

**IN THE UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF ILLINOIS  
EASTERN DIVISION**

CENTER FOR BIOLOGICAL DIVERSITY, )	)	
INC., and )	)	
THE HOOSIER ENVIRONMENTAL )	)	
COUNCIL, INC. )	)	
	)	
	)	
Plaintiffs )	)	
	)	
v. )	)	Case No.
	)	
	)	
MARTHA WILLIAMS, in her official )	)	
capacity as Director of the U.S. Fish and )	)	
Wildlife Service, )	)	
the U.S. FISH AND WILDLIFE SERVICE, )	)	
and DEB HAALAND, in her official capacity )	)	
as Secretary of the U.S. Department of the )	)	
Interior. )	)	
	)	
Defendants. )	)	

**COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF**

1. Plaintiffs Center for Biological Diversity, Inc. (“the Center”) and The Hoosier Environmental Council, Inc. (collectively “Plaintiffs”) challenge the unlawful decision of the U.S. Fish and Wildlife Service (“the Service”) to deny Endangered Species Act (“ESA”) protection to the Kirtland’s snake (*Clonophis kirtlandii*) (“the Snake”).

2. Kirtland’s snake is a small, non-venomous snake once found across 139 counties in nine states in the Midwest and Ohio River Valley.

3. However, as of 2017, the Kirtland’s snake was only extant in sixty counties across seven states.

4. The Kirtland's snake population has declined, primarily due to habitat destruction from urban and residential development, as well as agricultural development and associated harms such as degradation from pesticide use.

5. Effects of climate change also pose a substantial threat to the survival of the Kirtland's snake, with respect to both the species as a whole and populations in particular portions of its range, as large portions of the species' current range are predicted to become increasingly unsuited to meet the species' ecological needs.

6. Many of the remaining populations of Kirtland's snakes are small and isolated, making them more vulnerable to extinction.

7. On April 20, 2010, the Center petitioned the Secretary of the Interior (the "Secretary") to have the Service list the Snake as either threatened or endangered under the ESA. (Exhibit A).

8. On October 5, 2017 the Service found that the Snake does not warrant listing as a threatened or endangered species. *Endangered and Threatened Wildlife and Plants; 12-Month Findings on Petitions To List 25 Species as Endangered or Threatened Species*, 82 Fed. Reg. 46618, 46618 (Oct. 5, 2017).

9. Plaintiffs bring this action against Defendants to remedy the Service's violations of the ESA, 16 U.S.C. §§ 1531–1544, reviewed under the standards of the Administrative Procedure Act (APA), 5 U.S.C. § 706(2). Specifically, Plaintiffs challenge as arbitrary and capricious the Service's determination that listing the Kirtland's snake as endangered or threatened under the ESA is not warranted.

10. Plaintiffs request that this Court declare the Service has violated the ESA. Plaintiffs also seek an order vacating and remanding the Service's "not warranted" case decision

and providing a timeline for a new listing determination for the Snake that applies the proper legal standards. Such relief is necessary to afford the Snake the full protections of the law, to which it is entitled and needs to survive and recover and to otherwise avoid impending extinction in significant portions of its range.

### **JURISDICTION AND VENUE**

11. This Court has jurisdiction over this action pursuant to 16 U.S.C. §§ 1540(c), (g)(1)(C) (action arising under ESA citizen suit provision) and 28 U.S.C. § 1331 (federal question), 28 U.S.C. § 1346 (United States as a defendant).

12. This Court has authority to grant the requested relief pursuant to 16 U.S.C. § 1540(g)(1)(C) (ESA) and 28 U.S.C. §§ 2201, 2202 (Declaratory Judgments Act).

13. As required by the ESA, 16 U.S.C. § 1540(g)(2)(C), the Plaintiffs provided the Defendants with written notice of their intent to sue more than sixty days ago, on January 6, 2022 (Exhibit B (notice); Exhibit C (proof of mailing and delivery for Defendant Director Martha Williams); Exhibit D (proof of mailing and delivery for Defendant U.S. Fish and Wildlife Service (Assistant Secretary Shannon Estenoz); Exhibit E (proof of mailing and delivery for Defendant Secretary Deb Haaland)).

14. Because the Defendants have not remedied their violations of law, there exists an actual controversy between the parties within the meaning of the Declaratory Judgment Act. 28 U.S.C. § 2201.

15. Venue lies in this Court pursuant to 28 U.S.C. § 1391(e) and 16 U.S.C. § 1540(g)(3)(A). Kirtland's snakes live in this judicial district, a substantial part of the events giving rise to the cause of action occurred in this judicial district, and Defendant United States Fish and Wildlife Service maintains an office in this judicial district.

