

**IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF NEW YORK**

CENTER FOR BIOLOGICAL DIVERSITY,
WATERKEEPER ALLIANCE, INC.,
WATERKEEPERS CHESAPEAKE, INC.,
LOWER SUSQUEHANNA RIVERKEEPER
ASSOCIATION,
and MIDDLE SUSQUEHANNA RIVERKEEPER
ASSOCIATION,

Plaintiffs,

v.

U.S. FISH AND WILDLIFE SERVICE,
MARTHA WILLIAMS, in her official capacity as
Acting Director of the U.S. Fish and Wildlife
Service,
and
DEBRA HAALAND, in her official capacity as
Secretary of the Interior,

Defendants.

**COMPLAINT FOR
DECLARATORY AND
INJUNCTIVE RELIEF**

Case No. 1:21-cv-5706

INTRODUCTION

1. Plaintiffs Center for Biological Diversity, Waterkeeper Alliance, Inc., Waterkeepers Chesapeake, Inc., Lower Susquehanna Riverkeeper Association, and Middle Susquehanna Riverkeeper Association challenge the decision of the U.S. Fish and Wildlife Service (“the Service”) that the eastern hellbender (*Cryptobranchus alleganiensis alleganiensis*)

does not warrant listing as a threatened or endangered species under the Endangered Species Act (“ESA”), 16 U.S.C. § 1531 *et seq.*; 84 Fed. Reg. 13223 (April 4, 2019).

2. The eastern hellbender is a large, fully aquatic salamander that was historically widespread across 15 eastern states, ranging from northeastern Mississippi, northern Alabama, and northern Georgia northeast to New York’s southern tier. Despite its ominous name, and although it is large and slimy, the hellbender is a harmless, non-venomous, and beloved species with a variety of colorful nicknames including water dog, mud puppy, old lasagna sides, grampus, and Allegheny river monster.



Photo Credit: Tierra Curry/Center for Biological Diversity

3. More than a decade ago, in April 2010, Plaintiff Center for Biological Diversity (“the Center”) petitioned the Service to list the eastern hellbender as a threatened or endangered species under the ESA. The Center submitted its listing petition because the best available science shows that the hellbender, once relatively common throughout its range, has disappeared from many rivers and streams, and that the stressors driving the species’ decline are expected to continue unabated or even intensify in the future.

4. The hellbender is an “indicator species” for aquatic habitats, needing free-flowing, cool, clean, highly oxygenated streams with boulders and crevasses to survive and reproduce. Unfortunately, the majority of streams within the hellbender’s range have been degraded by disturbances including agricultural and industrial water pollution, sedimentation, dams and other impoundments, warming waters, deforestation, and destruction of riverine habitat. Reflecting these losses, an estimated 80 percent of historic hellbender populations have already been extirpated or are in decline. In the foreseeable future, these pervasive threats are expected to increase, meaning that most of the remaining hellbender populations are expected to suffer a similar fate without increased protections for the species and its aquatic habitat.

5. Nonetheless, when the Service finally issued a long overdue finding on the Center’s petition on April 4, 2019, it concluded that listing the eastern hellbender under the ESA is not warranted. As detailed in this Complaint, the Service’s decision is unlawful and failed to rely on the best scientific and commercial data available in several respects, including: (1) arbitrarily relying on admittedly unproven and ineffective conservation measures; (2) failing to consider the adequacy of existing regulatory mechanisms; (3) arbitrarily concluding that the hellbender is not endangered or threatened in a significant portion of its range; (4) failing to provide a rational explanation for its choice to limit the foreseeable future analysis regarding the

hellbender and its threats to 25 years (shorter than a single generation's expected lifespan); and (5) conflating the Act's definitions of endangered and threatened such that it did not determine whether the species was threatened. For these and other reasons, the Service's disregard for the legal requirements of the ESA and the best available scientific information about the species led to an arbitrary and unlawful decision.

6. To remedy these violations, Plaintiffs seek declaratory relief declaring the Service's not warranted finding unlawful under the ESA, vacatur of the illegal finding, and injunctive relief remanding the matter to the Service with direction to promptly issue a new determination regarding whether the eastern hellbender warrants protection under the ESA as an endangered or threatened species.

JURISDICTION AND VENUE

7. Plaintiffs bring this action under the ESA, 16 U.S.C. §§ 1533, 1540(g), and the Administrative Procedure Act ("APA"), 5 U.S.C. § 706.

