IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

CENTER FOR BIOLOGICAL DIVERSITY
P.O. Box 11374
Portland, OR 97211,

Plaintiff,

v.

U.S. FISH AND WILDLIFE SERVICE,
1849 C Street NW, Room 3331
Washington, DC 20240,

BRIAN NESVIK, in his official capacity as Director of U.S. Fish and Wildlife Service,
1849 C Street NW, Room 3345
Washington, DC 20240,

and

DOUG BURGUM, in his official capacity as Secretary of the U.S. Department of the Interior,
1849 C Street NW
Washington, DC 20240,

Defendants.

Case No._____

COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF

INTRODUCTION

1. Plaintiff Center for Biological Diversity ("Center") brings this case challenging the U.S. Fish and Wildlife Service's ("Service") failure to comply with the Endangered Species Act ("ESA") and the Administrative Procedure Act ("APA") when determining that the Rio Grande cooter (*Pseudemys gorzugi*) ("the turtle") does not warrant listing as a threatened or endangered species under the ESA.

2. The Rio Grande cooter is a late-maturing, long-lived, basking turtle that sits on logs or rocks to soak up sunshine. It is brightly colored, medium to large-sized, with distinctive curved markings on its shell. The turtle's range is limited to portions of New Mexico, Texas, and northern Mexico.

3. The Rio Grande cooter's continued existence is threatened by alterations in river flow resulting from dam construction and channelization, water pollution and dewatering associated with oil and gas operations, climate change, drought and long-term aridification, and direct mortality, including collection for international trade.

4. Despite the mounting evidence showing that the turtle is in danger of extinction, the Service determined on March 14, 2022, that the turtle does not warrant listing under the ESA.

5. In reaching this conclusion, the Service acted arbitrarily and capriciously and violated the ESA and APA by: (1) failing to provide a rational basis for the metrics by which it characterized the turtle's risk of extirpation within each of its 16 "population analysis units"; (2) failing to explain its omission of direct mortality and collection from its metrics; (3) failing to address the only study specifically modeling climate change impacts on the turtle's habitat, and failing to rationally explain its decision to exclude the impact of climate change on the feminization of turtle eggs; and (4) unlawfully concluding that the turtle does not warrant listing as threatened or endangered in a significant portion of its range

6. To remedy these violations, the Center brings this lawsuit for declaratory and injunctive relief, seeking an Order declaring that the Service violated the ESA and APA by determining that the Rio Grande cooter does not warrant listing under the ESA, and directing the Service to issue a revised listing decision by a date certain.

JURISDICTION

7. This Court has jurisdiction over this action pursuant to 16 U.S.C. § 1540(c), (g) and 28 U.S.C. § 133. This Court has authority to issue declaratory and injunctive relief pursuant to the ESA, 16 U.S.C. § 1540(g); 28 U.S.C. §§ 2201–2202; and 5 U.S.C. § 706(2).

8. The Center provided Defendants with 60-days' notice of their ESA violations, as required by 16 U.S.C. § 1540(g)(2)(C). Defendants have not remedied the violations set out in the notice, and an actual controversy exists between the parties within the meaning of the Declaratory Judgment Act, 28 U.S.C. § 2201.

9. Venue is proper in the District of Columbia pursuant to 28 U.S.C. § 1391(e) and 16 U.S.C. § 1540(g)(3)(A) because Defendants reside in this district and a substantial part of the events or omissions giving rise to the Center's claims occurred in this district.

PARTIES

10. Plaintiff CENTER FOR BIOLOGICAL DIVERSITY is a national, non-profit conservation organization that works through science, law, and the creative media to protect endangered species and their habitats, including the Rio Grande cooter. The Center has more than 93,000 members, including many who live and recreate in the turtle's range. The Center is headquartered in Tucson, Arizona, with offices throughout the United States.

11. The Center brings this action on behalf of its staff and members who derive recreational, aesthetic, educational, scientific, professional, and other benefits from the Rio Grande cooter and its habitat. The interests of the Center's members in protecting and recovering the turtle and its habitat are directly harmed by the Service's failure to comply with the ESA and APA in making a listing determination for the turtle.