## PARTIES

16. Plaintiff the CENTER FOR BIOLOGICAL DIVERSITY, INC. is a non-profit organization with more than 89,000 members and offices in Tucson and Flagstaff, Arizona; Oakland, California; Denver, Colorado; Honolulu, Hawaii; La Paz, Mexico; Minneapolis and Duluth, Minnesota; Portland, Oregon; Seattle, Washington; and Washington, D.C. The Center is dedicated to the preservation, protection, and restoration of biodiversity, and it works through science, law, and creative media to secure a future for all species hovering on the brink of extinction.

17. Plaintiff THE HOOSIER ENVIRONMENTAL COUNCIL, INC. is an Indiana non-profit organization dedicated to shaping Indiana's environmental future. It is one of the state's largest environmental advocacy organizations and uses education and advocacy to secure protection of Indiana's forests, lakes, rivers, native fish and wildlife, and groundwater.

18. Plaintiffs bring this action on their own behalf and on behalf of their adversely affected members and staff who derive ecological, recreational, aesthetic, spiritual, educational, scientific, professional, and other benefits from the Kirtland's snake and the habitat upon which the snake relies for its continued existence.

19. Plaintiffs' members and staff are deeply interested in and committed to conservation of imperiled species, including the Kirtland's snake, and have an interest in the effective implementation of the ESA to protect those species.

20. Plaintiffs' members and staff have researched, studied, and observed or attempted to observe the Kirtland's snake and intend to continue to do so in the future. Plaintiffs' members and staff also spend time in the Snake's habitat; Plaintiffs' members and staff live in the range of the Kirtland's snake and have specific intentions to continue to use and enjoy the Kirtland's

snake's habitat on an ongoing basis in the future. Plaintiffs' members and staff have concrete plans to visit the Snake's habitat to look for the Kirtland's snake.

21. For example, Center employee and member Tierra Curry has looked for Kirtland's snake in habitats in the Louisville, Kentucky metropolitan area, including in Cherokee Park, Iroquois Park, Jefferson Memorial Forest, and Floyds Fork. Ms. Curry has specific plans to explore these areas again in search of Kirtland's snake in the late spring and summer of 2022 and thereafter.

22. As a biologist, naturalist, writer, photographer, and person who enjoys spending time recreating in freshwater habitats, Ms. Curry is harmed when her ability to encounter the Kirtland's snake is diminished by the Service's failure to protect the Snake under the ESA.

23. Ms. Curry drafted the Kirtland's snake portion of the petition that the Center submitted to request that the Service the Snake, among other species, as threatened or endangered. (Exhibit A)

24. Ms. Curry is concerned that without the protection and conservation measures provided by the ESA, the remaining populations of Kirtland's snakes will become extinct.

25. Hoosier Environmental Council senior policy director and longtime Indiana resident Tim Maloney often hikes within the Snake's range in Brown County and Jackson County, Indiana. Mr. Maloney also frequently canoes through waterways near the Snake's habitat in Delaware County, Indiana.

26. Mr. Maloney has concrete plans to visit areas within the Snake's range in Indiana within the next year but fears that if the Kirtland's snake population continues to decline, he may never encounter the species in its natural habitat.

27. Mr. Maloney is a dedicated conservationist who cares deeply about species preservation and the prevention of habitat loss in all states, not just Indiana.

28. Mr. Maloney and other members of the Hoosier Environmental Council are harmed when their ability to observe the Kirtland's snake is diminished by the increased likelihood of extirpation as a result of the Service's failure to list the Kirtland's snake as threatened or endangered under the ESA.

29. Plaintiffs' members and staff have been, are being, and will continue to be adversely harmed by the Service's unlawful determination that listing the Kirtland's snake as threatened or endangered is not warranted under the ESA, and by the Service's failure to afford the species the ESA's protections. The injuries described are actual, concrete injuries presently suffered by Plaintiffs and their members, and the injuries will continue to occur unless this Court grants relief. The relief sought herein would redress those injuries by ensuring the Service adequately considers the Snake for protection under the ESA.

30. Defendant DEB HAALAND is the Secretary of the Interior. The Secretary is the federal official charged with administering the ESA and listing species as endangered or threatened under the ESA. She is sued in her official capacity.

31. The Secretary has delegated her obligation to review and make findings on listing petitions under the ESA to Defendant U.S. FISH AND WILDLIFE SERVICE.

32. Defendant MARTHA WILLIAMS is the Director of Defendant U.S. Fish and Wildlife Service. She is sued in her official capacity.