8. This Court has jurisdiction to hear this case pursuant to 16 U.S.C. § 1540(c) and (g) (action arising under citizen suit provision of the ESA), 5 U.S.C. § 702 (APA), and 28 U.S.C. § 1331 (federal question jurisdiction).

9. The Court may grant the relief requested under the ESA, 16 U.S.C. § 1540(g), the APA, 5 U.S.C. §§ 702–706, and 28 U.S.C. § 2201 (declaratory relief) and § 2202 (injunctive relief).

10. Plaintiffs provided sixty (60) days' notice of their intent to file this suit pursuant to the citizen suit provision of the ESA, 16 U.S.C. § 1540(g)(2)(C), by letter to Defendants dated March 4, 2021. Defendants have not provided any response to, or acknowledgment of, Plaintiffs' notice letter, and have not taken action to remedy their continuing ESA violations by the date of

this complaint's filing. Therefore, an actual controversy exists between the parties under 28 U.S.C. § 2201.

11. The federal government has waived sovereign immunity in this action pursuant to 16 U.S.C. § 1540(g) and 5 U.S.C. § 702.

12. Venue is proper in the United States District Court for the Southern District of New York pursuant to 16 U.S.C. § 1540(g)(3)(A) and 28 U.S.C. § 1391(e) because Plaintiff Waterkeeper Alliance resides in and has its principal place of business in this district.

PARTIES

13. Plaintiff CENTER FOR BIOLOGICAL DIVERSITY (“the Center”) is a non-profit conservation organization dedicated to the protection of endangered species and their habitats through science, policy, and environmental law. The Center is headquartered in Tucson, Arizona, with offices in numerous other locations in the country, including New York. The Center has more than 84,000 members.

14. Plaintiff WATERKEEPER ALLIANCE, INC., (“Waterkeeper”) is a not-for-profit corporation organized under the laws of New York. Waterkeeper is a member-supported, international environmental advocacy organization with its headquarters in New York. Waterkeeper strengthens and grows a global network of grassroots leaders protecting everyone's right to clean water. Composed of more than 350 member and affiliate organizations around the world—including Plaintiffs Waterkeepers Chesapeake, Lower Susquehanna Riverkeeper Association, and Middle Susquehanna Riverkeeper Association—as well as more than 15,000 individual supporting members, Waterkeeper is the largest and fastest growing non-profit focused solely on clean water. Waterkeeper's goal is drinkable, swimmable, and fishable water

everywhere, and the protection of native species that also depend on clean water such as the eastern hellbender.

15. Plaintiff WATERKEEPERS CHESAPEAKE, INC. is a nonprofit watershed advocacy organization headquartered in Takoma Park, Maryland. It operates as a coalition of 18 independent Waterkeeper programs working throughout the Chesapeake and Coastal Bays Watersheds. The coalition works to protect and improve the health of the Chesapeake Bay and the waterways in the region, including the Lower Susquehanna. Waterkeepers Chesapeake aims to stop pollution throughout the region that affects the Chesapeake and the species that live within it.

16. Plaintiff LOWER SUSQUEHANNA RIVERKEEPER ASSOCIATION is a nonprofit environmental organization dedicated to improving the ecological health of the Lower Susquehanna River Watershed and the Chesapeake Bay. The association is headquartered in Wrightsville, Pennsylvania. Lower Susquehanna Riverkeeper utilizes education, chemical and biological monitoring, pollution patrols, research, and legal action to improve the health of the Susquehanna River on behalf of the communities and species that depend on the river's waterways.

17. Plaintiff MIDDLE SUSQUEHANNA RIVERKEEPER ASSOCIATION is a nonprofit environmental organization dedicated to protecting and promoting our river-based resources. The association is headquartered in Sunbury, Pennsylvania, working across an 11,000 square-mile watershed defined by the North and West branches of the Susquehanna River, and covering a drainage basin that includes 25 counties in central, north-central, and northeast Pennsylvania. Middle Susquehanna Riverkeeper Association works with a large network of

media sources to better educate families and individuals across the region about issues facing the Susquehanna River, its tributaries, and the species that depend upon our aquatic resources.

18. Plaintiffs bring this action on behalf of their organizations, and their staff and members who derive ecological, recreational, aesthetic, educational, scientific, professional, and other benefits from the eastern hellbender, its aquatic habitat, and the broader watershed health upon which the hellbender relies upon for its continued existence. Plaintiffs' members and staff live near and/or regularly visit areas where eastern hellbenders are known or believed to exist, in hopes of viewing this increasingly elusive and rare species.

