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IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF ARIZONA
TUCSON DIVISION

Center for Biological Diversity, Plaintiff, v. U.S. Fish and Wildlife Service, and U.S. Forest Service, Defendants.	)	Case No.: **COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF**

INTRODUCTION

1. Plaintiff Center for Biological Diversity ("the Center") challenges Defendant U.S. Fish and Wildlife Service's ("FWS'") failure to comply with the Endangered Species Act ("ESA") and the Administrative Procedure Act ("APA") in issuing the 2016 "Biological Opinion" for the Rosemont Copper Mine, located in the Santa Rita Mountains and the Coronado National Forest in southern Arizona. The Rosemont Mine would significantly impact a number of endangered species and their remaining habitat, including one of the three known wild jaguars in the United States.

2. The Center also challenges Defendant U.S. Forest Service's ("Forest Service's") unlawful reliance on FWS's 2016 Biological Opinion in issuing the 2017 Record of Decision for the Rosemont Mine.

3. More specifically, the Center challenges (1) FWS' April 28, 2016 Amended Final Reinitiated Biological and Conference Opinion for the Rosemont Copper Mine ("2016 Biological Opinion")[1]; (2) the Forest Service's unlawful reliance on the 2016 Biological Opinion in issuing the June 6, 2017 Record of Decision on the "Rosemont Copper Project"; (3) FWS' issuance of unlawful regulations defining "destruction or adverse modification of critical habitat" (81 Fed. Reg. 7214, (Feb. 11, 2016)), and reliance upon those unlawful regulations in the 2016 Biological Opinion; and (4) FWS' unlawful revision of the critical habitat designation for the jaguar.

[1] The Center also challenges FWS' October 30, 2013 Biological Opinion for the Rosemont Mine, to the extent FWS relies on or incorporates it by reference in the 2016 Biological Opinion.

4. The Center seeks declaratory relief that FWS violated the ESA and APA in issuing and approving the 2016 Biological Opinion for the Rosemont Mine, in issuing and approving new regulations defining "destruction or adverse modification of critical habitat," and in revising the critical habitat designation for the jaguar. The Center further seeks declaratory relief that the Forest Service violated the ESA in unlawfully relying on the 2016 Biological Opinion in issuing and approving the 2017 Record of Decision. The Center seeks injunctive relief to enjoin any implementation of the Rosemont Mine or the new regulations pending compliance with the ESA and APA.

JURISDICTION

5. Jurisdiction is proper in this Court under 28 U.S.C. § 1331; 28 U.S.C. § 1346; 5 U.S.C. §§ 551 *et seq*., and 16 U.S.C. § 1540(g) because this action involves the United States as a defendant and arises under the laws of the United States, including the ESA, 16 U.S.C. §§ 1531 *et seq*., and the APA, 5 U.S.C. §§ 551 *et seq*. Plaintiff Center for Biological Diversity provided Defendants FWS and the Forest Service with notice of the Center's intent to file suit pursuant to the ESA citizen suit provision. 16 U.S.C. § 1540(g)(2). An actual justiciable controversy exists between Plaintiff and Defendants. The requested relief is proper under 28 U.S.C. §§ 2201 and 2202; 5 U.S.C. §§ 705 and 706; and 16 U.S.C. § 1540(g). The challenged agency actions are final and subject to this Court's review under 5 U.S.C. §§ 702, 704, and 706.

VENUE

6. Venue is proper in this Court pursuant to 28 U.S.C. § 1391(e) and 16 U.S.C. § 1540(g)(3)(A), because the proposed Rosemont Mine is located in Arizona.

Defendants FWS and the Forest Service also have offices in the district. Venue is proper in the Tucson Division because the proposed Rosemont Mine is located within Pima County, and the Center for Biological Diversity is headquartered in Tucson. LRCiv 77.1(a).

PARTIES

7. Plaintiff Center for Biological Diversity ("the Center") is a non-profit corporation headquartered in Tucson, Arizona, with offices in a number of states and Mexico. The Center works through science, law, and policy to secure a future for all species, great or small, hovering on the brink of extinction. The Center is actively involved in endangered species and habitat protection issues nationwide, and has more than 60,000 members throughout the United States and the world.

8. The Center brings this action on its own behalf, and on behalf of its members who derive scientific, aesthetic, recreational, and spiritual benefits from threatened and endangered species that would be significantly impacted by the proposed Rosemont Mine, including jaguar, ocelot, northern Mexican gartersnake, Chiricahua leopard frog, Gila chub, Gila topminnow, southwestern willow flycatcher, and western yellow-billed cuckoo.

9. The Center's members use and enjoy the Coronado National Forest for a variety of purposes, including hiking, fishing, camping, photographing scenery and wildlife, viewing wildlife and signs of wildlife, and engaging in other vocational, scientific, and recreational activities. The areas of the Coronado National Forest that the Center's members use and enjoy include specific areas the Rosemont Mine would

directly and indirectly affect, and specific areas where threatened and endangered species, such as the jaguar, may be found.

10. The Center's members derive health, aesthetic, recreational, inspirational, spiritual, scientific, and educational benefits from their activities within the Coronado National Forest. The Center's members intend to continue to use and enjoy the Coronado National Forest frequently and on an ongoing basis in the future, including this fall and winter. The areas of the Coronado National Forest that the Center's members intend to continue to use and enjoy include specific areas that the Rosemont Mine would directly and indirectly affect, and specific areas where threatened and endangered species may be found.