### **LEGAL BACKGROUND**

33. The ESA, 16 U.S.C. §§ 1531–1544, provides comprehensive protections for both endangered and threatened species.

34. In passing the ESA, Congress found that different species “have been rendered extinct as a consequence of economic growth and development untempered by adequate concern and conservation” and that “other species of fish, wildlife, and plants have been so depleted in numbers that they are in danger of or threatened with extinction.” 16 U.S.C. § 1531(a)(1)-(2). Accordingly, the purposes of the ESA include “provid[ing] a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, [and] provid[ing] a program for the conservation of such endangered species and threatened species.” 16 U.S.C. § 1531(b).

35. To this end, section 4 of the ESA requires the Secretary to protect imperiled species by listing them as either “endangered” or “threatened.” 16 U.S.C. § 1533(a).

36. The Secretary has delegated their administration of the ESA to the Service. 50 C.F.R. § 402.01(b).

37. A species is “endangered” if it is “in danger of extinction throughout all or a significant portion of its range . . . .” 16 U.S.C. § 1532(6). A species is “threatened” if it 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). The definition of “species” includes “subspecies” and “distinct population segments of any species of vertebrate fish or wildlife which interbreeds when mature.” 16 U.S.C. § 1532(16).

38. In making listing determinations, the Service must assess five categories of threats to a species, also known as “listing factors”: “(A) the present or threatened destruction, modification or curtailment of [a species’] 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 [the species'] continued existence.” 16 U.S.C. § 1533(a)(1).

39. If a species meets the definition of “endangered” or “threatened” because of “any one or a combination of” these five listing factors, the Service must list the species. 50 C.F.R. § 424.11(c); *see* 16 U.S.C. § 1533(a)(1) (“because of any of the following factors”).

40. The ESA mandates that the Service make listing determinations “solely on the basis of the best scientific and commercial data available,” 16 U.S.C. § 1533(b)(1)(A), which “may include, but are not limited to scientific or commercial publications, administrative reports, maps or other graphic materials, information received from experts on the subject, and comments from interested parties.” 50 C.F.R. § 424.13.

41. The requirement that the Service rely “solely” on the “best scientific and commercial data available to [the Secretary],” 16 U.S.C. § 1533(b)(1)(A), means that the Service cannot require scientific certainty that a species is endangered or threatened.

42. Congress intended that the Service act before a species is driven to the brink of extinction. *See* 119 Cong. Rec. 30157, 30167 (1973) (“In the past, little action was taken until the situation became critical and the species was dangerously close to total extinction. This legislation provides us with the means for preventive action.”) (remarks of Rep. Clausen); *id.* (“By heeding the warnings of possible extinction today, we will prevent tomorrow’s crisis.”) (remarks of Rep. Gilman).

43. A species does not receive the ESA’s substantive protections unless the Service lists it as endangered or threatened. Thus, listing is the crucial first step in the ESA’s system of species protections.



44. Upon listing, an endangered species gains all of the protections under section 9 of the ESA, 16 U.S.C. § 1538, which makes it unlawful to “take” endangered species, meaning no person can harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect these species or disturb their habitats without first receiving authorization from the Service. *See* 16 U.S.C. § 1532(19) (defining take); 50 C.F.R. § 17.3 (defining harm in the ESA’s definition of take).

45. Upon listing, threatened species are protected under section 4(d) of the ESA, 16 U.S.C. § 1533(d), which requires the Service to issue necessary and advisable regulations to conserve threatened species and allows the Service to extend the statutory protections afforded to endangered species by section 9, 16 U.S.C. § 1538, to threatened species.

46. To ensure the timely protection of species at risk, Congress set forth a detailed process whereby citizens may petition the Service to list a species as endangered or threatened, and established deadlines for the Service’s response. 16 U.S.C. § 1533(b)(3); *see* 50 C.F.R. § 424.14.

47. Upon receiving a petition to list a species, the Service has ninety days to determine “whether the petition presents substantial scientific or commercial information indicating that the petitioned action may be warranted.” 16 U.S.C. § 1533(b)(3)(A); 50 C.F.R. § 424.14(h)(1). This determination is known as a “ninety-day finding.”

48. If the Service makes a positive ninety-day finding in response to a petition, it must conduct a status review of the species. 16 U.S.C. §§ 1533(b)(3)(A), 1533(b)(1)(A); 50 C.F.R. § 424.14(h)(2). During the status review, the Service publishes a notice and invites comment on a species’ status, which provides the basis for a listing determination. The Service may look beyond information presented in the listing petition or its own files during the status review. 50 C.F.R. § 424.13.

49. In conducting its status review, the Service compiles the best available data regarding the species' biology and factors that influence the species viability in a "Species Status Assessment" ("SSA"). This document is supposed to serve as the biological underpinning for the Service's decision regarding whether a species warrants protection under the ESA.