19. Center member Tierra Curry has looked for hellbenders in the Cumberland River watershed in Kentucky and Tennessee, the Green River and Rockcastle River watersheds in Kentucky, the Obed River and Tennessee River watersheds in Tennessee, and the Cranberry River in West Virginia. Ms. Curry has specific plans in the next year to visit the Licking River in Kentucky and in the Clinch River in Virginia in an effort to observe hellbenders in their natural habitat. Ms. Curry has also photographed eastern hellbenders at captive breeding facilities in Chattanooga and St. Louis.

20. Waterkeeper Alliance has at least a dozen organizational members that work to protect hellbender habitat on behalf of its members—including the three Keepers organizations that are also Plaintiffs in this suit—and also has many individual members who use and enjoy waters within hellbender range and who care deeply about protecting water quality for hellbender survival and propagation. For example, Middle Susquehanna Riverkeeper member Dr. Peter Petokas conducts research in the West Branch watershed. Dr. Petokas is concerned that without protection and conservation measures, the remaining populations, which have been reduced to only three sub-watersheds, will be lost. He regularly visits those populations to

monitor their health for evidence of additional declines or human impacts. Andy Hill, the Watauga Riverkeeper, also an individual supporting member of Waterkeeper, has done considerable work with eastern hellbenders in the Watauga and New River watersheds, including species trend counts, habitat surveys, habitat improvements, and environmental impact studies.

21. Plaintiffs' members have been, are being, and will continue to be adversely harmed by the Service's unlawful determination that listing the eastern hellbender as a threatened or endangered species is not warranted under the ESA, and its failure to afford the species the protections of the Act. The injuries described are actual, concrete injuries presently suffered by Plaintiffs and their members, and they will continue to occur unless this Court grants relief. The relief sought herein—including an Order vacating the not warranted finding and remanding to the Service to issue a new finding based on the best available scientific data—would redress those harms. Plaintiffs and their members have no other adequate remedy at law.

22. Defendant U.S. FISH AND WILDLIFE SERVICE is a federal agency within the U.S. Department of the Interior. The Secretary of the Interior has delegated to the Service the authority to conserve non-marine endangered and threatened species under the ESA. 50 C.F.R. § 402.01(b). This authority encompasses proposed and final listing determinations for the eastern hellbender.

23. Defendant MARTHA WILLIAMS is the acting Director of the U.S. Fish and Wildlife Service and is charged with ensuring agency decisions comply with the law. Plaintiffs sue Defendant Williams in her official capacity.

24. Defendant DEBRA HAALAND is the Secretary of the U.S. Department of the Interior ("Secretary") and has the ultimate responsibility to administer and implement the provisions of the ESA regarding the eastern hellbender and to comply with all other federal laws

applicable to the U.S. Department of the Interior. Plaintiffs sue Defendant Haaland in her official capacity.

LEGAL FRAMEWORK

Endangered Species Act

25. The ESA, 16 U.S.C. §§ 1531–1544, “represent[s] the most comprehensive legislation for the preservation of endangered species ever enacted by any nation.” *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 180 (1978). Its fundamental purposes are “to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved [and] to provide a program for the conservation of such endangered species and threatened species.” 16 U.S.C. § 1531(b).

26. The Secretary has delegated its administration of the ESA to the Service for freshwater aquatic species such as the eastern hellbender. 50 C.F.R. § 402.01(b).

27. ESA section 4 requires that the Service protect imperiled species by listing them as either “endangered” or “threatened.” 16 U.S.C. § 1533(a)(1).

28. A species is “endangered” if it “is in danger of extinction throughout all or a significant portion of its range.” *Id.* § 1532(6). A species is “threatened” if it is “likely to become an endangered species within the foreseeable future.” *Id.* § 1532(20).

29. The ESA does not define what constitutes a “significant portion” of a species’ range. In 2014, the Service promulgated a “Final Policy on Interpretation of the Phrase ‘Significant Portion of Its Range’ in the ESA’s Definitions of ‘Endangered Species’ and ‘Threatened Species.’” 79 Fed. Reg. 37578 (July 1, 2014) (“SPR Policy”). The SPR Policy provides that “a key part” of the Service’s analysis of whether a species is at risk in a significant portion of its range is “whether the threats are geographically concentrated in some way.” *Id.* at

37586. This definition of “significant portion of range” saying that a portion is significant only if, without that portion, the entire species would go extinct (or become endangered) has been judicially invalidated. The Service now “identif[ies] portions that may be significant by looking for portions of the species’ range that could be significant under any reasonable definition of ‘significant.’” 84 Fed. Reg. at 13230.