11. The health, aesthetic, recreational, inspirational, spiritual, scientific, and educational interests of the Center and its members have been and will continue to be adversely affected and irreparably injured if Defendants' ongoing violations of the ESA and APA continue. These are actual, concrete injuries caused by the Defendants' violations of the ESA and APA. The relief sought will redress the Center and its members' injuries.

12. Defendant U.S. Fish and Wildlife Service ("FWS") is an agency within the U.S. Department of the Interior. It and its officers are responsible for administering the ESA, particularly regarding potential impacts to wildlife species that have been listed as threatened or endangered with extinction pursuant to the ESA.

13. Defendant U.S. Forest Service ("Forest Service") is an agency within the U.S. Department of Agriculture. It and its officers are responsible for the lawful management of the National Forest System, including the Coronado National Forest.

STATUTORY BACKGROUND

I. Endangered Species Act

14. Congress enacted the ESA in 1973 to provide "a program for the conservation of . . . endangered species and threatened species." 16 U.S.C. § 1531(b). Section 2(c) of the ESA establishes that it is the policy of Congress that all federal agencies shall seek to conserve threatened and endangered species, and shall utilize their authorities in furtherance of the purposes of this Act. 16 U.S.C. § 1531(c)(1).

15. The ESA defines "conservation" to mean "the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this Act are no longer necessary." 16 U.S.C. § 1532(3).

16. Section 4 of the ESA directs the Secretary of the Interior to list species that are threatened or endangered with extinction, and to designate "critical habitat" for such species. 16 U.S.C. § 1533(a). "Critical habitat" is the area that contains the physical or biological features essential to the "conservation" of the species and which may require special protection or management considerations. 16 U.S.C. § 1532(5)(A). The ESA lays out a specific process for the designation and revision of critical habitat. 16 U.S.C. §§ 1533(a) & (b).

17. Section 4 of the ESA also requires the Secretary to develop and implement

recovery plans for threatened and endangered species, unless the Secretary finds that such a plan will not promote the conservation of the species. 16 U.S.C. § 1533(f).

18. Section 7(a)(2) of the ESA requires each federal agency, in consultation with FWS, to ensure that any action authorized, funded, or carried out by the agency is not likely to jeopardize the continued existence of any threatened or endangered species, or result in the destruction or adverse modification of the critical habitat of such species. 16 U.S.C. § 1536(a)(2). During consultation, both the action agency and FWS must use the best scientific data available. *Id*.

19. For each proposed action, the action agency must request from FWS whether any listed or proposed species may be present in the area of the proposed action. 16 U.S.C. § 1536(c)(1); 50 C.F.R. § 402.12. If listed or proposed species may be present, the action agency must prepare a "biological assessment" to determine whether the listed species may be affected by the proposed action. *Id.* If the agency determines that its proposed action may affect any listed species or critical habitat, the agency must engage in "formal consultation" with FWS. 50 C.F.R. § 402.14.

20. To complete formal consultation, FWS must provide the action agency with a "biological opinion" explaining how the proposed action will affect the listed species or critical habitat. 16 U.S.C. § 1536(b); 50 C.F.R. § 402.14. If FWS concludes in the biological opinion that the proposed action is likely to jeopardize the continued existence of a listed species, or result in the destruction or adverse modification of critical habitat, FWS must outline "reasonable and prudent alternatives" to the proposed action that FWS believes would not jeopardize listed species or result in the destruction or adverse

modification of critical habitat. 16 U.S.C. § 1536(b)(3)(A).

21. If FWS concludes in the biological opinion that the proposed action is not likely to jeopardize the continued existence of a listed species, or result in the destruction or adverse modification of critical habitat, FWS must provide an "incidental take statement" ("ITS") along with the biological opinion, specifying the amount or extent of such incidental taking on the species, any "reasonable and prudent measures" that FWS considers necessary or appropriate to minimize such impact, and setting forth the "terms and conditions" that must be complied with by the action agency to implement those measures. 16 U.S.C. § 1536(b)(4); 50 C.F.R. § 402.14(i).

22. In order to monitor the impacts of incidental take, the action agency must report the impact of its action on the listed species to FWS. 50 C.F.R. § 402.14(i)(3). If during the course of the action the amount or extent of incidental taking is exceeded, the action agency and FWS must reinitiate consultation immediately. 50 C.F.R. § 401.14(i)(4); 50 C.F.R. § 402.16.

23. The reinitiation of formal consultation is required and must be requested by FWS or the action agency where discretionary federal involvement or control over the action has been retained or is authorized by law, and if (1) the amount or extent of taking specified in the incidental take statement is exceeded; (2) new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered; (3) the action is modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the biological opinion; or (4) a new species is listed or critical habitat designated that may be affected by the

identified action. 50 C.F.R. § 402.16.

24. After the initiation or reinitiation of consultation, the action agency is prohibited from making any irreversible or irretrievable commitment of resources with respect to the action which may foreclose the formulation or implementation of any reasonable and prudent alternative measures. 16 U.S.C. § 1536(d).

25. Section 9 of the ESA and its implementing regulations prohibit the unauthorized "take" of any endangered or threatened species of fish or wildlife. 16 U.S.C. § 1538(a)(1); 16 U.S.C. § 1533(d); 50 C.F.R. § 17.31. "Take" is defined broadly to include harming, harassing, trapping, capturing, wounding or killing a protected species either directly or by degrading its habitat. 16 U.S.C. § 1532(19).

26. Taking that is in compliance with the terms and conditions of an ITS in a biological opinion is exempt from the Section 9 take prohibition. 16 U.S.C. § 1536(o)(2).