50. Based on the results of the status review, the Service must make one of three findings within twelve months of receipt of the petition, known as a "twelve-month finding": (1) the petitioned action is "warranted"; (2) the petitioned action is "not warranted"; or (3) the petitioned action is warranted, but the Service's issuance of a proposed rule is presently "precluded because of other pending proposals to list, delist, or change the listed status of species" and the agency is making "[e]xpeditious progress . . . to list, delist, or change the listed status of qualified species . . ." (known as "warranted but precluded"). 50 C.F.R. § 424.14 (h)(2); *see* 16 U.S.C. § 1533(b)(3)(B). These determinations must be based on the "best scientific and commercial data available." 16 U.S.C. § 1533(b)(1)(A).

51. If the Service's twelve-month finding concludes that listing is warranted, the agency must publish notice of the proposed regulation to list the species as endangered or threatened in the Federal Register for public comment. 16 U.S.C. § 1533(b)(3)(B)(ii).

52. If the Service issues a twelve-month finding that listing the species is "not warranted," that finding is a final agency action subject to judicial review. 16 U.S.C. §§ 1533(b)(3)(B)(i), 1533(b)(3)(C)(ii).

### **Administrative Procedure Act**

53. 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." 5 U.S.C. § 706(2)(A). While the ESA provides for

judicial review of a “not warranted” twelve-month finding, 16 U.S.C. § 1540(g), the APA governs the standard and scope of judicial review. 5 U.S.C. §§ 701–706.

### **FACTUAL BACKGROUND**

54. The Kirtland’s snake (*Clonophis kirtlandii*) is a small, non-venomous snake that lives in the Midwest and Ohio River Valley states.



Kirtland’s snake (*Clonophis kirtlandii*).

Photo Credit: Andrew Hoffman,  
U.S. Fish and Wildlife,  
Kirtland’s Snake (*Clonophis kirtlandii*) Species Status Assessment  
at cover page (Mar. 2017)

55. The Kirtland’s snake is identifiable by the eye-catching red ventral scales on its belly.

56. The Kirtland’s snake is a secretive species that is notoriously difficult to detect. The species is fossorial, meaning that it spends most of its time underground, often in or near crayfish burrows. Even when above ground, it is almost always found under natural or artificial cover objects instead of basking in open areas.

57. The Kirtland's snake requires moist-soil environments to survive and is always found in close proximity to a permanent or seasonal water source, including wetlands, streams, reservoirs, lakes, or ponds.

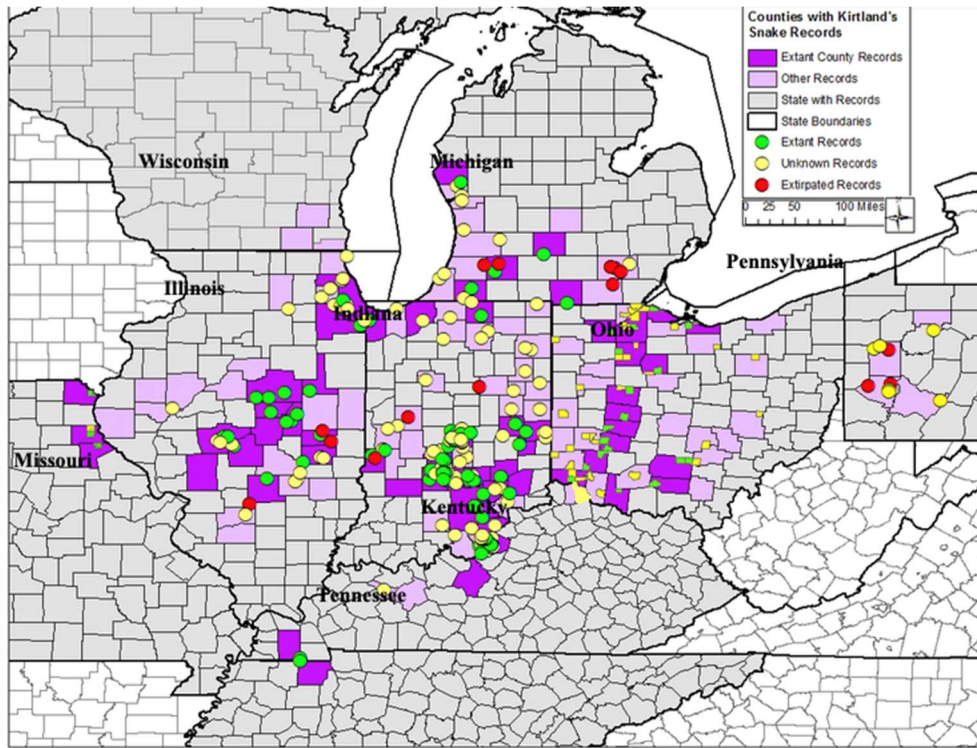
58. Accordingly, the species' typical habitats include meadow wetlands, prairies, seasonal marshes, and forested riparian areas of streams and reservoirs.

