention to one of the 404 species in that group's petition, the Georgia blind salamander. FWS stated that the salamander changed from being the *Haideotriton wallacei* to the *Eurycea wallacei*, even though it was still known as the Georgia blind salamander.<sup>5</sup> The fact that its genus was switched did not appear to give FWS pause in continuing that listing process. It is not known how FWS will react to the change in the species identification for the Pearl River map turtle, but the salamander's path might indicate that the existing petition would suffice. Otherwise, the listing process would begin again, and despite the statutory 90-day response period, it is likely FWS would take years to make its initial determination.

FWS has had notice of the scientific identification of *G. pearlensis* for years. The Pearl River map turtle is considered endangered or perhaps critically endangered by the International Union for Conservation of Nature (IUCN) which has it on its Red List since 2011. And FWS considers *Graptemys*, encompassing all map turtles, to be at such peril that it restricted trade of any map turtle under an international treaty – the Convention on International Trade of Endangered Species of Wild Fauna and Flora (CITES).<sup>6</sup>

A CITES listing is the result of a narrower review than for an ESA listing. Under CITES, a species may be listed after the scientific community has evaluated the impacts of trade on a species' likelihood of extinction. It does not consider loss of habitat. The CITES trade restriction has been in place since 2006, during which time

it appears the turtle's population continued to decline, suggesting that trade is not the main factor putting the turtle at risk of extinction. Therefore, the ESA listing arguably is still needed to prevent the turtle from becoming extinct.



### Habitat Loss

The group's notice of suit claimed that FWS "has abandoned its duty to ensure that endangered and threatened species are afforded protections in a timely manner, thereby avoiding further decline and increased risk of extinction." In particular, the notice points to the Jackson "One Lake Project" as posing a risk to the turtle's habitat. That project would dam the river to create a second reservoir on the Pearl River south of Jackson.

Habitat loss is a major reason prompting the petition to list those 404 species. According to the petition, development activities have impacted rivers

across the southeast, such as dredging, channelization, and draining. Those activities change the quantity and quality of the waters on which aquatic species depend. A change does not have to be a toxic chemical to be harmful. Increased sediment in the water, for example, can be enough to harm the turtle, killing the mollusks the map turtle eats.

The Ross Barnett reservoir on the Pearl River is one of several U.S. Army Corps of Engineers projects that have adversely impacted the turtle's habitat, according to FWS.<sup>8</sup> Additionally, the scientists who identified the genetic distinction of the *G. pearlensis* species observed "substantial channel filling" over 27 years has damaged the map turtle's habitat.<sup>9</sup> As discussed, habitat change is more dire in the case of a species like the Pearl River map turtle that has a limited range. According to the petition "because many of the aquatic species in the Southeast are very narrow endemics or have experienced a dramatic range reduction, remaining populations are now susceptible to extinction from even relatively minor habitat losses."<sup>10</sup>

### ESA Protection

Separate species of the same genus may be given different protection status under the ESA. The ESA allows listing of species, subspecies, and distinct population segments of vertebrate species. It is more important that the turtle is listed at all, to get the Pearl River map turtle under the protective umbrella of the ESA, than whether it is listed as its own species.

However, the Pearl River map turtle might get greater protection if it were found to be a distinct species. Here's why. The ESA requires people who are planning actions such as construction projects or changes in water discharges to weigh the impacts of those actions on protected species and their habitats. It must be evaluated whether that action is likely to "take" a species. In ESA parlance, "take" means to injure or kill an animal, or harm it by disrupting its habits. This includes actions that damage a listed species' habitat. Species with large-scale habitats may not respond as sharply to a deterioration in a part of that habitat as would a species that has only a narrow range. Having a limited range puts species at a higher risk of extinction, as the smaller the habitat, the fewer the options for adaptation and survival.<sup>11</sup>



Photograph: Panama Pictures

For example, if the Pearl River map turtle is listed as a distinct species from the Pascagoula map turtle, changes to the Pearl River would have an impact to the species' entire range. Whereas, if the turtle were the same as a Pascagoula turtle, harm to the Pearl River would have less significance over the species' larger entire range – which would include both the Pascagoula River and the Pearl River. It is possible, therefore, that an action damaging the Pearl River could be seen as a “take” to the distinct Pearl River map turtle, but perhaps not be considered a “take” if it is just another type of Pascagoula map turtle. Accordingly, an ESA listing of *G. pearlensis* might reduce harmful habitat changes by focusing the review of those impacts on only the Pearl River.

### Conclusion

The threatened lawsuit will make FWS's position clear on whether *Graptemys pearlensis* is a distinct species needing protection. While predicting the course of litigation is a fool's game, it is fair to say that many notices of suit regarding FWS's failure to meet legislated deadlines result in legal settlements. For example, FWS entered a settlement agreement in 2011 after failing to meet ESA deadlines for over 600 species and being sued “dozens” of times.<sup>12</sup> Notably, the group that raised the *G. pearlensis* dispute elected not to enter that agreement despite being eligible.

The difficulty in forcing a case to trial is that the court cannot make a listing determination on its own. It can only set a deadline for the agency to comply. That relief may be available more quickly via a settlement. 🦢

*Kristina Alexander is the Editor of Water Log and a Senior Research Counsel at the Mississippi-Alabama Sea Grant Legal Program at the University of Mississippi School of Law.*

### Endnotes

1. For details about the identification of the Pearl River map turtle, and its existing protection status under federal and state law, see Kristina Alexander, *Small Critter, Big Problem: Protecting the Pearl River Map Turtle in Mississippi*, ELR (March 2018).
2. FWS, *Ringed Map Turtle (*Graptemys oculifer*) Five-Year Review: Summary and Evaluation*, p. 4 (2010).
3. IUCN, (“While hard quantitative data are absent, available information indicates that populations of *Graptemys pearlensis* have declined by 80-98% since 1950...”). Construction of the reservoir began in 1960.
4. Joshua R. Ennen, et al., *Genetic and Morphological Variation Between Populations of the Pascagoula Map Turtle (*Graptemys gibbonsi*) in the Pearl and Pascagoula Rivers with Description of a New Species*, *Chelonian Conservation and Biology* 9(1):98-113 (June 2010).
5. 76 Fed. Reg. 59836, at 59838 (Sept. 27, 2011) (its common name stayed the same).
6. See, CITES, [www.cites.org](http://www.cites.org). FWS is the scientific authority of the United States for the treaty.
7. Center for Biological Diversity (CBD), *Sixty-day Notice of Intent to Sue* (Nov. 13, 2018), p. 4. CBD attorneys did not reply to email requests for updates on the litigation.
8. 70 Fed. Reg. 74700, 74706 (Dec. 16, 2005).
9. *Id.*
10. 76 Fed. Reg. 59835, at 59845 (citing Herring and Shute 2002).
11. See, *gen.*, Steven R. Beissinger, *Ecological Mechanisms of Extinction*, 97 Proc. Nat'l Acad. Sci. U.S. 11688, 11688-89 (Oct. 24, 2000) (“It is generally agreed that risk should be higher for species with small populations, small geographic ranges, and poor dispersal ability than for their ecological counterparts [...but that size and generation length also affect survival]”).
12. See, In re: *Endangered Species Act Section 4 Deadline Litigation*, No. 1:10-MC-00377 (D.D.C. May 10, 2011) (resolving claims between WildEarth Guardians and FWS by setting a 6-year schedule for listing; CBD chose not to participate in the settlement agreement although it had relevant claims to the action).