II. Administrative Procedure Act

27. The Administrative Procedure Act ("APA") provides for judicial review of federal agency actions for persons adversely affected or aggrieved by the agency action. 5 U.S.C. § 702. Agency action made reviewable by statute and final agency action for which there is no other adequate remedy are subject to judicial review. *Id.* § 704.

28. The APA requires a reviewing court to "compel agency action unlawfully withheld or unreasonably delayed" and "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.

29. An agency action is arbitrary and capricious if the agency relied on factors which Congress did 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. *See Motor Vehicle Mfrs. Assoc. v State Farm*, 463 U.S. 29, 43 (1983).

FACTUAL BACKGROUND

I. The Proposed Rosemont Copper Mine

30. Rosemont Copper Company ("Rosemont") has submitted a proposed plan of operations to the Forest Service for a proposed mine on the Coronado National Forest. The Rosemont Mine would be a large-scale open-pit copper mine on the east side of the Santa Rita Mountains, approximately 30 miles south of Tucson, Arizona.

31. Under the proposed plan of operations, mine activities are proposed on 995 acres of private lands, and 3,653 acres of the Coronado National Forest. The active mining phase is expected to last 20 to 25 years.

32. The Forest Service prepared an Environmental Impact Statement ("EIS") for the proposed Rosemont Mine, pursuant to the National Environmental Policy Act. In the Rosemont EIS, the Forest Service identified the "Barrel Alternative" as the preferred alternative. The Barrel Alternative places all of the tailings and waste rock in upper Barrel Canyon and the lower portion of Wasp Canyon.

33. On June 6, 2017, the Forest Service issued a Record of Decision selecting the Barrel Alternative for the proposed Rosemont Mine. The Record of Decision relied

on the Forest Service's EIS and FWS' 2016 Biological Opinion.

34. The proposed Rosemont Mine would include a 955-acre open pit (up to 6,500 feet in diameter), with a final depth of up to 3,000 feet deep. The Mine would also include a processing plant and associated facilities, transmission lines, waste rock and tailings facilities, and new roads.

35. Total fresh water to be used during operations of the mine would be about 4.8 million gallons per day, mostly supplied by groundwater wells in the Santa Cruz Valley. The mine would use between 4,700 and 5,400 acre-feet per year, for a total use over the mine life of approximately 100,000 acre-feet.

36. The Rosemont Mine would be surrounded by a perimeter barbed wire fence within which public access would not be allowed. Within the perimeter fence, a separate security fence would be constructed around the waste rock and tailings facilities. The security fence would not be removed upon closure of the mine, presenting a permanent barrier to wildlife movement.

37. A total of approximately 5,431 acres of land would be directly affected by the Rosemont Mine, including 4,228 acres within the security fence, the primary access road (226 acres), the utility line corridor (889 acres), new forest roads (39 acres), and rerouted trailheads (19 acres).

38. During mine operations, blasting would be required. Once a day, on average, an ammonium nitrate and fuel oil explosive would be detonated in the mine pit.

39. The Rosemont Mine would be located within an area of concern relative to the effects of light pollution. The mine would produce approximately 6.4 million lumens.

40. The Rosemont Mine is within the Cienega Creek watershed, which provides some of the highest quality stream and wetland ecosystems in Arizona. The construction of the mine would permanently fill approximately 18 miles of streams, and cause the permanent regional drawdown of groundwater that currently sustains hundreds of acres of springs, seeps, streams, and wetlands.

41. The Rosemont Mine would impact aquatic and wetland resources within Pima County's "Cienega Creek Natural Preserve," and within the Bureau of Land Management's "Las Cienegas National Conservation Area."

42. The mine pit would permanently convert the hydrologic regime of the proposed site from a water source area to a terminal sink, significantly lowering the surrounding regional aquifer. The consequences of groundwater drawdown from the proposed mine would include the conversion of hundreds of acres of riparian vegetation, including wetlands, and the drying of streams currently characterized by permanent flow.

43. The mine would permanently reverse the natural direction of groundwater flow toward and into the mine pit, and away from the sensitive aquatic habitats in the Cienega Creek Natural Preserve and Las Cienegas National Conservation Area. This would add to a baseline trend of decreasing groundwater, causing a permanent reduction of water in streams and wetlands along Empire Gulch, Mattie Canyon, Gardner Canyon, and Cienega Creek, with potential adverse impacts to over 30 seasonal and perennial wetlands, and aquatic habitat dependent plants, fish, and wildlife.

II. The 2016 Amended Biological Opinion

44. On April 28, 2016, FWS issued the Amended Final Reinitiated Biological

and Conference Opinion for the Rosemont Copper Mine ("2016 Biological Opinion").[2] FWS prepared the 2016 Biological Opinion to assess the environmental impacts of the proposed Rosemont Mine on a large number of threatened and endangered species that occur within the action area for the mine.

45. Throughout the ESA consultation process, FWS determined that the Rosemont Mine would result in severe negative impacts to many threatened and endangered species, and their critical habitats. Threatened and endangered species that would be adversely impacted by the mine include the jaguar, ocelot, Gila chub, Gila topminnow, desert pupfish, Chiricahua leopard frog, northern Mexican gartersnake, southwestern willow flycatcher, western yellow-billed cuckoo, lesser long-nosed bat, Huachuca water umbel, and the Pima pineapple cactus. Several of these species, including the jaguar, Gila chub, Chiricahua leopard frog, and southwestern willow flycatcher also have critical habitat in the action area that would be adversely impacted by the mine.

