

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF NEW MEXICO**

WILDEARTH GUARDIANS,	)	
	)	
Plaintiff,	)	Case No. _____
	)	
v.	)	
	)	
U.S. ARMY CORPS OF ENGINEERS and	)	<b>PETITION FOR REVIEW</b>
U.S. FISH AND WILDLIFE SERVICE,	)	<b>OF AGENCY ACTION</b>
	)	
Federal Defendants,	)	
	)	

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**INTRODUCTION**

1. The Rio Grande flows 1900 miles from its headwaters in the San Juan Mountains of Colorado to the Gulf of Mexico. On this journey, the Rio Grande travels through the rocky canyons, deep gorges, and open valleys of Colorado, New Mexico and Texas, and serves as the United States’ border with Mexico.

2. Flows in the Rio Grande derive primarily from snowmelt from the mountains of southern Colorado and northern New Mexico. Seasonal runoff can vary considerably based on the snowpack resulting in a dynamic peak flow in the river in May or June of each year. Similarly, summer rain events contribute to flows and can do so in an unpredictable way, causing temporary and dramatic increases in flows and flooding.

3. In the Rio Grande valley in central New Mexico, particularly the region from Cochiti Dam to Elephant Butte Reservoir (hereafter the “Middle Rio Grande”), the Rio Grande historically roamed freely across its expansive floodplain, creating and rejuvenating diverse ecosystems in its path. At high flows, the Rio Grande would rush outside its normal channel to inundate the floodplain, deposit sediment, transport nutrients, and create unique habitats that

supported a diverse assemblage of fish, wildlife, and plants. For example, the Rio Grande's flows and floods once nourished and regenerated the extensive cottonwood and willow forest, or "bosque," that spans 200 miles from Santa Fe to Elephant Butte Reservoir. The river has also long served as habitat along a major north-south migratory route of many birds and butterflies, including the Southwestern willow-flycatcher, yellow-billed cuckoo, and sandhill crane.

4. At the start of the twentieth century, both federal and local entities in the Middle Rio Grande began installing jetty jacks and constructing levees to constrain the path of the river, and building dams to harness its dynamic flows. These changes significantly altered the native ecosystem, causing measurable habitat loss and rapid and pronounced population decline of native species. These impacts appeared more pronounced in the upstream portions of the Middle Rio Grande, such as in the Albuquerque reach, where levees and drains were constructed on both banks of the Rio Grande and the channel was significantly straightened.

5. However, the San Acacia Reach—that portion of the Rio Grande from the San Acacia Diversion Dam (located just north of Socorro) to Elephant Butte Reservoir—remains one of the last relatively wild reaches of the river in New Mexico. The San Acacia Reach retains at least some of its natural character, and only one earthen levee exists on the west bank of the river.

6. The City of Socorro is the largest population center in the San Acacia Reach. The remaining lands within the Reach are agricultural or used as National Wildlife Refuges. Although engineered levees may be the most effective option to protect the residential community of Socorro, the agricultural nature of the remainder of the Reach allows for a more diverse range of flood control options that would balance the need for flood control with protection of the ecosystem that endangered species need to survive.

7. Because of the remote location of the San Acacia Reach, a more naturally functioning river system may still be restored with the proper care and management. A naturally functioning ecosystem is crucial for the health of the Rio Grande, but also to protect endangered species—the Rio Grande silvery minnow, Southwestern willow flycatcher, yellow-billed cuckoo, New Mexico meadow jumping mouse, and Pecos sunflower—as well as other diverse fish, wildlife, and plants.

8. The recently approved project of the United States Army Corps of Engineers (“Corps”) to replace 43 miles of the existing levees along the west side of the Rio Grande in the San Acacia Reach (hereafter, “the Levee Project”) with a taller, permanent engineered levee threatens any plan for large-scale restoration of this unique segment of the Rio Grande and will further imperil the handful of endangered species already struggling to survive.