30. The ESA does not define “foreseeable future.” The Service interprets the “foreseeable future” to “extend[] only so far into the future as the Services can reasonably determine that both the future threats and the species’ responses to those threats are likely.” 50 C.F.R. § 424.11(d). The Service determines “the foreseeable future on a case-by-case basis, using the best available data and taking into account considerations such as the species’ life-history characteristics, threat-projection timeframes, and environmental variability.” *Id.*

31. The definition of “species” includes “subspecies” and “distinct population segments [“DPS”] of any species of vertebrate fish or wildlife which interbreeds when mature.” 16 U.S.C. § 1532(16). When considering whether a population segment qualifies as a DPS under the Act, Service policy requires the agency to determine whether that population is “discrete” and “significant.” If the Service determines that a population segment is both discrete and significant, then the population segment qualifies as a DPS and meets the ESA’s definition of a “species” that may be classified as threatened or endangered.

32. The ESA requires the Service to “determine whether any species is an endangered species or a threatened species because of any of the following factors:

- (A) the present or threatened destruction, modification, or curtailment of its habitat or range;
- (B) overutilization for commercial, recreational, scientific, or educational purposes;
- (C) disease or predation;
- (D) the inadequacy of existing regulatory mechanisms; or
- (E) other natural or manmade factors affecting its continued existence.”

Id. § 1533(a)(1).

33. The Service’s determination as to whether existing regulatory mechanisms are inadequate to protect the species pursuant to section 1533(a)(1)(D) is guided in part by its Policy on Evaluation of Conservation Efforts When Making Listing Determinations (“PECE”). 68 Fed. Reg. 15100 (March 28, 2003). The PECE directs that “conservation efforts that are not sufficiently certain to be implemented and effective cannot contribute to a determination that listing is unnecessary or a determination to list as threatened rather than endangered.” *Id.* at 15115.

34. The Service’s listing determinations must be based “solely on the basis of the best scientific and commercial data available.” 16 U.S.C. § 1533(b)(1)(A).

35. The ESA’s substantive protections generally apply only once the Service lists a species as threatened or endangered. For example, section 7 of the ESA requires all federal agencies to ensure that their actions do not “jeopardize the continued existence” of any listed species or “result in the destruction or adverse modification” of a species’ “critical habitat.” *Id.* § 1536(a)(2). Section 9 of the ESA prohibits, among other things, “any person” from intentionally taking listed species, or incidentally taking listed species, without a lawful authorization from the Service. *Id.* §§ 1538(a)(1)(B), 1539. Other provisions require the Service to designate “critical habitat” for listed species, *id.* § 1533(a)(3); to “develop and implement” recovery plans for listed species, *id.* § 1533(f); authorize the Service to acquire land for the protection of listed species, *id.* § 1534; and authorize the Service to make federal funds available to states to assist in its efforts to preserve and protect threatened and endangered species, *id.* § 1535(d).

36. To ensure the timely protection of species at risk of extinction, Congress set forth a detailed process whereby citizens may petition the Service to list a species as endangered or threatened. The process includes mandatory, nondiscretionary deadlines that the Service must meet. The three required findings, described below, are the 90-day finding, the 12-month finding, and for species that the Service determines warrant protection, the final listing determination.

37. Upon receipt of a listing petition, the Service must “to the maximum extent practicable, within 90 days” make an initial finding as to whether the petition “presents substantial scientific or commercial information indicating that the petitioned action may be warranted.” *Id.* § 1533(b)(3)(A). If the Service finds that the petition does not present substantial information indicating that listing may be warranted, the petition is rejected and the process ends.

38. If on the other hand, as in this case, the Service determines that a petition does present substantial information indicating that listing may be warranted, then the agency must publish that finding and proceed to conduct a full scientific review of the species’ status. *Id.*

39. Upon completion of this status review, and within twelve (12) months from the date that it receives the petition, the Service must make a listing determination, or “12-month finding,” with one of three determinations: (1) listing is “not warranted”; (2) listing is “warranted”; or (3) listing is “warranted but precluded” by other pending proposals for listing species, provided certain circumstances are present. *Id.* § 1533(b)(3)(B).

40. Under internal policy created without public notice and comment, the Service uses a “species status assessment” to inform the agency’s listing decision. U.S. Fish & Wildlife Service, *Species Status Assessment Framework: An Integrated Framework for Conservation*, FWS.gov (Aug. 2016), at https://fws.gov/endangered/improving_esa/pdf/SSA_Fact_Sheet-August_2016.pdf.