46. At various points in the ESA consultation process, FWS expert staff concluded that the Rosemont Mine would jeopardize the continued existence of threatened and endangered species and/or destroy or adversely modify their critical habitats. For example, in multiple versions of the draft biological opinion, FWS concluded that the mine would adversely modify jaguar critical habitat.

[2] In the 2016 Biological Opinion, FWS at times relies on and incorporates by reference its October 30, 2013 Final Biological and Conference Opinion for the Rosemont Copper Mine ("2013 Biological Opinion"). For purposes of this complaint, all references to the "2016 Biological Opinion" also include any portions of the 2013 Biological Opinion that remain legally operative.

47. The Rosemont Mine would be located in the portion of designated critical habitat for jaguar that comprises the home range for one of the only known wild jaguars in the United States.

48. A male jaguar, named *El Jefe* by Tucson-area school children, has been repeatedly photographed in the Santa Rita Mountains, within and near the proposed Rosemont Mine action area, and as recently as September 2015. FWS hypothesizes that this jaguar has established a home range in the Santa Rita Mountains.

49. FWS has designated critical habitat for the jaguar in Pima, Santa Cruz, and Cochise counties in Arizona, and Hidalgo County in New Mexico. Critical habitat units 3 and 4 would be adversely affected by the proposed Rosemont Mine.

50. Jaguar critical habitat unit 3, identified as the "Patagonia Unit," includes the Santa Rita Mountains. FWS considers unit 3 to be currently occupied based on the number of confirmed sightings. The action area for the proposed Rosemont Mine is within the Patagonia Unit. The mountain ranges within the Patagonia Unit, including the Santa Rita Mountains, contain all of the primary constituent elements that are essential to the conservation of the jaguar.

51. Jaguar critical habitat unit 4 is divided into subunits 4a, 4b, and 4c. Subunit 4b is named the "Whetstone-Santa Rita Subunit," and consists of 12,710 acres between the Empire Mountains and the northern extent of the Whetstone Mountains in Pima County. The Whetstone-Santa Rita subunit provides connectivity from the Whetstone Mountains to Mexico, through unit 3, which FWS considers to be essential to the conservation of jaguar.

52. The Rosemont Mine would directly result in long-term or permanent negative effects to 6,990 acres of jaguar critical habitat, including over 4,000 acres that would be permanently lost due to the construction of new roads, trails, and the "security fence." FWS' assessment is that the mine would result in 30-year loss of up to 38.6 percent of a jaguar home range, and a permanent loss of up to 26 percent of a jaguar home range.

53. The Rosemont Mine would also modify and destroy critical habitat that provides connectivity to and from Mexico. The mine would permanently remove connectivity to Mexico on 3,514 acres of land that would be encircled by the security fence. The perimeter fence and the section of access road between it and the security fence would remove or appreciably reduce connectivity to Mexico on 2,126 additional acres for 25 to 30 years.

54. The Rosemont Mine would restrict connectivity habitat in the northeastern portion of unit 3, which could remove an additional 32,992 acres of unit 3 as functional jaguar habitat. This would further remove the connectivity-to-Mexico role of the 12,710-acre subunit 4b, and also render the 62,479-acre Subunit 4a inaccessible through unit 3.

55. Overall, the Rosemont Mine could result in an 114,320-acre long-term loss of function within jaguar critical habitat units 3, 4a, and 4b. This would include a 112,194-acre permanent loss of function within these jaguar critical habitat units.

56. FWS determined that the Rosemont Mine would likely cause one jaguar to be "taken" via harassment.

57. FWS determined in draft biological opinions that implementation of the

Rosemont Mine would result in adverse modification to jaguar critical habitat, resulting both from direct impacts to critical habitat in the project area, and by restricting connectivity and movement between the affected units and jaguar habitat in Mexico. In the final 2016 Biological Opinion, however, FWS changed course and concluded that the project would not result in the destruction or adverse modification of jaguar critical habitat. The 2016 Biological Opinion does not address or explain the agency's prior adverse modification determination and ignores a number of relevant factors that it had earlier considered in assessing the mine's impacts on jaguar critical habitat.

58. In concluding that the Rosemont Mine would not result in the destruction or adverse modification of jaguar critical habitat, FWS relied on a "high probability" standard and threshold, instead of the "likely" standard that is required by the plain language of Section 7 of the ESA. 16 U.S.C. § 1536(a)(2).

59. In concluding that the Rosemont Mine would not result in the destruction or adverse modification of jaguar critical habitat, FWS relied on its revised definition for "destruction or adverse modification" of critical habitat, published as a final rule on February 11, 2016. 81 Fed. Reg. 7214 (Feb. 11, 2016).

60. In making its no jeopardy and no destruction or adverse modification determinations for jaguar and jaguar critical habitat, FWS relied on mitigation measures that are uncertain, non-specific, unenforceable, and unlikely to be effective or adequate.

61. FWS' analysis of critical habitat for the Gila chub, Chiricahua leopard frog, and southwestern willow flycatcher in the 2016 Biological Opinion contains similar flaws as the analysis of jaguar critical habitat in terms of the standards applied, the sufficiency

of the analysis, and the reliance upon mitigation measures.

62. For all species with critical habitat, FWS applied its new regulatory definition of "destruction or adverse modification of critical habitat," which is at odds with the ESA's plain language, purposes, legislative history and relevant caselaw.

63. The Rosemont Mine would result in significant degradation of the aquatic ecosystem on which the Gila club, Gila topminnow, desert pupfish, Huachuca water umbel, Chiricahua leopard frog, and northern Mexican gartersnake depend.

