



November 13, 2018

Sent via electronic and certified U.S. Mail

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RE: Sixty-day Notice of Intent to Sue for Violations of the Endangered Species Act Relating to a Petition to List the Pascagoula Map Turtle as a Threatened or Endangered Species

Dear Secretary Zinke, Acting Director Kurth, and Acting Regional Director Oetker,

This letter serves as a sixty-day notice of intent to sue the U.S. Fish & Wildlife Service (“Service”), on behalf of the Center for Biological Diversity (“Center”), pursuant to the Endangered Species Act (“Act”),¹ for failure to make a 12-month finding for the Pascagoula map turtle (*Graptemys gibbonsi*). Specifically, the Service violated and continues to be in violation of Section 4 of the Act, 16 U.S.C. §1533, which requires the Service to make a determination of whether a species warrants designation as threatened or endangered within 12 months of receiving a petition for listing. This letter is provided pursuant to the sixty-day notice

¹ 16 U.S.C. § 1531, *et. seq.*; 50 C.F.R. § 402, *et seq.*

requirement of the citizen suit provision of the Act, to the extent such notice is deemed necessary by a court.²

On April 20, 2010 the Service received a petition from the Center for Biological Diversity, Alabama Rivers Alliance, Clinch Coalition, Dogwood Alliance, Gulf Restoration Network, Tennessee Forests Council, West Virginia Highlands Conservancy, Tierra Curry, and Noah Greenwald to list the Pascagoula map turtle (*Graptemys gibbonsi*) as threatened or endangered and to designate critical habitat concurrent with listing under the Act. On September 27, 2011, the Service issued a 90-day finding that there was substantial scientific or commercial information indicating that listing the Pascagoula map turtle as endangered or threatened may be warranted.³

In June, 2010 a scientific study was published that splits the Pascagoula map turtle into two species.⁴ The study concluded what was currently accepted at the time as Pearl and Pascagoula populations of *G. gibbonsi* should be recognized as two separate species.⁵ The study found that *G. gibbonsi* populations in the Pascagoula River are “morphologically and genetically distinct from broad-headed *Graptemys* in the Pearl River, and recognition of these differences is compatible with the pattern of narrow distributional ranges as typical in the genus.”⁶ The researchers noted that there are important conservation implications for these taxonomic findings as *Graptemys gibbonsi* (sensu lato) populations were reported as less abundant than two federally listed species *G. oculifera* and *G. flavimaculata*.⁷ The authors cautioned that not recognizing the Pearl and Pascagoula rivers as separate species in conservation planning “could result in loss of significant evolutionary lineages in a region well known for its biological diversity.”⁸ Because the two species constitute populations previously petitioned for listing as a single species, the Service should make a 12-month finding on both the Pascagoula map turtle (*Graptemys gibbonsi*) and the Pearl River map turtle (*Graptemys pearlensis*).

When the Service receives a petition to list a species as endangered or threatened, the ESA requires the Service to “make a finding as to whether the petition presents substantial scientific or commercial information indicating that the petitioned action may be warranted” within 90 days of receiving the petition.⁹ If the petition is found to present substantial scientific and commercial information indicating the petitioned action may be warranted the Service must “promptly commence a review of the status of the species”¹⁰ and “[w]ithin 12 months after receiving the petition” it must make a finding that the listing is 1) warranted; 2) not warranted; or

² See 16 U.S.C. § 1540(g).

³ United States Fish & Wildlife Service, Endangered and Threatened Wildlife and Plants; Partial 90-Day Finding on a Petition to List 404 Species in the Southeastern United States as Endangered or Threatened With Critical Habitat, Docket No. FWS-R4-ES-2011-0049; MO 92210-0-0009, 76 Fed. Reg. 59836-59862 (Sep. 27, 2011).

⁴ Ennen, J.R., Lovich, J.E., Kreiser, B.R., Selman, W., and C.P. Qualls. 2010. 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.

⁵ *Id.*

⁶ *Id.*

⁷ *Id.*

⁸ *Id.* See also The IUCN Red List of Threatened Species, *Graptemys pearlensis*, at icunredlist.org/details/184437/0 (also recognizing the split-out taxon *G. pearlensis*).

⁹ 16 U.S.C. § 1533(b)(3)(A).

¹⁰ *Id.*

3) warranted but precluded by higher priority listing activities.¹¹ The Service has yet to publish a 12-month finding in the Federal Register.

The Service's failure to make a 12-month finding could spell doom for these two species. Turtles across the globe are facing an extinction crisis as they are now among the most threatened of any major group of vertebrates.¹² Populations are declining due to overexploitation, water pollution, habitat loss, road mortality and other threats.¹³ Turtles play important roles in their native ecosystems, connecting terrestrial and aquatic habitats. They are beneficial scavengers that feed on water plants, dead animals, snails, aquatic insects, and crayfish. Population declines can cause changes in energy flow, nutrient cycling, and food web structure, affecting entire ecosystems.¹⁴