41. If the Service issues a 12-month finding that listing the species is “warranted,” it must publish a proposed rule to list the species as endangered or threatened in the Federal Register. 16 U.S.C. § 1533(b)(5). Within one year of the publication of a proposed rule to list a species, the Service must issue a final rule listing the species along with a final designation of critical habitat for the species. *Id.* §§ 1533(a)(3), (b)(6)(A), (C).

42. If on the other hand, as in this case, the Service issues a 12-month finding that listing the species is “not warranted,” the Service rejects the petition, and the process ends. A not warranted finding is subject to judicial review. *Id.* § 1533(b)(3)(C)(ii).

Administrative Procedure Act

43. While the ESA provides for judicial review of a “not warranted” 12-month finding, *id.* § 1540(g), the APA generally governs the standard and scope of judicial review. 5 U.S.C. §§ 701–706.

44. Under the APA, a reviewing court “shall hold unlawful and set aside agency action, findings, and conclusions found to be . . . arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” *Id.* § 706(2)(A).

45. An agency’s action is arbitrary and capricious if the agency has relied on factors that Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise. *Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983).

BACKGROUND

The Eastern Hellbender and Threats to Its Continued Existence

46. The eastern hellbender is a large, fully aquatic salamander that lives in clear, clean streams of the eastern United States. Reaching nearly two feet in length, it is the largest amphibian in North America.

47. The hellbender is primarily nocturnal and remains under cover during the day. At night, it uses ambush tactics to hunt crayfish, and occasionally small fish, insects, and frogs. Though it can move quickly to avoid predators, the hellbender generally leads a minimally active life. Its home range is relatively small, from approximately 30 to 2,200 square meters.

48. The hellbender can live at least 25–30 years in the wild and may in some instances live longer than 50 years. At every life stage, the eastern hellbender has a strong preference for free-flowing, cool, clean, highly oxygenated streams with boulders and crevasses to survive.

49. Hellbenders were historically fairly common across 15 eastern states, ranging from northeastern Mississippi, northern Alabama, and northern Georgia northeast through Tennessee, Kentucky, North Carolina, Missouri, Illinois, Indiana, Ohio, West Virginia, Maryland, Virginia, and Pennsylvania, to the southern portion of New York.

50. Hellbender abundance has decreased in many parts of the range, with reduced numbers observed beginning in the mid-20th century. These declines have been drastic in most areas of the species' range.

51. Hellbender declines are driven by myriad human-caused impacts. Sedimentation is one of the primary factors most impacting the status of the species throughout its range, arising from multiple sources, including agriculture, deforestation of upland forests, clearing of riparian

vegetation, oil and gas development (including enhanced recovery techniques such as hydraulic fracturing), residential development, off-road vehicles, impoundments, and instream gravel mining. Increased sediment fills the interstitial spaces in cobble beds that are used as shelter by larval and juvenile hellbenders as well as their prey, and sediment can also impact habitat use and migration by adults by burying shelter and nest rocks.

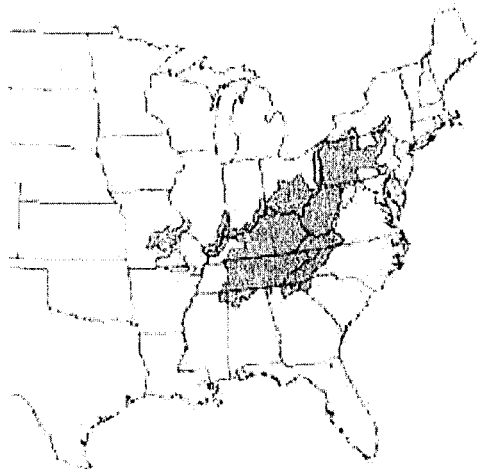


Figure 1 – Map of the range of the hellbender. Dark gray sites are the range of the Eastern hellbender, and the light gray site in northern Arkansas and southern Missouri is the range of the Ozark hellbender.

Illustration is courtesy of the Marshall University Herpetology Lab web site –

<http://www.marshall.edu/herp/Salamanders/hellbender.htm>.

52. The loss of canopy cover due to deforestation and sedimentation is also associated with increased temperatures in streams and rivers, which negatively impacts hellbender physiology.

53. Climate change is predicted to exacerbate the trends of warming stream temperatures and lower flow regimes that negatively impact eastern hellbenders.