12. For example, Center member Max Havelka lives in New Mexico and is a wildlife biologist and herpetologist. Mr. Havelka volunteers with the New Mexico Herpetological Society and the Desert Tortoise Council. In August 2023, he observed Rio Grande cooters in the Black River south of Carlsbad (Eddy County). Mr. Havelka was thrilled by this encounter, knowing that the turtle is one of the rarest species he has recently tried to observe in New Mexico. He watched the turtles for several hours as they came and went from basking log to water, taking photographs for his recreational hobby and for educational purposes to share with the Herpetological Society. He intends to return with a group from the Herpetological Society in March 2026. Mr. Havelka has recreational, aesthetic, and educational interests in the conservation of the Rio Grande cooter. He is harmed by the Service's decision to deny ESA protection to the turtle because it lessens his experience recreating in its habitat, harms his volunteer, educational, and conservation efforts, and harms his aesthetic experience in nature because it increases the turtle's decline.

13. Center member Roxana J. Rojas lives in Texas and is an avid turtle enthusiast. Ms. Rojas visits spring-fed waters for aesthetic, recreational, and spiritual reasons, and she seeks out turtles as a measure of the health of the water. She has traveled to the Rio Grande to search for the Rio Grande cooter, and she has specific plans to visit New Mexico to visit the turtle's habitat in the lower Pecos and Black Rivers (near the 6 mile and 10 mile dam and also the lower Tansel dam) for recreational, aesthetic, and spiritual renewal where she intends to look for the Rio Grande cooter. She also intends to make plans to spend time in the turtles' habitat in the Big Bend and Marfa area. Ms. Rojas is harmed by the Service's decision to deny ESA protection to the turtle because its decline makes it harder for her to locate the turtle, and the disappointment

in not finding the turtle after so much effort harms her recreational enjoyment, aesthetic pursuits, and creates a divide between Ms. Rojas and her spiritual practices.

14. The Service's decision to deny ESA protections to the Rio Grande cooter has caused Center members, including Mr. Havelka and Ms. Rojas, to suffer a concrete and particularized injury that is actual and imminent. Without the protections provided by listing the Rio Grande cooter as an endangered or threatened species pursuant to the ESA, the species will likely continue to decline towards extinction, and the Center and its members will continue to suffer injury unless the relief sought in this complaint is granted.

15. Defendant U.S. FISH AND WILDLIFE SERVICE is the agency within the Department of the Interior charged with implementing the ESA for the Rio Grande cooter.

16. Defendant BRIAN NESVIK is the Director of the Service, charged with ensuring that agency decisions comply with the ESA. Defendant Nesvik is sued in his official capacity.

17. Defendant DOUG BURGUM is the Secretary of the U.S. Department of the Interior and has the ultimate responsibility to administer and implement the provisions of the ESA. Defendant Burgum is sued in his official capacity.

STATUTORY FRAMEWORK

The Endangered Species Act

18. The Endangered Species Act, 16 U.S.C. §§ 1531–1544, is "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).

19. The ESA defines a "species" as "any subspecies of fish or wildlife or plants, and any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature." *Id.* § 1532(16).

20. 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 throughout all or a significant portion of its range." *Id*. § 1532(20).

21. The ESA requires the Service to determine whether any species is endangered or threatened because of any one of, or combination 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).

22. If the Service determines that the species is not endangered or threatened throughout all its range, the ESA requires the agency to examine whether it is endangered or threatened throughout any "significant portion" of its range. *Id.* §§ 1532(6), (20).

23. The Service must base all listing determinations "solely on the basis of the best scientific and commercial data available." *Id.* § 1533(b)(1)(A).

24. To ensure the timely protection of species at risk of extinction, Congress set forth a detailed process whereby any person may petition the Service to list a species. *Id.* § 1533(b)(3). In response, the Service must publish a series of three decisions according to statutory deadlines. First, within 90 days of receipt of a listing petition, the Service must publish 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 determines that a petition presents substantial information indicating that listing "may be warranted," the agency must publish that finding and proceed with a scientific review of the species' status, known as a "status review." *Id.*

25. Upon completing the status review, and within 12 months of receiving the petition, the Service must publish a "12-month finding" with one of three listing determinations: (1) listing is "warranted"; (2) listing is "not warranted"; or (3) listing is "warranted but precluded" by other proposals, provided certain circumstances are met. *Id.* § 1533(b)(3)(B).