9. In 2013, the Corps prepared a Supplemental Environmental Impact Statement and Record of Decision authorizing construction of an engineered levee for the Levee Project, but it failed to properly analyze the impacts of removal of the existing levees and construction of a new, continuous levee on listed species (including the silvery minnow and the willow flycatcher) occupying the Reach. The Corps also failed to analyze alternatives to the proposed action that would have met the project’s flood control purpose while reducing impacts to listed species and their designated critical habitats.

10. Also in 2013, the U.S. Fish and Wildlife Service (“the Service”) issued a Biological Opinion (“BiOp”) for the Levee Project that failed to place any restrictions on the Project that would ensure the survival and recovery of the silvery minnow and willow flycatcher.

11. With this lawsuit, Plaintiff WildEarth Guardians (“Guardians”) seeks to protect and restore the Rio Grande ecosystem in the San Acacia Reach and prevent the Corps from

foreclosing opportunities to conduct large-scale restoration to reconnect the Rio Grande and its floodplain. Native species that depend on this ecosystem need these intertwined riparian habitats to survive and thrive. The primary objective of this litigation is to secure the congressionally mandated protections of the Endangered Species Act (“ESA”) and the National Environmental Policy Act (“NEPA”) to protect and conserve the silvery minnow, willow flycatcher, and the environment. Guardians aims to safeguard the possibility of a new path forward in flood control that seriously evaluates non-structural flood control options and does not exacerbate the already critical impacts to the endangered silvery minnow and willow flycatcher.

12. Accordingly, Guardians alleges that the Corps’ authorization of the Levee Project violated NEPA, 42 U.S.C. § 4321 *et seq.*, and the Administrative Procedure Act (“APA”), 5 U.S.C. 701 *et seq.* Guardians also alleges that the U.S. Fish and Wildlife Service’s Biological Opinion for the Levee Project violated the ESA, 16 U.S.C. § 1536(b)(3), and the APA.

#### **JURISDICTION AND VENUE**

13. This Court has jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 (federal question), 1346 (United States as a defendant), 2201 (declaratory relief), and 2202 (injunctive relief). Guardians’ claims arise under the judicial review provision of the APA, 5 U.S.C. §§ 701-706. This Court has jurisdiction to grant Guardians’ attorneys’ fees and costs pursuant to the Equal Access to Justice Act, 28 U.S.C. § 2412.

14. An actual and present controversy exists between the parties within the meaning of the Declaratory Judgment Act, 28 U.S.C. § 2201.

15. Venue is proper in this judicial district under 28 U.S.C. § 1391(e)(2) because “a substantial part of the events or omissions giving rise to the claim” occur in New Mexico. Levee construction would occur along the west bank of Rio Grande in the San Acacia Reach.

## **PARTIES**

16. Plaintiff WILDEARTH GUARDIANS is a non-profit environmental advocacy and conservation organization based in Santa Fe, New Mexico. Guardians has more than 66,500 members and activists. More than 1,410 of these members and activists reside in New Mexico. Guardians and its members are dedicated to protecting and restoring the wildlife, wild places, wild rivers, and health of the American West.

17. One of Guardians' main endeavors is its "Wild Rivers Program." A specific purpose of this program is to work towards the enhancement and restoration of riverine ecosystems. Amongst other concerns, Guardians and its members are concerned about impairment of rivers due to water management activities, point and nonpoint source pollution, and physical modification of river ecosystems through channelization and the construction of levees. Guardians works through administrative appeals, litigation, public outreach, and other efforts to assure that all federal agencies fully comply with the provisions of all pertinent federal environmental laws.

18. For the past 20 years, the focus of Guardians' Wild Rivers Program has been its "Rio Grande: America's Great River" campaign. The purpose of this campaign is to protect and restore the Rio Grande by ensuring that the river has dynamic flows and that federal government management policies promote a healthy, ecologically functional Rio Grande that supports diverse native species.

19. Guardians has participated extensively in agency proceedings and other matters relating to the Rio Grande ecosystem broadly, advocated for the survival and recovery of the Rio

Grande silvery minnow and Southwestern willow flycatcher, and participated in the NEPA process for the challenged action specifically.