54. Dam construction and other stream impoundments negatively impact hellbenders throughout much of their range. Because hellbenders breathe primarily through their skin, they depend on well-oxygenated water. Dams stop swift water flow and submerge riffles, causing dissolved water levels to drop and rendering the habitat unsuitable for hellbenders. Impoundments also fragment hellbender habitat, blocking the flow of immigration and emigration between populations.

55. Coal mining, streambed gravel mining, and other forms of mining destroy hellbender habitat and degrade water quality through toxic pollution (often caused by acid mine drainage), decreased pH levels, and increased siltation and sedimentation.

56. Hellbenders have suffered direct mortality through collection for scientific study and anatomy courses, the illegal pet trade, bounty hunts by sportsman's clubs, and persecution by anglers holding the misconception that hellbenders impact fish populations, when their primary prey is in fact crayfish. In addition, non-native fish stocked for sports fishing often prey on young or larval hellbenders.

57. Compounding the many threats to the hellbender's continued existence, long-lived species such as eastern hellbenders are slow to recover from perturbations because of their delayed maturity, low fecundity, and other factors. Many of the remaining hellbender populations largely consist of older animals and have little to no recruitment of new animals, suggesting that reproduction is no longer occurring. Such populations may be functionally extirpated.

The Center's Petition and Listing History

58. On April 20, 2010, the Center petitioned the Service to list the eastern hellbender as threatened or endangered under the ESA. On September 27, 2011, the Service issued a

positive 90-day finding for the eastern hellbender, determining the petition presented substantial scientific information indicating that listing may be warranted because of “habitat loss and overuse,” as well as other factors. 76 Fed. Reg. 59836.

59. In June 2013, the Center sued to compel the Service to issue the required but overdue 12-month finding. *Ctr. for Biological Diversity v. Jewell*, Case No. 1:13-cv-00975-EGS (D.D.C.). On September 23, 2013, the Center and the Service entered a stipulated settlement agreement that the Service would submit to the Federal Register a 12-month finding on the petition to list the hellbender by September 30, 2018. *Id.* at Dkt. No. 7.

The Service’s Unlawful Not Warranted Determination

60. On April 4, 2019, the Service issued the 12-month finding concluding that listing the eastern hellbender as threatened or endangered under the ESA is not warranted. 84 Fed. Reg. 13223.

61. The Service’s not warranted determination was primarily based on a Species Status Assessment Report (“Status Assessment”) dated July 20, 2018.

62. The Status Assessment states that the eastern hellbender subspecies was historically broadly distributed with 570 populations occurring in 15 eastern U.S. states. Of these 570 populations, more than 70 percent (410 populations) have either unknown status or trend. For these 410 populations, the Service made predictions whether they are extant or extirpated. The Status Assessment predicts that of the 570 populations, approximately 40 percent (225 populations) are already extirpated and approximately 60 percent (345 populations) are still extant.

63. Of the 345 populations predicted to be extant, nearly two-thirds (219 populations) are declining, while only 126 populations are considered to be healthy. Of the 126 populations

considered to be healthy, nearly three-quarters (91 populations) are of unknown status.

Accordingly, of the 570 historic eastern hellbender populations, the Service can now identify only 35 remaining *known* populations that are considered to be healthy.

64. The Status Assessment organizes the remaining hellbender populations into four evolutionary lineages, which it characterizes as “adaptive capacity units” or “ACUs”: 1) the Missouri River drainage; 2) the Ohio River-Susquehanna River drainages; 3) the Tennessee River drainage; and 4) the Kanawha River drainage.¹ The Service notes that “[e]ach of the evolutionary lineages represents a substantial amount of the [hellbender’s] genetic diversity, as well as diverse ecological and physical conditions, which may provide important sources of adaptive diversity.” 84 Fed. Reg. at 13233. Indeed, the Service concludes that the hellbender’s survival depends on “conserving the full breadth of representation” by “maintaining populations across and within the four distinct lineages.” Status Assessment, at p. 24.

65. The remaining hellbender populations known or predicted to still exist are heavily concentrated in the Ohio River-Susquehanna ACU (44 percent of remaining populations) and Tennessee River ACU (45 percent of remaining populations), with smaller numbers in the Kanawha River ACU (10 percent of remaining populations) and Missouri River ACU (1 percent of remaining populations).

66. The Status Assessment and not warranted determination both acknowledge that the stressors driving the hellbender’s populations decline are pervasive across the species’ range, and that a continued reduction in its geographic range is anticipated.