Like many turtles in the southeastern United States, the Pascagoula and Pearl River map turtles are at risk of extinction. Habitat loss and degradation appears to be a leading cause for the decline, particularly as a result of alterations to hydrologic flow regimes caused by dams, impoundments, and flood control projects.¹⁵ Associated floodplain clearing and channelization contributes to increased turbidity and siltation that further impacts the snails and other mollusks on which map turtles feed.¹⁶ Sedimentation and other anthropogenic alterations within the Pearl River drainage basin may have caused a decline in native mussel and gastropod populations, thus decreasing a significant prey source for female Pearl River map turtles.¹⁷ Researchers have cautioned that additional impoundment downstream of the Ross Burnett reservoir would further impact downstream flow regimes and the species.¹⁸ Presently, the Pearl River map turtle is threatened by the proposed construction of a low-head dam on the Pearl River in Hinds and Rankin Counties, Mississippi.¹⁹ The "One Lake Project" would transform a riverine ecosystem into a large lake environment, resulting in the disruption of flow regimes and the loss of habitat

¹¹ *Id.* § 1533(b)(3)(B).

¹² Forty percent of all turtles are threatened according to the International Union for Conservation of Nature. Rhodin, A.G.J. and P.P. van Dijk. 2010. Setting the Stage for Understanding Globalization of the Asian Turtle Trade: Global, Asian, and American Turtle Diversity, Richness, Endemism, and IUCN Red List Threat Levels in U.S. Fish & Wildlife Service, Conservation and Trade Management of Freshwater and Terrestrial Turtles in the United States: Workshop Presentation Abstracts, available at <https://www.fws.gov/international/pdf/archive/workshop-terrestrial-turtles-setting-the-stage-for-understanding-globalization-of-the-asian-turtle-trade.pdf>.

¹³ Moll, D. and Moll, E.O. 2004. The Ecology, Exploitation, and Conservation of River Turtles. New York: Oxford University Press, 393 pp.; Schlaepfer, M.A., Hoover, C., and Dodd, C.K., JR. 2005. Challenges in evaluating the impact of the trade in amphibians and reptiles on wild populations. *BioScience* 55:256-264.

¹⁴ Mali I, Vandewege MW, Davis SK, Forstner MRJ. 2014. Magnitude of freshwater turtle exports from the US: long term trends and early effects of nearly implemented harvest management regimes. *PLoS One*. 2014; 9(1), available at <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3903576/>.

¹⁵ Ennen, J.R., Lovich, J.E., and Jones, R.L. 2016. *Graptemys pearlensis* Ennen, Lovich, Kreiser, Selman, and Qualls 2010-Pearl River Map Turtle. In: Rhodin, A.G.J., Pritchard, P.C.H., van Dijk, P.P., Saumure, R.A., Buhlmann, K.A., Iverson, J.B., and Mittermeier, R.A. (Eds.). Conservation Biology of Freshwater Turtles and Tortoises: A Compilation Project of the IUCN/SSC Tortoise and Freshwater Turtle Specialist Group. Chelonian Research Monographs 5(9):094.1-8, doi: 10.3854/crm.5.094.pearlensis.v1.2016, <http://www.iucn-tftsg.org/cbftt/>.

¹⁶ See Selman, W. and Jones, R.L. 2017. Population Structure, Status, and Conservation of Two *Graptemys* Species from the Pearl River, Mississippi. *Journal of Herpetology* 51(1):27-36.

¹⁷ *Id.*

¹⁸ Ennen, et. al. 2016., *supra* note 15.

¹⁹ Selman, W. 2018. Diamonds in the Rough: Status of Two Imperiled *Graptemys* Species (*Graptemys oculifera* and *G. pearlensis*) in the Pearl River of Jackson, MS. Year 2.

for basking.²⁰ Impounding this stretch of the Pearl River could extirpate the species from the area.²¹

These species are also threatened by contaminants from urban and industrial sources²² and overexploitation. *G. gibbonsi* (sensu lato) was found in Asian markets and there is evidence that the Pearl River map turtle has been collected for the pet trade.²³ As Selman and Jones (2017) explain, the species is currently experiencing a decline both upstream and downstream of the Ross Barnett Reservoir, likely as a result of impaired water quality from industrial and/or municipal effluents, associated impacts of reservoir flow regulation, collection by the pet trade, or a combination of these factors.²⁴

The state of Mississippi has listed the Pearl River map turtle as a Species in Need of Management²⁵ and the International Union for the Conservation of Nature (IUCN) considers the species endangered and possibly critically endangered, noting that the population has declined by 80-98 percent since 1950.²⁶

In failing to make a 12-month finding for these species, the Service is in violation of Section 4 of the ESA and 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.²⁷ The Service will continue to be in violation of the law until it publishes a 12-month finding on the Pascagoula map turtle and Pearl River map turtle.

Sincerely,



Jason Totoiu
Senior Attorney

²⁰ *Id.* at 18.

²¹ *Id.*

²² Ennen, et. al. 2016, *supra* note 15.

²³ *Id.*

²⁴ Selman, W. and Jones, R.L. 2017, *supra* note 16.

²⁵ Ennen, et. al. 2016, *supra* note 15.

²⁶ IUCN Red List of Threatened Species, *Graptemys pearlensis*, at <http://www.iucnredlist.org/details/184437/0> (last visited August 30, 2018).

²⁷ 16 U.S.C. § 1533(b)(3)(B).