20. Guardians and its members use and enjoy the Rio Grande and its tributaries and adjoining public lands in New Mexico for recreational, scientific, aesthetic, spiritual, commercial, professional, and other purposes and will continue to do so in the future. Guardians and its members derive recreational, scientific, aesthetic, spiritual, commercial, and professional benefits from the existence of the Rio Grande silvery minnow and Southwestern willow flycatcher in the wild through observation, study, photography, and other pursuits.

21. The above-described aesthetic, conservation, recreational, scientific, commercial, professional and other interests of Guardians and its members have been, are being, and, unless the relief prayed for is granted, will continue to be adversely affected and irreparably injured by the failure of the Federal Defendants to comply with their mandatory duties under NEPA and the ESA. Guardians brings this action on behalf of itself and on behalf of its injured members.

22. Defendant UNITED STATES ARMY CORPS OF ENGINEERS (“Corps”) is an agency of the United States within the Department of the Army. The 1948 Flood Control Act authorized the Corps to construct dams and levees for flood control purposes in the Rio Grande Basin. The Corps is responsible for ensuring compliance with NEPA and other federal laws that apply to levee construction projects undertaken pursuant to the Flood Control Act.

23. Defendant U.S. FISH AND WILDLIFE SERVICE (“Service”) is an agency of the United States. The Service’s responsibilities include administration of the ESA for terrestrial species that include the Rio Grande silvery minnow and Southwestern willow flycatcher. As part of its statutory duty to administer the ESA for terrestrial species, the Service has a

mandatory duty to prepare biological opinions that fully comply with relevant laws and regulations.

## LEGAL BACKGROUND

### I. The National Environmental Policy Act

24. NEPA aims to “encourage productive and enjoyable harmony between man and his environment” and to promote government efforts “which will prevent or eliminate damage to the environment.” 42 U.S.C. § 4321. As Council on Environmental Quality (“CEQ”) regulations implementing NEPA explain, the law “is our basic national charter for protection of the environment.” 40 C.F.R. § 1500.1(a).

25. Under NEPA, a federal agency must prepare an environmental impact statement (“EIS”) for all “major Federal actions significantly affecting the quality of the human environment.” 42 U.S.C. § 4332(C)(i); 40 C.F.R. § 1501.4. In the EIS, the agency must, among other things, rigorously explore and objectively evaluate all reasonable alternatives, analyze and assess all direct, indirect, and cumulative environmental effects, and include a discussion of the means to mitigate adverse environmental impacts. 40 C.F.R. §§ 1502.14 and 1502.16.

26. Alternatives must be presented in a “comparative form” in order to “sharply defin[e] the issues and provid[e] a clear basis for choice among options by the decision maker and the public.” 40 C.F.R. § 1502.14.

27. Direct effects include those that “are caused by the action and occur at the same time and place.” 40 C.F.R. § 1508.8(a). Indirect effects include effects that “are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable.” 40 C.F.R. § 1508.8(b). Cumulative effects are “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably

foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions.” 40 C.F.R. § 1508.7.

28. Where a decision is issued based on an EIS, the federal agency must prepare a “public record of decision” (“ROD”). 40 C.F.R. § 1502.2. A ROD must “state what the decision was,” “[i]dentify all alternatives considered,” and “[s]tate whether all practicable means to avoid or minimize environmental harm from the alternative selected have been adopted, and if not, why they were not.” 40 C.F.R. §§ 1502.2(a)-(c).

## **II. The Endangered Species Act**

29. The structure and function of the ESA, 16 U.S.C. § 1531 *et seq.*, are premised on Congress’s finding that the biggest threat to the continued survival of threatened and endangered wildlife species is the destruction of their natural habitats. Accordingly, the ESA contains various provisions that are specifically intended to halt the trend of habitat destruction.

30. The expressed purpose of the ESA is “to provide a program for the conservation [of] endangered species and threatened species” and “to provide a means whereby the ecosystems upon which [such] species depend may be conserved.” 16 U.S.C. § 1531(b).