26. If the Service determines that listing is "warranted," the agency must publish that finding in the Federal Register along with the text of a proposed regulation to list the species as endangered or threatened and to designate critical habitat for the species. *Id.* § 1533(a)(3)(A), (b)(3)(B)(ii). Within one year of publication of the proposed listing rule, the Service must publish in the Federal Register the final rule implementing its determination to list the species and designate critical habitat. *Id.* § 1533(b)(6)(A).

27. If the Service instead determines listing is "not warranted," the process concludes, and that finding is a final agency action subject to judicial review. *Id.* § 1533(b)(3)(C)(ii).

28. The ESA has a suite of protections that apply to species once they are listed as endangered or threatened. For example, ESA section 4(a)(3) requires the Service to designate "critical habitat" for each endangered and threatened species. *Id.* § 1533(a)(3).

29. ESA section 7(a)(2) requires all federal agencies to ensure that their actions do not "jeopardize the continued existence" of any endangered or threatened species or "result in the destruction or adverse modification" of any listed species' critical habitat. *Id.* § 1536(a)(2).

30. ESA section 9 prohibits, among other actions, "any person" from causing the "take" of any protected species without lawful authorization. *Id.* §§ 1538(a)(1)(B), 1539; *see also id.* § 1532(19) (defining "take"). Other provisions require the Service 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 the conservation of protected species, *id.* § 1535(d).

The Administrative Procedure Act

31. Under the APA's standard of review, a court must hold unlawful and set aside "agency actions found to be arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A). This standard of review applies to claims brought under the citizen suit provision of the ESA.

32. An agency's action is arbitrary and capricious if the agency "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 of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983).

FACTUAL BACKGROUND

The Rio Grande cooter

33. The Rio Grande cooter, pictured swimming below in its namesake river, is a freshwater turtle native to the lower Rio Grande basin in New Mexico, Texas, and northern Mexico. The turtle relies on clean, flowing water and prefers deep, clear pools with access to logs or rocks so it can bask in the sun and regulate its body temperature.

Photo Credit: RKO

34. In New Mexico, the Rio Grande cooter's range is restricted to the Pecos River watershed downstream of the Brantley Reservoir, including the Black River and the Delaware River; in Texas, it occurs along the Rio Grande, Devils, and Pecos Rivers, and some of their tributaries; and in Mexico, it has historically occurred in the Río Salado and the Río San Juan watersheds in Coahuila, Nuevo Léon, and Tamaulipas.

The Rio Grande Cooter's Current Imperilment

35. The Rio Grande and Pecos River watersheds are in crisis. Unsustainable levels of surface and groundwater usage and construction of dams, channels, and water diversions have resulted in reduced or intermittent flows and dewatering of extensive reaches of both rivers. These impacts are magnified by rising temperatures, reduced snowpack, and long term aridification driven by climate change. In the past decade, unrestrained oil and gas development within the Permian Basin has resulted in thousands of fluid spills, and injection of vast amounts of toxic, highly saline "produced water" into the region's aquifers, further imperiling the turtle's limited remaining habitats.

36. The widespread degradation of its habitat, particularly drying in the Pecos River, has separated the Rio Grande cooter into a northern and southern population. The northern population is restricted to the Pecos River downstream of the Brantley Reservoir (including the

Black and Delaware Rivers) in New Mexico. The southern population's range occurs in portions of the Rio Grande River and its tributaries in Texas and northern Mexico.

37. The severing of habitat connectivity between the northern and southern turtles isolates populations, increasing the risk of extinction for both. Small, isolated populations are more prone to loss of genetic diversity, more likely to experience inbreeding, and less likely to survive catastrophes such as severe weather and years of low reproduction (all of which the turtle is currently experiencing).

38. Both the northern and southern populations are threatened by salt pollution in the lower Pecos River. Although the Pecos is a naturally saline river, dam construction and climate change have led to decreased streamflow and increased evaporation, leading to vastly increased salinity levels that Rio Grande cooters cannot survive.