¹ This organization is inherently unclear, as the Tennessee and Kanawha Rivers both drain into the Ohio River, while the Susquehanna River is part of the Chesapeake Bay watershed.

67. The Status Assessment predicts that the loss of geographic range will include the complete elimination of two of the remaining four lineages—the Kanawha River and Missouri populations.

68. The Service states that the Ohio River-Susquehanna and Tennessee River ACUs “have experienced huge declines from the historical condition” and that “declines are expected to continue.” Status Assessment, at p. 74.

69. The Service nonetheless concludes that “[b]ased on our review of the best available scientific and commercial information pertaining to the five factors, we find that the stressors acting on the eastern hellbender and its habitat, either singly or in combination, are not of sufficient imminence, intensity, or magnitude” to warrant listing as threatened or endangered throughout all or a significant portion of its range. 84 Fed. Reg. at 13230.

70. This conclusion is based on what the Service characterizes as “a few key assumptions”; most notably, that “ongoing and future population augmentation [such as the use of artificial nest boxes] and habitat restoration efforts will be successful.” Status Assessment, at p. 75. Yet the Service acknowledges that “little data exist as to whether successful sustained reproduction and recruitment can be achieved and whether augmentation is logistically possible at a broad scale.” *Id.*; 84 Fed. Reg. at 13229. The Service’s reliance on population and habitat restoration efforts to deny listing to the eastern hellbender is thus arbitrary and counter to the evidence before the agency.

71. Another “key assumption” the Service makes in the Status Assessment and not warranted determination is that “many of the best-case scenario predictions are contingent on threats being reduced and habitat conditions improving.” Status Assessment, at p. 75. Yet here too, the Service’s rationale is counter to the evidence before the agency, as it admits that “[l]ittle

data exist that provide evidence of reduced negative influences, such as sedimentation, water quality, degradation and improved stream conditions, over the next 25 years.” *Id.*; 84 Fed. Reg. at 13229.

72. In addition to the arbitrary and internally inconsistent findings the Service makes in the 12-month finding, the PECE prohibits reliance on conservation efforts that have not been implemented or shown effective, such as the hellbender augmentation efforts. 68 Fed. Reg. at 15115. Despite the direct applicability of this policy direction, the 12-month finding contains no analysis or discussion of the PECE.

73. Despite the many threats facing the hellbender, the number of states the species occurs in, and the mix of federal, state, and private lands upon which remaining members of the species depend, the 12-month finding also fails to consider the inadequacy of existing regulatory mechanisms, one of the five specific statutory factors that the agency must address when making a listing decision. 16 U.S.C. § 1533(a)(1)(D). A lawful analysis of the adequacy of existing regulatory mechanisms would include consideration of the laws, regulations, ordinances, and policies to address known threats across the various land ownerships, yet this analysis is simply absent from the 12-month finding.

74. The Service’s 12-month finding also denies listing to the eastern hellbender by applying an unlawfully stringent standard requiring a showing that the species is endangered throughout *all* of its range, when listing is also required if the species is imperiled throughout a *significant portion* of its range. *Id.* § 1532(6), (20). Although hellbender populations have already dramatically declined and survive in only four lineages, and the Service concludes that two of those lineages will be lost within the next 25 years, it nonetheless determines that listing is not warranted because the species is not imperiled throughout a significant portion of its range.

The Service reasons that the remaining two lineages would “guard[] against catastrophic losses rangewide.” 84 Fed. Reg. at 13230. This analysis is functionally no different from an analysis of the species’ status across its entire range, and it is thus arbitrary.

75. The arbitrary nature of the Service’s “significant portion of range” analysis is further illustrated by its decision to propose listing for the Missouri lineage as a DPS. 84 Fed. Reg. at 13231–13236. There, the Service finds the DPS to be “significant” based on its acknowledgment that each of the four remaining lineages “represents a substantial part of the subspecies’ genetic diversity, as well as diverse ecological and physical conditions, which may provide important sources of adaptive diversity for the subspecies.” 84 Fed. Reg. at 13233.

76. While designating and protecting DPSs is an essential facet of ESA protections, the Service in this case is unlawfully abusing its DPS Policy as a pretense for refusing protections to the entire species as demanded by the ESA. In addition, despite the Service’s prediction that both the Missouri and Kanawha lineages will be extirpated within the next 25 years, the agency does not consider DPS protections for the Kanawha lineage.