31. Pursuant to the ESA, the Service has the duty to list imperiled species as threatened or endangered solely on the basis of biological criteria without regard to the economic impact of listing. 16 U.S.C. § 1533(c).

32. Pursuant to Section 7(a)(2) of the ESA, 16 U.S.C. § 1536(a)(2), federal agencies have a mandatory, substantive duty to “insure that any action . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification” of the species’ designated critical habitat.

33. In order to assure that federal agencies comply with their substantive Section 7(a)(2) duty to insure against jeopardy or adverse modification of designated critical habitat, Section 7(a)(2) of the ESA mandates a “formal consultation” process which requires all federal agencies to consult with the Service as to those projects that may adversely affect a listed species or may adversely modify designated critical habitat. 16 U.S.C. § 1536(a)(2)

34. The first step in the Section 7(a)(2) formal consultation process is a written request for the initiation of formal consultation from the action agency to the Service. 16 U.S.C. § 1536(c), 50 C.F.R. § 402.14(c). The phrase “action agency” refers to the federal agency that proposes to implement or provide funding for a project that may adversely affect listed species. This written request includes submission of a Biological Assessment (“BA”) prepared by the action agency in which the action agency identifies the action which it proposes to implement and assesses the expected impact of the proposed action on listed species and their designated critical habitats. 16 U.S.C. § 1536(c), 50 C.F.R. §§ 402.12, 402.14.

35. The formal Section 7(a)(2) consultation process, including the Service’s analysis of jeopardy to species and adverse modification to designated critical habitat, concludes with the Service’s issuance of a Biological Opinion (“BiOp”). 16 U.S.C. § 1536(b)(3)(A).

36. In undertaking its Section 7(a)(2) jeopardy and critical habitat analyses during the course of preparing a BiOp, the Service must consider how a proposed action affects a species’ prospects for recovery, as well as its prospects for survival. A species’ prospects for recovery are adversely affected when an action’s impacts reduce the reproduction, numbers, and/or distribution of the species. 50 C.F.R. § 402.02; *Natl. Wildlife Fed’n v. Natl. Marine Fisheries Serv.*, 524 F.3d 917, 932 (9th Cir. 2008).

37. Throughout the Section 7(a)(2) formal consultation process—including the development of both the BA and the BiOp—the action agency and the Service must utilize the “best scientific and commercial data available.” 16 U.S.C. § 1536(a)(2), 50 C.F.R. §§ 402.14(f), 402.14(g)(8).

38. In the BiOp that it issues at the conclusion of a formal consultation process, the Service determines whether a proposed agency action comports with the action agency’s Section 7(a)(2) substantive duties. If the Service finds that a proposed agency action will jeopardize a listed species or adversely modify its designated critical habitat, the Service formulates a “Reasonable and Prudent Alternative” (“RPA”) which avoids that effect.

### **III. The Administrative Procedure Act**

39. The APA provides a right to judicial review for any “person suffering legal wrong because of agency action.” 5 U.S.C. § 702. Actions that are reviewable under the APA include final agency actions “for which there is no other adequate remedy in a court.” *Id.*