39. Injection of massive amounts of contaminated wastewater resulting from hydraulic fracturing in the Permian Basin, now the highest producing oil field in the world, is resulting in additional freshwater salinization in the Pecos watershed that negatively impacts both the northern and southern Rio Grande cooter populations. Each well that is fracked in the Permian not only requires more than 10 million gallons of freshwater daily but also results in about four barrels of produced water for every barrel of oil produced. This byproduct is as much as five times saltier than the ocean, and once injected into the ground, it commonly results in contamination of surface waters through old wells or blowouts.

40. The southern Rio Grande cooter population in Texas shows little to no evidence of reproduction. Because of the low population density and lack of juvenile recruitment, the southern population of turtles in Texas is unlikely to survive without captive breeding.

41. In Mexico, the main threats include climate change (drought and low levels of water), pollution, and illegal trade. Habitat within both the Río Salado and Río San Rodrigo basins has been extensively degraded.

42. There is no evidence that the turtle is reproducing in Mexico. Most of the observations that the Service relied on were casual observations uploaded to the social network platform iNaturalist. The Mexican government and a leading species expert informed the Service that the turtle may be confused with other similar looking turtles.

43. Collection has always been a threat for this turtle because of its distinct markings, but exports from the United States have sharply increased in recent years. Trade data collected by the Service, which only accounts for what was officially reported, shows a dramatic increase in the number of exports of turtles. Between 2016 and 2017, the data reflects a massive twelve-fold increase in exports. Direct mortality from incidental fishing catch and unlawful recreational shooting are additional threats to the species.

44. Long-term aridification and other extreme weather events driven by climate change threaten the turtle at all stages of its life. Increased temperatures are leading to lower water flows which impact turtle reproduction, and increased drying of freshwater habitat. Low flow and altered water regimes are especially harmful to young turtles and can lead to exhaustion and death if hatchlings are unable to reach water during low flow events. Increased temperatures also have the potential to feminize eggs, leading to more females and less males, harming the turtle's genetic fitness.

The Service's Not-Warranted Finding

45. The Center petitioned the Service to list the species as threatened or endangered under the ESA on July 11, 2012.

46. Long after the Service's preliminary finding was due, the Service issued a positive finding that listing the Rio Grande cooter may be warranted. 80 Fed. Reg. 37568 (July 1, 2015). The Service initiated a status review, culminating in the production of a Species Status Assessment ("SSA"). The SSA purports to summarize the turtle's biological status but does not reach a decision whether the turtle warrants listing under the ESA.

47. On March 14, 2022, the Service published a finding that the Rio Grande cooter does not warrant listing under the ESA. 87 Fed. Reg. 14227 (Mar. 14, 2022).

48. In the not warranted finding, based on the SSA and a "Species Assessment and Listing Priority Assignment Form" ("SAF"), the Service concluded that the turtle has multiple population units that it characterizes as at low risk of extirpation now and in the foreseeable future.

49. To reach this conclusion, the Service divided the turtle into 16 population units (nine in the United States, seven in Mexico) based on watersheds and physical barriers and evaluated the turtle's risk of extirpation in each unit by two demographic factors (occurrence and subadult presence) and three habitat factors (diversity of habitat available, water quantity, and water quality).

50. The Service determined that only three of the units in the United States are currently at high risk of extirpation. Although two of these units encompass most of the species' range within the Pecos River watershed, the Service concluded that turtles within the large majority of the Rio Grande watershed are at only low to moderate risk of extirpation. The Service further determined that no additional units in either watershed will become at risk of extinction as far as 30 years in the future, and in fact predicted the species' overall status will

improve. Based on these rosy predictions, the Service declined to list the Rio Grande cooter as endangered or threatened.

51. The Service's not warranted finding relied on assumptions and conclusions that were flawed, irrational, and contradictory to the best available science before the agency.

The Service Did Not Provide a Rational Basis for Its "Risk Metrics"

52. Under the occurrence metric, the Service only characterized a population unit at high risk of extirpation if there have been no observations of the Rio Grande cooter in the preceding 30 years. The Service's metric further characterized units at low risk of extirpation based on as few as six observations of turtles during the same time period. The Service provided no explanation for where this range came from or what it was based on.