59. The Kirtland's snake historically ranged across 139 counties in nine states: Illinois, Indiana, Kentucky, Michigan, Missouri, Ohio, Pennsylvania, Tennessee, and Wisconsin.

60. The Kirtland's snake population is declining in many parts of this range.

61. The most recent evidence indicates that the Kirtland's snake is currently only extant in sixty counties in seven states: Illinois, Indiana, Kentucky, Michigan, Missouri, Ohio, and Tennessee.

62. In other words, the Kirtland's snake is only confirmed to exist in less than half of its historical range, as measured by counties.



U.S. Fish and Wildlife Service,  
Kirtland's Snake (*Clonophis kirtlandii*) Species Status Assessment  
at 24 (Figure 4.3) (Mar. 2017)

### **Threats to the Kirtland's Snake**

#### Habitat Loss from Residential and Agricultural Development

63. The primary threat contributing to the decline of the Kirtland's snake comes from development, both residential and agricultural.

64. Agricultural land use has destroyed much of the Kirtland's snake's habitat.

65. Separately, urban sprawl continues to encroach on previously undeveloped areas, reducing the Kirtland's snake's natural habitat.

66. The conversion of previously undeveloped lands for both agriculture and urban development leads to habitat destruction, degradation, and fragmentation.

67. Substantial wetland habitat has been lost throughout the species' range in the last century.

68. Because the species' natural habitats have become increasingly rare, the Kirtland's snake has been forced to inhabit remnant wet areas in urban and suburban settings that are currently off-limits or otherwise undesirable for development, at least for now.

69. Accordingly, a large proportion of the recorded observations of extant Kirtland's snakes occur in urban areas. The species has been reported in vacant lots, trash dumps, parks, cemeteries, and neighborhood yards.

70. These urban populations are likely remnants of larger populations of Kirtland's snakes that have been mostly extirpated by urbanization and agriculture.

71. The remaining urban populations are small and isolated, and therefore more vulnerable to extirpation.

72. The urban sites that continue to persist may be more vulnerable to habitat loss or modification from development or collection.

73. Known populations in Toledo, Chicago, and Indianapolis have been lost to development.

#### Climate Change

74. Climate change also poses a substantial threat to the continued survival of the Kirtland's snake.

75. The U.S. Global Change Research Program predicts that temperatures will increase and precipitation patterns will change across the Snake's range in the coming decades.

76. As a result of these changes, the Snake is expected to see greater declines in climatic suitability than other reptiles in the region.

77. A decline in climatic suitability means that the climate in the range that the Snake inhabits will become less suitable for the Snake's ecological needs.

78. Based on a 2013 report that modeled potential climate change impacts on the Kirtland's snake, the Service found that potentially large portions of the Snake's current range will have different and likely unfavorable climate conditions in the future.

79. As cited in that 2013 report, the worst-case model predicts that in 2050, only 14% of the Snake's current known locations will be climatically similar to those locations' conditions at the time of the study, while the best-case model predicts that 72% of locations will remain climatically similar.

80. The worst-case model also predicts that in 2080, only 3% of the Snake's current known locations will be climatically similar to those locations' conditions at the time of the study, while the best-case model predicts that 33% of locations will remain climatically similar.

81. The model also shows that areas of high climatic suitability for the Kirtland's snake will steadily decline, whether currently occupied by the Snake or not.

82. This means that, overall, there will be fewer areas for the Snake to inhabit that are highly suitable to meeting the Snake's needs.

83. While Ontario, Canada and western New York are predicted to become climatically suitable for the Kirtland's snake in the future, the Service has stated that it is unlikely that the Snake will be able to colonize these areas.

84. This is because it is not likely that the Snake would be able to move the hundreds of miles necessary to occupy these new areas, especially given habitat fragmentation and the species' site fidelity.

85. Site fidelity means that the Kirtland's snake tends to return to the same previously occupied areas, rather than moving into new territory.

86. It is unknown how the Kirtland's snake will respond to these changes in the climate in their current range.

#### Existing State Regulatory Mechanisms

87. Several states where the Kirtland's snake lives list the species as threatened or endangered under the relevant state laws.

88. However, the protections afforded by these laws are mostly limited to prohibiting collection of the species.

89. These state-level protections neither address the primary threats facing the Kirtland's snake from habitat destruction and climate change, nor do they address the cumulative danger of smaller threats such as agricultural pesticides.