64. Upper Empire Gulch would suffer the most severe effects from the Rosemont Mine, with the potential to be subject to over 300 days of zero flow by 50 years post-mining.

65. The Rosemont Mine would result in measurable losses of discharge, increases in the occurrence of zero flow and extremely low flows, and reductions in the number, depth, volume, and surface area of pools for the main stem of Cienega Creek. The mine drawdown-related effects in the main stem of Cienega Creek would represent significant degradations of the aquatic ecosystem.

66. FWS listed the Gila chub as an endangered species in 2005. The Gila chub currently occupies an estimated 10 to 15 percent of its historical range, and is limited to about 25 small, isolated, and fragmented populations in the Gila River basin.

67. Cienega Creek has the only known stable and secure population of Gila chub in existence, and all of the Gila chub critical habitat in the Cienega Creek watershed is within the action area of the proposed Rosemont Mine.

68. The combined impacts of the Rosemont Mine and climate change would

cause four of the six key reaches in Cienega Creek to lose at least 24 percent of their June flow, with three of those four key reaches losing at least half of their June flow, and with one reach projected to have zero flow.

69. The Rosemont Mine would cause adverse impacts to groundwater, which would decrease stream flow, pool area, pool volume, and pool depth in Gila chub critical habitat and areas that are currently occupied by Gila chub. Reductions in stream flow and pool volume, depth, and surface area due to the mine will reduce the amount of habitat that is available to Gila chub.

70. FWS concluded in the 2016 Biological Opinion that the Cienega Creek Watershed Conservation Fund and Sonoita Creek Ranch conservation measures are essential to partially offset the expected adverse effects to Gila chub and Gila chub critical habitat.

71. FWS concluded in the 2016 Biological Opinion that the Rosemont mine would not jeopardize the Gila chub, nor result in the destruction or adverse modification of its critical habitat.

72. FWS listed the Gila topminnow as an endangered species in 1967.

73. The natural population of Gila topminnow in the Las Cienegas National Conservation Area is the only extant one on public lands, and is by far the largest of all remaining natural populations in the United States.

74. The groundwater drawdown that would result from the Rosemont Mine would adversely affect the Gila topminnow. The adverse impacts from the drawdown would be more deleterious for the Gila topminnow than the Gila chub because all life

stages of Gila topminnow prefer and use shallow waters much more than the Gila chub. As a result, habitat that is likely to be currently occupied by the Gila topminnow would be lost or reduced by the proposed action.

75. The Rosemont Mine would adversely affect areas occupied by Gila topminnow through impacts to groundwater and surface water, including stream flow, pool area, pool volume, and pool depth.

76. FWS concluded that the Rosemont Mine is not likely to jeopardize the continued existence of the Gila topminnow. In making this determination, FWS relied considerably on conservation measures, including the Cienega Creek Watershed Conservation Fund and Sonoita Creek Ranch conservation measures.

77. FWS designated the Chiricahua leopard frog ("CLF") as a threatened species in 2002, and designated critical habitat for CLF in 2012.

78. The Rosemont Mine would result in severe impacts to CLF and its critical habitat at multiple locations.

79. The Rosemont Mine would result in a complete loss of current and potential CLF habitat within the security fence of the mine.

80. The Rosemont Mine would result in the degradation and eventual disappearance of surface water in the upper portion of Empire Gulch, which would permanently remove the longest standing and most prolific site CLF occupy in the Las Cienegas National Conservation Area metapopulation. This site serves as a major source of CLF for dispersal to other sites within the Empire Cienega metapopulation, as well as potential connectivity to the Santa Rita metapopulation.

81. The Rosemont Mine would result in the streamflow loss, pool reduction, and decreased water quality in four key reaches of upper Cienega Creek, which currently provide stable breeding sites and connectivity.

82. Groundwater withdrawal resulting from the Rosemont Mine may adversely affect all dispersal and nonbreeding CLF critical habitat within the Las Cienegas National Conservation Area and Eastern Slope of the Santa Rita Mountains critical habitat units. This includes the complete loss of value of dispersal habitat in Empire Gulch that connected breeding habitat at Empire Spring to other breeding habitats.

83. Groundwater withdrawal may permanently remove functionality of 49 percent of the Las Cienegas National Conservation Area critical habitat unit, with the functionality of the remaining habitat in this unit also diminished.

84. FWS concluded that the Rosemont Mine is not likely to jeopardize the continued existence of CLF, and is not likely to destroy or adversely modify its designated critical habitat.

85. FWS concluded in the 2016 Biological Opinion that construction of the Rosemont Mine would take CLF, including the complete loss of current and potential habitat for CLF within the security fence of the mine. FWS further concluded that the mine would result in the incidental take of CLF from groundwater drawdown.

86. FWS designated the northern Mexican gartersnake as a threatened species in 2014. FWS proposed critical habitat for the gartersnake in 2013, but critical habitat designation has not yet been finalized.

87. The northern Mexican gartersnake is often found in riparian habitat, and its

diet consists of amphibians and fish.

88. Only five populations of northern Mexican gartersnake in the United States are considered viable where the species remains reliably detected.

89. The action area for the Rosemont Mine overlaps two proposed critical habitat units for the northern Mexican gartersnake, the Cienega Creek Subbasin Unit and the Upper Santa Cruz River Subbasin Unit.

90. The proposed Cienega Creek Subbasin Unit is uniquely important for the northern Mexican gartersnake because it is the only unit in southern Arizona that provides an intact native prey base and is currently free of harmful nonnative species.