53. The occurrence metric contradicts the best available scientific information. For example, in a comprehensive status review of aquatic river turtles in Texas rivers based on two years of fieldwork, Forstner et al. (2004) documented significantly more than six Rio Grande cooters in 14 specific locations throughout the turtle's range in Texas, but still concluded there was cause for concern. The researchers recorded, for example, 123 adults on a 60-mile stretch of the Pecos River (2.05 per river mile) and 68 adults on a 22-mile stretch of the Devils River (3.09 per river mile), a major tributary of the Rio Grande. Based on these population densities, the authors concluded that "the risk to [the species] is so great" that they recommended initiating a captive breeding program.

54. The Service failed to rationally explain what scientific information it relied on in selecting only six turtles as the threshold for characterizing a population unit as at low risk of extirpation and did not address or even acknowledge this contradiction with the findings of Forstner et al. (2004) or other scientific studies.

55. The Service's subadult presence metric characterized population units with as few as *one* subadult (juveniles and hatchlings) observation over the preceding 15 years as at low risk of extirpation. The Service failed to provide any rational basis for this metric and did not address or acknowledge the best available scientific information contradicting its characterization.

56. Bailey et al. (2014), for example, recorded a total of three juveniles each in the same 60-mile stretch of the Pecos River and 22-mile stretch of the Devils River surveyed by Forstner et al. (2014). Characterizing these observations as a "conspicuous lack of juveniles," the authors concluded that there is "considerable threat to the persistence" of Rio Grande cooters throughout Texas.

57. In addition, the Service determined that populations with *zero* observations of subadults would be at only a "moderate-high risk" of extirpation, based on alleged uncertainty. The Service identified no basis for how a lack of *any* sightings of young turtles equals a "moderate-high risk."

58. Likewise, the Service provided no rational basis for its water quantity metric. The Service assumed that, because the turtle has been observed since 1990 in 11 out of 16 population units despite historical reductions in water quantity, those populations must be more "robust to declines in flow" than other aquatic species. This is despite the best available science showing that the Rio Grande cooter has different flow needs and sensitivities, not that it is more robust. Based on the unsupported assumption that the Rio Grande cooter is more robust to declines in water flow, the Service determined that turtle populations are only at high risk of extirpation when the waters it relies on are completely dry or intermittent throughout the entire population unit.

59. For example, the Service found that the Pecos–Brantley Dam to Red Bluff Dam unit (located in New Mexico and Texas) was only at moderate risk of extirpation even though the waters within the population unit are "generally dry." This unit includes the Delaware River, which used to contain a robust turtle population but now has been largely dewatered by intensive fracking. The Service provided no rational explanation for these characterizations, when the best available scientific information demonstrates that the turtle is generally reliant on deep pools in high flow areas.

60. For the water quality metric, the Service based its risk categories on specific conductance (salinity) tolerances drawn from studies of mussels, generalist turtles, and unsupported statements that freshwater turtles can tolerate some high salinity levels. Although freshwater is typically defined as conductivity levels of 1,500 µS/cm or less, the Service characterized population units with salinity levels as high as 5,500 µS/cm at a low risk of extirpation.

61. The Service's metric contradicts the best available scientific information regarding the salinity tolerance of Rio Grade cooters specifically, including Davis et al. (2020), which only detected the species at sites with much lower conductivity (an average of 1,961 µS/cm) and recorded no turtles at sites with levels averaging more than 3,906 µS/cm. The Service did not address or acknowledge the findings of Davis et al. (2020).

62. The Service's approach is inconsistent with the best available scientific information demonstrating that the Rio Grande Cooter has lower tolerance to salinity than the turtles addressed in the studies relied on by the Service.

The Service Failed to Rationally Explain Its Omission of Direct Mortality and Collection Impacts From Its Risk Metrics

63. Although the best available scientific information demonstrates that predation, shooting, fishhook ingestion, and bycatch are significant additional threats to the turtle, the Service did not include a metric accounting for these mortality impacts. Bailey et al. (2014), for example, found that the species' "low population density, coupled with existing threats *and direct anthropogenic mortality*, would appear to pose a considerable threat to the persistence of the species in Texas." The Service's decision to not account for direct mortality in its metrics was not rationally explained and the Service arbitrarily excluded this threat from its not warranted determination.

64. Collection is an additional serious threat to the Rio Grande cooter. Removal of even a few adults from a turtle population can have effects lasting for decades because each removal eliminates that turtle's reproductive potential, and Bailey et al (2014) explained that over-collection for the pet trade compounds the threat the turtle is facing from habitat degradation and from having low population density.