90. Each of Indiana, Michigan, and Pennsylvania lists the Kirtland's snake as endangered. These states only prohibit activities such as taking, possession, transport, import, export, buying, disposal and selling of the species.

91. In Indiana, Michigan, and Pennsylvania, an endangered listing is based on the risk of extirpation in the foreseeable future.

92. "The foreseeable future" is an unspecified term left to the discretion of each state.

93. Illinois, Kentucky and Ohio list the Kirtland's snake as threatened because it is likely to become endangered in the foreseeable future.

94. "Likely to become endangered" is vague.

95. Illinois, Kentucky and Ohio each fail to propose any sort of timeline or reparative measures to prevent further degradation of the Snake population.



96. For example, Kentucky allows anyone to take up to five individual Kirtland's snakes per year for personal use without a permit.

97. Similarly, Ohio only prohibits buying and selling of the Kirtland's snake without a permit.

98. Other states within the Kirtland's snake habitat range do even less to protect the species: Missouri, Tennessee, and Wisconsin do not classify the Snake as threatened or endangered.

99. Missouri lists the Kirtland's snake as a species of conservation concern, S1 (critically imperiled), but does not offer any general protections for species under this designation.

100. Tennessee lists the Kirtland's snake as extremely rare and critically imperiled, but affords the species no protection.

101. Wisconsin does not list the species and does not offer any protections for the Snake.

102. Thus, the existing state regulations fail to address the primary threats facing the species, which are habitat destruction and climate change within a significant portion of its range.

103. ESA protections would help the Kirtland's snake survive each of these stressors through habitat protections and focused recovery planning for isolated populations within the range.

### **The Center's Petition and Listing History**

104. On April 20, 2010, the Center petitioned the Secretary to have the Service list the Snake as threatened or endangered under the ESA.

105. In its September 27, 2011, ninety-day finding, the Service agreed that listing the Kirtland's snake as endangered or threatened may be warranted based on one or more of the five listing factors: (A) present or threatened habitat destruction, modification, or curtailment of the species' 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 the species' continued existence. 76 Fed. Reg. 59,836, 59,859 (Sept. 27, 2011).

106. Following its ninety-day finding, the Service initiated a status review to determine whether listing the Kirtland's snake under the ESA was warranted.

107. On June 17, 2014, the Center filed a complaint against the Service for not meeting the statutory petition deadlines, namely the requirement that the Service publish a listing decision within twelve months of receiving a petition.

108. Per a settlement agreement, the Service agreed to publish a twelve-month finding regarding the Kirtland's snake by September 30, 2017.

### **The Service's Unlawful Not Warranted Determination**

109. On October 5, 2017, the Service published its Twelve-Month Finding for the Kirtland's snake based on the evidence that the Service compiled in the SSA.

110. In the Twelve-Month Finding, the Service found that listing the Kirtland's snake is not warranted because the Service concluded that "the Kirtland's snake is not in danger of extinction nor is it likely to become so in the foreseeable future throughout all or a significant portion of its range." 82 Fed. Reg. 46,618, 46,642 (Oct. 5, 2017).

#### The Service's Consideration of the Five Listing Factors Was Unlawful

111. In the Twelve-Month Finding, the Service described the many actual threats facing the Kirtland's snake as merely "potential threats." *Id.* at 46,641.

112. The Service determined that none of these threats is occurring to a degree or magnitude that would result in population- or species-level impacts.

113. In the Twelve-Month Finding, the Service dismissed the threats facing the Kirtland's snake with only minimal analysis.

114. The Service acknowledged that habitat loss and degradation from urbanization and development (Listing Factor A) pose a potential threat to the Kirtland's snake, but dismissed this threat, stating that Snake populations have persisted in degraded urban habitats.

115. However, the Service failed to consider that these urban populations are remnant populations that are small, isolated, and therefore highly vulnerable to extirpation by further development.

116. The Service also gave limited analysis to other potential threats to the Snake, including collection for the pet trade (Listing Factor B), disease (Listing Factor C), and road mortality (Listing Factor E).

117. The Service dismissed these threats as too insignificant to pose population- or species-level impacts.

118. The Service's Twelve-Month Finding entirely failed to assess Listing Factor D, the inadequacy of existing regulatory mechanisms.

#### The Service's Reliance on Uncertainty Was Unlawful

119. Additionally, the Service dismissed the evidence that climate change is another natural or manmade factor affecting the Snake's continued existence (Listing Factor E).

120. The evidence that the Service compiled in the SSA indicates that the Kirtland's snake will see substantial declines in climatic suitability across its current range as a result of climate change.