91. The Rosemont Mine would cause indirect, adverse effects to the northern Mexican gartersnake during mining operations and continuing for decades. The primary cause of adverse effects would be the permanent degradation to gartersnake prey due to the adverse, indirect effects resulting from a lowering groundwater table.

92. The northern Mexican gartersnake prey species that the Rosemont Mine would adversely affect includes CLF, Gila chub, Gila topminnow, and desert pupfish. CLF is the most important prey species for the northern Mexican gartersnake in this area.

93. FWS expects significant losses of northern Mexican gartersnake as an indirect effect of the Rosemont Mine, resulting from the anticipated degradation and ultimate disappearance of Empire Spring.

94. Empire Spring is considered extremely important for the CLF metapopulation in the Las Cienegas National Conservation Area. If lost, this vital site would be unable to act as a source population of CLF for the area, which greatly

increases the odds of extirpation of this metapopulation. The loss or significant degradation of this CLF metapopulation would place significant nutritional strain on the northern Mexican gartersnake and weaken the functionality of the habitat for the recovery of the northern Mexican garternake in perpetuity.

95. FWS concluded that the Rosemont Mine is not likely to jeopardize the continued existence of the northern Mexican gartersnake, and is not likely to destroy or adversely modify its proposed critical habitat.

96. FWS determined that the Rosemont Mine is reasonably certain to result in the take of a number of threatened and endangered species, and therefore the 2016 Biological Opinion contains an incidental take statement ("ITS").

97. For a number of aquatic and riparian dependent species, including Gila chub, Gila topminnow, desert pupfish, Chiricahua leopard frog, northern Mexican gartersnake, yellow-billed cuckoo, and Southwestern willow flycatcher, FWS claimed in the ITS for the 2016 Biological Opinion that it was unable to determine a numeric estimate or limit on take. For each of these species, FWS instead relied on groundwater drawdown as a surrogate measure for incidental take.

98. FWS relied on one groundwater model in the ITS – Tetra Tech (2010) – to estimate the anticipated "post-mining groundwater drawdown," which is calculated for 0, 20, 50, and 150 years post-mining. FWS recognized, however, that these time intervals are not meaningful for monitoring take. FWS therefore relied in the ITS on annual groundwater monitoring at unspecific sites.

99. FWS identified in the ITS "potential" groundwater monitoring wells for

compliance with the surrogate measure of incidental take (groundwater drawdown). According to FWS, the to-be-modeled groundwater drawdowns at a suite of potential sites would serve as proxies for the incidental take of species at the sites.

100. According to the ITS, if it is determined at any time that the observed groundwater drawdowns exceed the upper bounds of the sensitivity analysis for the modeled groundwater drawdown, then it is possible that the take of threatened or endangered has been exceeded. In this event, a number of agencies, the University of Arizona, and Rosemont Copper Company would seek consensus on whether the specific metrics have been exceeded and whether the exceedance can be attributed to the Rosemont Mine.

101. In deciding upon groundwater drawdown in the ITS as a surrogate for measuring the incidental take of numerous threatened and endangered species, FWS did not consider the time lapse between when mining activities will occur, and the resulting groundwater drawdown. Similarly, FWS did not consider what additional measures could be imposed or implemented, if any, to alleviate the impacts of the groundwater drawdown on the affected listed species if and when it is determined that the anticipated incidental take for one or more species has been exceeded.

102. In reaching its no jeopardy and no adverse modification determination for aquatic and riparian dependent species in the 2016 Biological Opinion, FWS relied heavily on conservation measures, including the Cienega Creek Watershed Conservation Fund and the Sonoita Creek Ranch conservation measures. FWS failed to adequately consider and address, however, the significant concerns of the U.S. Environmental

Protection Agency ("EPA"), U.S. Army Corps of Engineers, and others regarding these proposed conservation measures, including concerns regarding the likely effectiveness, certainty, appropriateness, adequacy, enforceability, durability, timing, distance and relationship to the mine site, and implementation of these measures.

103. For example, for the Cienega Creek Watershed Conservation Fund and proposed mitigation measures below Pantano Dam, EPA found that it is uncertain whether the proposed water distribution points along Cienega Creek would result in any significant enhancement of aquatic functions. According to EPA, this conservation measure is risky and uncertain, ecologically inappropriate, and may exacerbate erosion problems elsewhere.

104. Additionally, for the Sonoita Creek Ranch conservation measure, EPA has explained that it is highly skeptical of proposals to create and enhance wetlands at the ranch. EPA has further explained that the site is far removed from the Davidson Creek and Cienega Creek watersheds, and therefore, does not provide ecological benefit for the loss of acreage and function that would occur from the proposed mine.

105. U.S. Army Corps of Engineers notified Rosemont that its proposed mitigation measures would result in a limited amount of restoration and enhancement of actual waters of the United States, and were inadequate.

106. In a July 27, 2015 Technical Memorandum prepared for the EPA, Dr. Mathias Kondolf and James Ashby also found significant problems and concerns with the Sonoita Creek conservation measure. The Technical Memo concluded that the plan overestimated the flow available and did not take into account the dynamic nature of

Sonoita Creek. The Memo found that the plan would not function as designed and noted that its conclusions were consistent with EPA's prior reviews and comments.