65. The Service's Law Enforcement Management and Information System ("LEMIS") data reveals that between 2003 and 2020 an average of about 120 Rio Grande cooters were reported exported annually from the United States, with a sharp increase from 20 turtles exported in 2016 to 277 in 2017, 217 in 2018, 388 in 2019, and 352 in 2020. Similarly, the Service had evidence from Dixon (2022) of a localized extirpation of Rio Grande cooters in San Felipe Springs in Texas from overcollection for trade.

The Service's Climate Change Analysis Was Arbitrary

66. The Service considered the future impact of climate change on the Rio Grande cooter's viability under two scenarios, based on the Intergovernmental Panel on Climate Change

("IPCC") Representative Concentration Pathways ("RCP") 4.5 and 8.5 (moderate and severe increase in greenhouse gas emissions, respectively). Although the Service claimed to use "existing, published projections of relevant future conditions to develop the scenarios," it failed to utilize or even acknowledge the best available scientific information, including *the only study modeling climate change impacts specifically on the Rio Grande cooter's habitat*. In Salas et al. (2017), the authors predicted loss of 76% and 90% of the turtle's present suitable habitat by 2050, under RCP 2.6 and 8.5 respectively. By 2070, the study projects loss of present suitable habitat between 76% and 94%. As the authors summarize, "most of the current localities of species occurrence and suitable climatic conditions [are] projected to become unsuitable."

67. While arbitrarily ignoring the findings of Salas et al. (2017), the Service instead relied on generalized studies, concluding that the turtle's viability will experience "little change" based on the assertion that "most of the significant changes" to its habitat occurred in the 20th century.

68. The Service also failed to consider climate change impacts on the feminization of turtle eggs. Although the Service acknowledged that this impact lessens genetic diversity, it did not incorporate it into its analysis based on alleged uncertainty as to the precise impacts.

69. The Service's explanation that the threat is too uncertain is counter to evidence before the agency. Valenzuela et al. (2019), for example, found a drastic increase in feminization when turtles were exposed to increased temperatures driven by climate change, including on painted turtles which the Service itself used elsewhere as a surrogate species to draw inferences regarding the Rio Grande cooter's survival, growth, and longevity. As most Rio Grande cooters surveyed in New Mexico already skew female, impacts from climate change to sex ratios could be significant for the Rio Grande cooter.

The Service Arbitrarily Concluded that the Rio Grande Cooter Does Not Warrant Listing in a Significant Portion of Its Range

70. After finding that the turtle does not warrant listing throughout all of its range, the Service separately concluded that the Rio Grande cooter is not threatened or endangered in a significant portion of its range ("SPOR"). But the Service's SPOR analysis contradicts its own findings and misunderstands the ESA. The Service purported to apply an approach that considers (1) whether any portion of the turtle's range is significant and (2) whether the turtle is in danger of extinction in that portion of its range or likely to become so in the foreseeable future, i.e., the "status" of the species in that portion. The Service addressed the turtle's "status" first and concluded that there is no concentration of threats in any portion of the Rio Grande cooter's range acting on the turtle at a "biologically meaningful scale." Based on this conclusion, the Service explained that it never reached the "significant" part of the test. But the Service failed to explain what "biologically meaningful" means in relation to the turtle's risk of becoming extinct or why this is the appropriate test for assessing the species' status in a significant portion of its range. The Service further erred in not assessing portions of the species' range facing high and increasing threats to determine if those portions meet the standard for "significant."

71. The Service acted arbitrarily in ignoring or dismissing evidence showing that the turtle is in danger of extinction in significant portions of its range. For example, the Service failed to address the turtle populations in Mexico as part of its SPOR analysis despite the fact that seven of the turtle's 16 population analysis units are in Mexico and the Service found all seven of these units at high or moderate risk of extirpation. For three of these seven units, there were no observations of adult turtles in a thirty-year period, and there were only "several observations" for each of the four remaining units and no evidence of reproduction. The lack of observations and no evidence of reproduction, combined with the documented threats to the

Mexican units, suggest the populations in Mexico may already be near collapse, but the Service did not consider these intrinsic factors when it evaluated the turtle's status.