77. The 12-month finding also arbitrarily defines the “foreseeable future” as only 25 years, based on a vague statement that “most experts had little confidence in predictions beyond” that time frame. 84 Fed. Reg. at 13228. Foreseeable future analyses must be applied to all stressors the eastern hellbender faces, and the projections of some stressors—such as climate change—extend well past 25 years. In addition, the Service’s selection of 25 years encapsulates less than a single generation of hellbenders, which commonly live longer than 30 years and may live to be older than 50 years. Because adults often survive degraded conditions better than young, looking at only 25 years arbitrarily excludes consideration of hellbender declines and extirpations related to poor or no reproduction, and overestimates the species’ future viability.

78. The ESA requires the Service to list a species as threatened, which is defined as “any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.” 16 U.S.C § 1532(20). Contrary to this mandate, the Service’s not warranted finding utterly fails to explain what factors would qualify the hellbender as endangered in what it defines as the foreseeable future (*e.g.*, 25 years). Instead, the Service unlawfully assesses the likelihood of *extinction* in the foreseeable future, rather than merely endangerment. 84 Fed. Reg. at 13230.

CLAIMS FOR RELIEF

First Claim for Relief

Violation of the ESA in Determining That Listing of the Eastern Hellbender as an Endangered or Threatened Species Is Not Warranted

79. Plaintiffs reallege and incorporate by reference the preceding paragraphs.

80. Defendants’ 12-month determination that listing the eastern hellbender as an endangered or threatened species is not warranted is unlawful because it disregards the best available scientific data regarding the status of, and imminent threats to, the species; fails rationally to apply the five statutory listing factors to the available data; arbitrarily relies on admittedly unproven and ineffective conservation measures; fails to consider the adequacy of existing regulatory mechanisms; contradicts the Service’s own recognition in the Status Assessment and elsewhere that the eastern hellbender is in danger of extinction throughout all or a significant portion of its range from a myriad of threats; fails to provide a rational explanation for its choice to limit the foreseeable future analysis regarding the hellbender and its threats to 25 years; and conflates the ESA’s definitions of endangered and threatened species such that it did not determine whether the species was threatened.

81. For these and additional reasons, the Service’s not warranted finding is contrary to the best available science, dismisses threats that warrant protection, violates the ESA, and is arbitrary and capricious, an abuse of discretion, and otherwise not in accordance with law. 16 U.S.C. § 1533.

Second Claim for Relief

(In the Alternative to Plaintiffs' First Claim for Relief)

Violation of the APA in Determining That Listing of the Eastern Hellbender as an Endangered or Threatened Species Is Not Warranted

82. Plaintiffs reallege and incorporate by reference the preceding paragraphs.

83. When making a not warranted finding, the Service must articulate a satisfactory explanation for its action, including a rational connection between the facts found and the choice made.

84. The Service cannot rely on factors Congress did not intend the agency to consider, ignore an important aspect of the problem, offer an explanation that runs counter to the evidence before the agency, or issue a finding so implausible that it cannot be ascribed to a difference in view or the product of agency expertise.

85. The Service's not warranted finding fails to provide a rational connection between the threats facing the eastern hellbender and the finding that the hellbender is not warranted for listing as an endangered or threatened species because it disregards the best available scientific data regarding the status of, and imminent threats to, the species; fails to rationally apply the five statutory listing factors to the available data; arbitrarily relies on admittedly unproven and ineffective conservation measures; fails to consider the adequacy of existing regulatory mechanisms; contradicts the Service's own recognition in the Status Assessment and elsewhere that the eastern hellbender is in danger of extinction throughout all or a significant portion of its range from numerous threats; fails to provide a rational explanation for its choice to limit the foreseeable future analysis regarding the hellbender and its threats to 25 years; and conflates the ESA's definitions of endangered and threatened such that it did not determine whether the species was threatened.

86. For these and additional reasons, the Service's not warranted finding is arbitrary, capricious, an abuse of discretion, and not in accordance with law. 5 U.S.C. § 706(2)(A).

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs respectfully request that this Court:

1. Declare that the Service's April 4, 2019 not warranted ESA listing determination for the eastern hellbender is unlawful;
2. Vacate and remand the April 4, 2019 listing determination to the Service for further analysis and a new listing determination within six months that is consistent with the ESA and this Court's order;
3. Award Plaintiffs their reasonable attorneys' fees and costs associated with this action; and
4. Grant such other and further relief as the Court may deem just and proper.

Respectfully Submitted 1st day of July, 2021.

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