107. More specifically, the 2015 Technical Memo found that the hydrologic modeling significantly overestimated the water available for Sonoita Creek and the proposed constructed channels, that the hydraulic modeling unrealistically assumed fixed bed elevations at Sonoita Creek, that the proposed constructed channels would likely not sustain flow within the project reach, that existing ecological functions of Sonoita Creek would be reduced by diverting flow from the main channel, that the proposed channel design would not provide equal ecological value as the original Sonoita Creek channel and would require continual maintenance, and that there is no ecological benefit to controlling bank erosion at Sonoita Creek.

108. In assessing the impacts of the mine on aquatic and riparian dependent species, FWS relied extensively on groundwater models in the 2016 Biological Opinion. FWS further relied on one of the groundwater models in its ITS for aquatic and riparian dependent species. FWS failed to adequately consider, however, the significant concerns with and deficiencies of the groundwater models that the agency relied on to reach its conclusions.

109. Dr. Robert H. Prucha, PhD, PE, Integrated Hydro Systems, LLC, summarized concerns with the groundwater models in a May 6, 2016 report, including model development, model setup and assumptions, calibration of the model, and the selection process for selecting an appropriate software modeling tool to meet stated objectives. According to the report, these issues reduce the overall credibility and

accuracy of the modeling to such a level that it is difficult to trust major conclusions that the pumping will have only limited impacts on water resources within the Las Cienegas National Conservation Area. Dr. Prucha found that had the agencies conducted a more formal uncertainty analysis, the agencies would have found a much greater range of impacts to water resources within the Las Cienegas National Conservation Area.

110. In the spring of 2017, the Sawmill and Mulberry wildfires burned over 48,000 acres in southern Arizona, including significant portions of the areas that will be adversely affected by the Rosemont Mine. The wildfires, along with activities conducted by federal agencies during and after the wildfires, may have had adverse impacts on the same threatened and endangered species and critical habitat that will be significantly affected by the Rosemont Mine. FWS has not reassessed the likely impacts of the Rosemont Mine on threatened and endangered species, and critical habitat, to take into account any harm to species or habitat caused by the 2017 wildfires and related activities.

CLAIMS FOR RELIEF

FIRST CLAIM FOR RELIEF

FWS's 2016 Biological Opinion Violates the ESA and APA

111. The Center hereby incorporates by reference all preceding paragraphs.

112. FWS' 2016 Biological Opinion[3] for the Rosemont Mine is unlawful under the ESA, and arbitrary and capricious under the APA, for the following reasons:

[3] To the extent FWS and the action agencies continue to rely on or incorporate by reference the 2013 Biological Opinion for the Rosemont Mine, the 2013 Biological Opinion violates the ESA and is arbitrary, capricious, an abuse of discretion, and not in accordance with law for these same reasons.

(1) failing to consider all relevant factors in making its jeopardy and destruction/adverse modification determinations for a number of listed species, including jaguar, ocelot, Gila chub, Gila topminnow, desert pupfish, Chiricahua leopard frog, northern Mexican gartersnake, southwestern willow flycatcher, western yellow-billed cuckoo, lesser long-nosed bat, Huachuca water umbel, and the Pima pineapple cactus;

(2) failing to articulate a rational connection between the facts found and the choices made in making its jeopardy and destruction/adverse modification determinations for a number of listed species, including jaguar, ocelot, Gila chub, Gila topminnow, desert pupfish, Chiricahua leopard frog, northern Mexican gartersnake, southwestern willow flycatcher, western yellow-billed cuckoo, lesser long-nosed bat, Huachuca water umbel, and the Pima pineapple cactus;

(3) inappropriately relying on conservation and mitigation measures that are not reasonably specific, binding, or certain to occur, and that are unproven, uncertain, unenforceable, unreliable and of limited duration, and hence unlikely to ensure that the mine will not jeopardize the continued existence of any listed species or result in the adverse modification or destruction of any species' critical habitat;

(4) failing to consider all relevant factors and properly analyze the potential effects of the mine on the recovery of each of the affected listed species and their critical habitats and/or setting a "tipping point" threshold for such effects;

(5) unlawfully applying a "high probability" standard and threshold, instead of the required "likely" standard, in making the destruction or adverse modification determinations for jaguar and other species with designated critical habitat in the action area;

(6) unlawfully applying a "greatly diminished" standard and threshold in making the destruction or adverse modification determination for the Gila chub;

(7) failing to provide a reasoned explanation and analysis concerning the agency's change in position from earlier agency documents including draft biological opinions for the Rosemont mine proposal;

(8) failing to adequately explain why it was impracticable to express a numeric population measure of the anticipated incidental take for a number of listed species including Gila chub, Gila topminnow, desert pupfish,

Chiricahua leopard frog, northern Mexico gartersnake, yellow-billed cuckoo, and Southwestern willow flycatcher;

(9) failing to choose a proper surrogate instead of a numerical population measure or any other sufficient measure of the incidental take authorized for a number of listed species including Gila chub, Gila topminnow, desert pupfish, Chiricahua leopard frog, northern Mexico gartersnake, yellow-billed cuckoo, and Southwestern willow flycatcher;

(10) relying upon unlawful regulations defining "destruction or adverse modification of critical habitat" which conflict with the plain language, purposes, legislative history, and relevant caselaw regarding the conservation purposes of critical habitat, including, *inter alia*, by allowing activities in designated critical habitat that do not fall within the definition of "conservation," 16 U.S.C. § 1533(3); allowing activities in designated critical habitat that conflict with recovery plans, 16 U.S.C. § 1533(f); allowing activities in designated critical habitat that wholly or significantly negate the conservation purposes for which those portions of the critical habitat were designated; and by conflating the separate terms "destroy" and "adversely modify," 16 U.S.C. § 1536(7)(a)(2);

(11) failing to adequately describe and analyze the environmental baseline and cumulative effects, including the effects of activities on federal and non-federal lands in the action area, as well as the impacts of invasive species, drought, and climate change;

(12) failing to provide the benefit of doubt to listed species; and

(13) failing to use the best scientific data available.