72. In evaluating the turtle's "status," the Service's analysis failed to consider or improperly minimized important factors intrinsic to the turtle's status and its overall risk of extinction, such as small observed population size and low to no juvenile observances. The Service's flawed and limited analysis thus failed to account for a population's ability in each portion of its range to respond to threats facing that population, and allowed the Service to mask or dismiss unique vulnerabilities that are an important aspect of a population's status.

73. The Service's arbitrary SPOR analysis led it to only address one portion of the species' range: the Pecos River basin from Brantley Dam downstream to its confluence with Independence Creek, which includes the Service's Brantley Dam to Red Bluff Dam population unit and Red Bluff Dam to Amistad Reservoir, Toyah Segment unit. The Service not only erred in only considering this small portion of the turtle's range, but even the analysis conducted for this portion was flawed and contradicted by the best available scientific information. The Service dismissed this portion as not significant because most observations within these units are in the "moderately resilient" Brantley Dam to Red Bluff Dam unit and noted in its conclusion that the turtle "is projected to maintain multiple population analysis units within the basin into the future." This focus on where the "most observations" of turtles are located is arbitrary, masks the fact that the Service's own projections found the populations are at moderate to high risk of extirpation, and inadequately explains away evidence documenting an increase in threats. Further, the Brantley Dam to Red Bluff Dam unit includes the Black River, the only location in New Mexico where scientists are finding turtles at all stages of life. The Service's improperly

narrow SPOR analysis failed to account for the unique importance of this unit to the turtle's viability.

CLAIM FOR RELIEF

Violations of the ESA and the APA

The Service's determination that the Rio Grande cooter does not warrant listing is arbitrary, capricious, fails to rely on the best available science, and is contrary to the ESA.

74. The Center re-alleges and incorporates by reference all allegations set forth in the preceding paragraphs.

75. The Service "shall . . . determine whether any species is an endangered species or a threatened species" because of any one or a combination of the ESA's five listing factors. 16 U.S.C. § 1533(a)(1). A species is "endangered" when it "is in danger of extinction throughout all or a significant portion of its range." *Id.* § 1532(6). A species is "threatened" when it is "likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." *Id.* § 1532(20).

76. The Service's listing decisions must be made "solely on the basis of the best scientific and commercial data available." *Id.* § 1533(b)(1)(A). This means the Service must act based on the best science available and cannot dismiss threats to, or refuse to list, a species based on uncertainty alone. Rather, it must explain how any uncertainty supports the listing decision. *Greater Yellowstone Coal., Inc. v. Servheen*, 665 F.3d 1015, 1028 (9th Cir. 2011).

77. 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 the law." 5 U.S.C. § 706(2)(A). An agency's decision is arbitrary and capricious if it "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 of U.S., Inc.*, 463 U.S. at 43.

78. The Service unlawfully determined that the Rio Grande cooter does not warrant listing under the ESA, violating the ESA and APA, for at least the following reasons.

79. First, the Service arbitrarily relied on unsupported and flawed metrics when assessing the turtle's resiliency, which was consequential because the Service's determination that the turtle has many resilient populations was the main reason why it denied listing the turtle under the ESA. The Service acted arbitrarily in assigning a rating of low risk for occurrence to a unit with six or more observations of turtles because it does not reflect the facts in front of the agency, is a departure from the best available science, and the agency failed to explain its decision-making in violation of the ESA and APA.

80. Similarly, the Service acted irrationally in determining the presence of a *single* juvenile is low risk. Given the turtle requires many juveniles to survive into adulthood, it was arbitrary to conclude that as few as *one* could be low risk, and the Service did not explain how it drew this line. The Service failed to explain its decision-making, failed to follow the best available science, and acted contrary to the facts in violation of the ESA and APA.

81. The Service also arbitrarily relied on purported uncertainty for its decision to collapse categories into moderate-high risk when a unit has *zero* observations of juveniles. The Service failed to provide a meaningful explanation as to how the uncertainty supports its decision, in violation of the ESA and APA.