121. For example, the Service found that temperatures across the Kirtland's snake's range are expected to increase by as much as 8.5 degrees Fahrenheit by 2100 compared to average temperatures from 1979 to 2000, and precipitation patterns are expected to change across the range.

122. Yet the Service nevertheless dismissed this unrefuted evidence that climate change will have deleterious effects on the Snake's habitat.

123. Instead, the Service concluded that "the impact of climate change on this species is too uncertain to make reasonable and reliable predictions, and therefore is unknown." U.S. Fish and Wildlife Service, *Species Assessment and Listing Priority Assignment Form (Kirtland's Snake)* 14 (July 25, 2017).

124. The Service stated that the Snake could adapt to the predicted changes in climate.

125. The Service reached this conclusion despite the fact that the Snake would not be likely to move hundreds of miles to inhabit climatically suitable areas in the future (e.g., large

portions of Ontario, Canada and western New York state) that are distant from their current range.

The Service's Consideration of Threats

in a "Significant Portion" of the Snake's Range Was Unlawful

126. The Service's consideration of threats in a "significant portion" of the Snake's range was unlawful in three ways.

127. First, in determining whether the Snake is threatened or endangered in a "significant portion of its range," the Service's policy was to consider a portion of range "significant" if "*without that portion*, the species in the remainder of its range warrants listing." *Id.* at 17 (emphasis in original).

128. In this interpretation of "significant," the Service restated a policy that courts have vacated because it renders the phrase superfluous and conflicts with the statute's legislative history. *See Defs. of Wildlife v. Norton*, 258 F.3d 1136, 1142 (9th Cir. 2001); *Desert Survivors v. U.S. Dep't of Interior*, 321 F. Supp. 3d 1011, 1072–73 (N.D. Cal. 2018); *Ctr. for Biological Diversity v. Jewell*, 248 F. Supp. 3d 946, 955 (D. Ariz. 2017), *amended in part*, No. CV-14-02506-TUC-RM, 2017 WL 8788052 (D. Ariz. Oct. 25, 2017) (limiting the vacatur to Arizona).

129. Second, the Service evaluated whether the Snake is threatened or endangered in a significant portion of its range by considering only threats that are geographically concentrated in certain portions of the Snake's range.

130. The Service determined that if the threats to the species are essentially uniform throughout its range, then the species is not likely to be in danger of extinction or likely to become so in the foreseeable future in any portion of its range.

131. However, widespread threats that do not endanger the Snake in the entirety of its range may nevertheless endanger the species in a significant portion of its range because of small population size, population isolation, or other intrinsic factors that the Service did not consider as part of its analysis.

132. Third, the Service stated it did not find any concentrated threats facing the Snake using the Service's flawed concentrated threat methodology.

133. However, development and associated habitat loss and wetland modification; agricultural pesticides; and climate change may affect a geographically "concentrated" area of the Snake's habitat.

134. Although habitat loss and wetland modification for agricultural and residential uses occurs throughout the Midwest, such loss and modification does not occur uniformly throughout the Snake's range.

135. Habitat loss and wetland modification does not occur at the same rate or to the same extent in each area of the Snake's range.

136. Further, residential and agricultural development likely do not pose a threat in the same area.

137. Isolated and small remnant Snake populations that occupy remaining habitats are highly vulnerable to extirpation by further development.

138. Thus, isolated and small remnant Snake populations are affected differently than more robust populations in other areas.

139. The Service did not directly address how development and the Snake's population isolation may interact to create a concentrated threat.

140. Also, the Service did not evaluate whether agricultural pesticides pose a threat in concentrated areas or at all.

141. Finally, the Service cited evidence that climate change would affect portions of the snake's range at different rates and to different extents.

142. However, the Service did not find that climate change may pose a concentrated threat.

143. Each of these non-uniform threats may constitute a concentrated threat under the Service's methodology.

## **CLAIMS FOR RELIEF**

### **First Claim for Relief**

#### **Violation of the ESA: Failure to Apply Lawfully the Five Listing Factors**

144. Plaintiffs re-allege and incorporate by reference all the allegations set forth in paragraphs 1-143.

145. The ESA requires the Service to base its determination of whether to list the Kirtland's snake on five statutory 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." 16 U.S.C. § 1533(a)(1).

146. If any one factor or a combination of the factors causes the species to be endangered or threatened, the Service must provide the full protection of the Act and list it. 50 C.F.R. § 424.11(c).

147. In its Twelve-Month Finding for the Kirtland's snake, the Service entirely failed to consider Listing Factor D, the inadequacy of existing regulatory mechanisms.

148. Although the Service included at least token mention of the other four listing factors, it did not reference Factor D at all.

149. Moreover, had the Service lawfully considered and applied all five listing factors, those would have dictated that the Service list the Kirtland's snake as threatened or endangered.