113. FWS violated the ESA in preparing, issuing, and approving the 2016 Biological Opinion. 16 U.S.C. § 1536; 50 C.F.R. § 402.14. The Biological Opinion is arbitrary, capricious, an abuse of discretion, and not in accordance with the ESA. 5 U.S.C. § 706(2)(A). The Biological Opinion should be held unlawful, set aside, and remanded to FWS. *Id.*

SECOND CLAIM FOR RELIEF

The Forest Service Violated the ESA in Relying on FWS' 2016 Biological Opinion

114. The Center hereby incorporates by reference all preceding paragraphs.

115. The 2016 Biological Opinion for the Rosemont Mine is unlawful, and thus the Forest Service's reliance on the 2016 Biological Opinion in issuing, authorizing and approving the June 2017 Record of Decision for the Rosemont Mine is arbitrary, capricious, and in violation of the ESA, 16 U.S.C. § 1536(a)(2).

116. Because the 2016 Biological Opinion is unlawful, the Forest Service is in ongoing violation of its independent and substantive duty to insure that the authorization and implementation of the Rosemont Mine is not likely to jeopardize the continued existence of any threatened or endangered species, or result in the destruction or adverse modification of designated critical habitat, in violation of Section 7 of the ESA. 16 U.S.C. § 1536(a)(2). The Forest Service cannot meet its ESA Section 7 obligations for the Rosemont Mine by relying on a Biological Opinion that is legally flawed. *Id.*

117. The Forest Service's 2017 Record of Decision for the Rosemont Mine is arbitrary, capricious, an abuse of discretion, and contrary to the ESA. 5 U.S.C. § 706(2)(A). The Record of Decision should be held unlawful, set aside, and remanded to the Forest Service. *Id.*

THIRD CLAIM FOR RELIEF

FWS' February 11, 2016 Final Rule Violates the ESA and APA

118. The Center hereby incorporates by reference all preceding paragraphs.

119. On February 11, 2016, FWS issued a new final rule revising the definition of "destruction or adverse modification" under the ESA. 81 Fed. Reg. 7214 (Feb. 11, 2016).

120. FWS relied on the revised definition of "destruction or adverse modification" in making its critical habitat determinations in the 2016 Biological Opinion.

121. FWS' issuance and approval of the February 11, 2016 regulations defining "destruction or adverse modification of critical habitat" (81 Fed. Reg. 7214) is arbitrary, capricious and unlawful under the ESA and APA. 16 U.S.C. §§ 1532, 1536; 5 U.S.C. § 706(2)(A).

FOURTH CLAIM FOR RELIEF

FWS Violated Section 4 of the ESA

122. The Center hereby incorporates by reference all preceding paragraphs.

123. The jaguar has critical habitat designated within the action area. This area is by definition essential to the conservation of these species. 16 U.S.C. § 1532(5).

124. Critical habitat can only be revised pursuant to the specific notice-and-comment rulemaking procedures under Section 4 of the ESA and any such revision must comply with the procedural and substantive standards for critical habitat designation. 16 U.S.C. §§ 1533(a)(3)(A) & (b).

125. By authorizing construction of the Rosemont Mine within the formally designated critical habitat for the jaguar, an action that will wholly and permanently negate the conservation value of those impacted areas, FWS implicitly revised the jaguar

critical habitat designation so as to effectively exclude this area from the designation without complying with the notice and comment rulemaking procedures of the ESA. *See Bennett v. Spear*, 520 U.S. 154, 172 (1997) (finding ESA cause of action for claim that biological opinion resulted in implicit designation of critical habitat).

126. FWS violated Section 4 of the ESA by revising the critical habitat designations for the jaguar without following proper procedures. 16 U.S.C. § 1533.

RELIEF REQUESTED

WHEREFORE, the Center respectfully requests that this Court:

A. Declare that FWS' April 26, 2016 Biological Opinion for the Rosemont Copper Mine is unlawful under the ESA and arbitrary and capricious under the APA;

B. Declare that the Forest Service violated the ESA by relying on the unlawful 2016 Biological Opinion in approving the June 6, 2017 Record of Decision for the Rosemont Mine;

C. Declare that FWS' issuance of a new rule revising the definition of "destruction or adverse modification" (81 Fed. Reg. 7214 (Feb. 11, 2016)) is arbitrary, capricious, and unlawful under the ESA;

D. Declare that FWS violated Section 4 of the ESA by revising the critical habitat designation for the jaguar without following proper procedures;

E. Vacate, set aside, and remand the April 26, 2016 Biological Opinion;

F. Vacate, set aside, and remand the June 6, 2017 Record of Decision.

G. Enjoin the Forest Service from any implementation of the Rosemont Mine.

H. Enjoin FWS from implementing or relying on the revised definition of

"destruction or adverse modification," as set forth in its February 11, 2016 Final Rule;

I. Award to the Center its costs, expenses, expert witness fees, and reasonable attorney fees pursuant to applicable law including the Endangered Species Act, 16 U.S.C. § 1540(g); and Equal Access to Justice Act, 28 U.S.C. § 2412; and

J. Grant the Center such further relief as may be just, proper, and equitable.

DATED: September 25, 2017

Respectfully submitted,

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