82. For the water quantity metric, the Service acted irrationally in relying on flawed assumptions based on mussels and fish instead of turtles (without a meaningful explanation). The Service also acted contrary to the evidence before the agency and identified no basis for what

science it based its low, moderate, and high-risk categories on. Instead, the Service provided vague, tautological characterizations of water quantity being "generally dry" and with "irregular flow" as high risk when practically there was no distinction with the moderate risk category (described as "irregular" water quantity, "intermittent drying" and "irregular" and "discontinuous" flow). SSA at 68. The Service's failure to explain its decision-making is particularly egregious given the agency's own finding that water quantity is one of the "most important stressors" impacting the species. SAF at 13.

83. Further, the Service relied on conservation measures designed to benefit species with different priorities to assume the turtle's water quantity will be protected without explaining how the measures will meet the turtle's particular needs. The Service also assumed that protected areas would face less pressure when the facts in front of the agency show the opposite. The Service acted irrationally in ignoring evidence before it, drawing unsupported conclusions, and failing to explain its decision-making in violation of the ESA and APA.

84. Regarding water quality, the Service failed to follow the best available science and acted arbitrarily by basing its low, moderate, and high-risk categories on salinity tolerances drawn from tolerance levels of mussels, generalist turtles, and unsupported statements instead of science on Rio Grande cooters. In addition, the Service failed to acknowledge contradictions in the studies it relies on.

85. Second, the Service unlawfully disregarded direct mortality, including collection, in its not warranted analysis even though a lack of data is not a rational basis for disregarding threats, and the Service did in fact have data showing impacts to Rio Grande cooters from direct mortality. The Service's decision to disregard the trade data is further evidence of its arbitrary

decision making and violates the best available science mandate in violation of the ESA and APA.

86. Third, the Service's failure to consider Salas et al (2017) in its climate change analysis was arbitrary and capricious, irrational, contrary to the best available science mandate, and in violation of the ESA. Instead, the Service relied on broad, generalized geographical projections and made no mention of the only scientific study that specifically addressed the impacts of climate change on the Rio Grande cooter. Because of this, the Service's analysis failed to accurately measure future threats and is therefore unreasonable, contrary to the best available science, and violates the ESA and APA.

87. Further, the Service relied on purported uncertainty to support its decision to not assess impacts of the feminization of turtle egg clutches on the turtle's viability. The Service's inability to identify precise impacts to the turtle from this threat is not a valid basis to set aside the threat; instead, the Service must provide a meaningful explanation as to how the uncertainty supports its decision, which it did not do. Valenzuela et al (2019) found a drastic increase in feminization when turtles were exposed to temperatures in line with current climate change data, meaning the Service's determination did not reflect the facts in front of the agency and runs counter to the best available science in violation of the ESA and APA.

88. Finally, the Service conducted an unlawful SPOR analysis by failing to address the portion of the turtle's range in Mexico; failing to explain the test applied to the portions of the turtle's range the Service did consider; failing to consider important threats facing the turtle, including intrinsic factors affecting the turtle's status; and arbitrarily ignoring or discounting evidence before the agency showing that threats are increasing in portions of the turtle's range. Further, the Service should have considered whether the portions of the species' range facing

high and increasing threats meet the standard for "significant." For example, the Service's own documents show that water quantity and water quality threats are greater in the Pecos portion of the turtle's range because of future projections of water use by the oil and gas industry.

89. In its SPOR analysis, the Service failed to explain its decision-making and follow the facts before it. The Service's SPOR analysis is thus arbitrary and capricious and ignores the best available science in violation of the ESA and APA.

90. For these and additional reasons, the Service's not warranted finding is not based on the best available science and is arbitrary, capricious, and otherwise not in accordance with law, in violation of the ESA and the APA. *See* 16 U.S.C. § 1533; 5 U.S.C. § 706(2)(A).

REQUEST FOR RELIEF

WHEREFORE, the Center respectfully requests that the Court enter judgment providing the following relief:

(1) Declare unlawful, set aside, and vacate Defendants' not warranted finding;

(2) Remand the not warranted finding to Defendants and order the Service to issue a new 12-month determination by a date certain consistent with the ESA, APA, and this Court's Order;

(3) Award the Center reasonable attorneys' fees and costs as provided by the ESA, 16 U.S.C. § 1540(g)(4); and

(4) Provide such other relief as the Court deems just and proper.

DATE: January 8, 2026

Respectfully submitted,

/s/ Camila Cossío
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