150. Therefore, the Service's listing decision violates the ESA, 16 U.S.C. § 1533(a)(1), and is arbitrary, capricious, and not in accordance with law, under the judicial review standards of the APA, 5 U.S.C. § 706(2)(A).

### **Second Claim for Relief**

#### **Violation of the ESA: Failure to Use the Best Scientific Data Available**

151. Plaintiffs re-allege and incorporate by reference all the allegations set forth in paragraphs 1-150.

152. In making decisions regarding whether to list a species as threatened or endangered, the Service must rely "solely on the basis of the best scientific and commercial data available." 16 U.S.C. § 1533(b)(1)(A).

153. The Service is required to rely on the best available scientific evidence, even if that evidence is uncertain or inconclusive.

154. In its Twelve-Month Finding, the Service failed to provide a rational explanation for its finding that the Kirtland's snake is not endangered or threatened when the best available scientific evidence indicates that climate change will make most of the snake's current range unsuitable for the species in the foreseeable future.



155. The Service arbitrarily assumed, without any scientific basis, that the Kirtland's snake can adapt to and survive climate changes in its current range.

156. In its Twelve-Month Finding, the Service relied on uncertainty to deny the Kirtland's snake protection as endangered or threatened.

157. The ESA requires that the Service give the benefit of the doubt to the species when making a listing determination.

158. Therefore, the Service's Twelve-Month Finding violates the ESA, 16 U.S.C. § 1533(b)(1)(A) and is arbitrary, capricious, an abuse of discretion, and not in accordance with law, under the judicial review standards of the APA, 5 U.S.C. § 706(2)(A).

### **Third Claim for Relief**

#### **Violation of the ESA: Failure to Analyze Lawfully Whether the Kirtland's Snake Is Threatened or Endangered in a Significant Portion of Its Range**

159. Plaintiffs re-allege and incorporate by reference all the allegations set forth in paragraphs 1-158.

160. An "endangered" species is one that is "in danger of extinction throughout all *or a significant portion of its range*," 16 U.S.C. § 1532(6) (emphasis added), and a "threatened" species as one that 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) (emphasis added).

161. The Service's significant-portion-of-range evaluation for the Snake is flawed for three reasons.

162. First, the Service's interpretation of "significant" was contrary to the ESA's statutory language, as it renders the "significant portion of its range" language in the ESA superfluous and restates a policy that courts have vacated. 16 U.S.C. § 1532(6), (20).

163. Second, the Service unlawfully determined that the Snake was not threatened or endangered throughout a significant portion of its range by limiting its analysis to concentrated threats.

164. Evaluating threats to a species in “a significant portion of its range” solely by evaluating threats that are geographically concentrated in certain portions of the range ignores threats that occur throughout a species’ range that may impact different portions differently.

165. Consequently, the Services’ concentrated threat analysis is insufficient to determine whether a portion of a species’ range is significant and falls short of the ESA’s statutory requirement to list species threatened or endangered in a significant portion of their range.

166. Third, even if the Service’s approach to concentrated threat analysis is lawful, the Service incorrectly applied that concentrated threat analysis when it found the Snake did not face any concentrated threats.

167. The Service’s finding that there is no concentration of threats is arbitrary, capricious, and contrary to the best scientific data available because the Service failed to evaluate adequately whether threats from development and associated habitat loss and wetland modification; agricultural pesticides; and climate change constitute “concentrated” threats in significant portions of the Snake’s range.

168. Consequently, the Service’s Twelve-Month Finding violates the ESA, 16 U.S.C. §§ 1532, 1533, and is arbitrary, capricious, and not in accordance with law, under the judicial review standards of the APA, 5 U.S.C. § 706(2)(A).

### **REQUEST FOR RELIEF**

WHEREFORE, Plaintiffs pray that this Court:

- (1) Issue a declaratory judgment that Defendants are in violation of the ESA as alleged herein;
- (2) Declare unlawful and set aside the Service’s Twelve-Month Finding on the Center’s listing petition for the Kirtland’s snake;
- (3) Declare the Service’s methodology for determining whether the Snake was threatened or endangered in a “significant portion of its range” is in violation of the ESA as alleged herein;
- (4) Remand the Twelve-Month Finding to Defendants and enjoin the Service to conduct a new Twelve-Month Finding for the Kirtland’s snake consistent with the law within a year;
- (5) Award Plaintiff its attorneys’ fees and costs pursuant to 16 U.S.C. § 1540(g)(4);  
and
- (6) Grant Plaintiff such other relief as the Court deems just and proper.

Respectfully submitted this June 8, 2022,

/s/ Mark N. Templeton

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