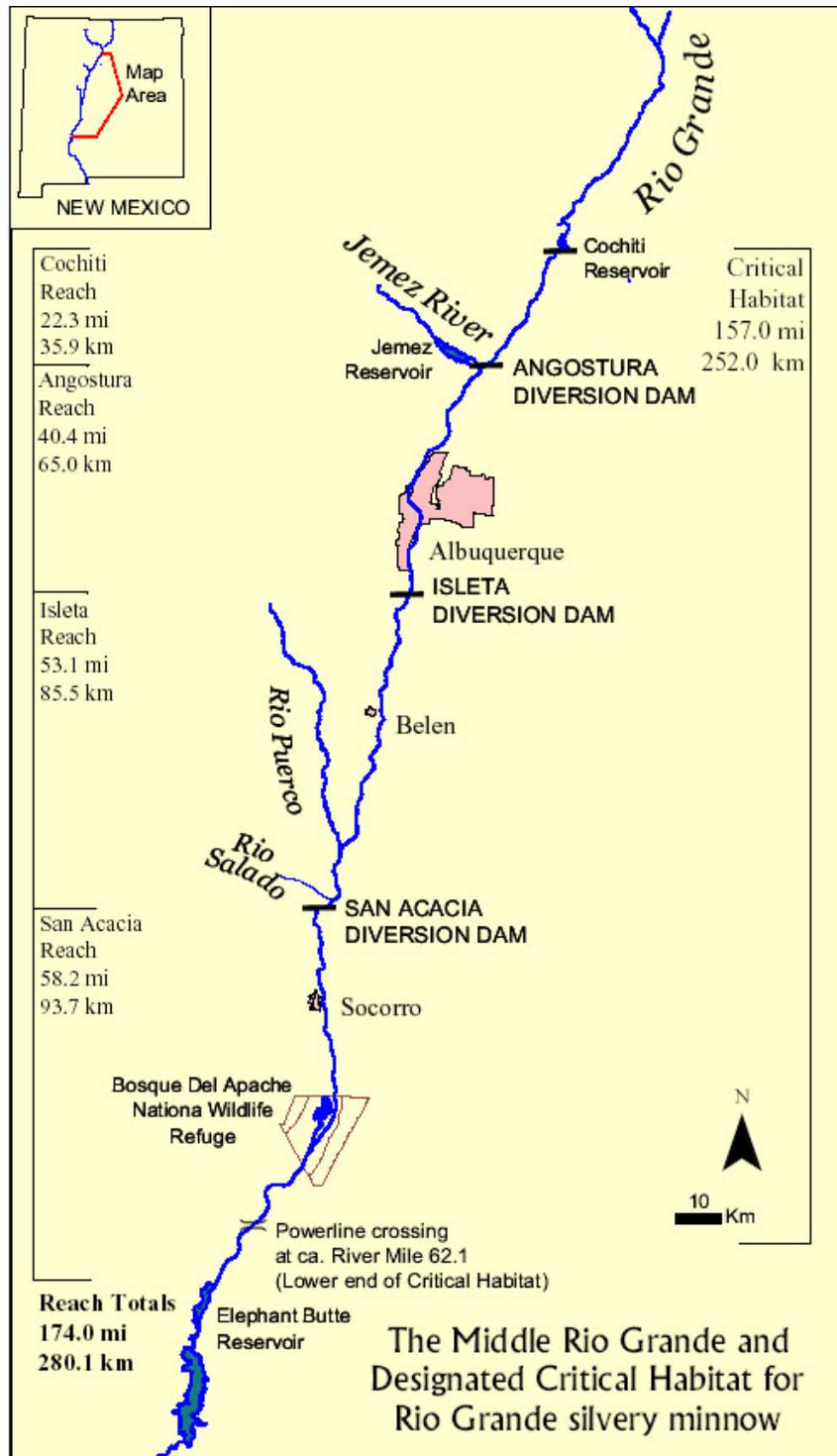
40. Under the APA, a reviewing court shall “hold unlawful and set aside agency action . . . found to be arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” 5 U.S.C. § 706(2)(A).

## **FACTUAL BACKGROUND**

### **I. San Acacia Reach of the Middle Rio Grande**

41. The San Acacia Reach is the segment of the Middle Rio Grande extending from the San Acacia Diversion Dam, south through the Bosque del Apache National Wildlife Refuge, to Elephant Butte Reservoir 60 miles downstream. The San Acacia Reach remains one of the

last relatively wild reaches of the Rio Grande. A map of the Middle Rio Grande identifying the San Acacia Reach is reproduced here.<sup>1</sup>



<sup>1</sup> Map from 2013 Levee Project BiOp at 17 (U.S. Fish and Wildlife Service).

42. Historically, the San Acacia Reach of the Middle Rio Grande was a large, braided, and meandering river system with a diversity of channels, oxbows, and marshes influenced by frequent naturally-occurring flood cycles. In this natural state, the river supported diverse plant communities, including cottonwood forests locally known as the “bosque,” interspersed with wet meadows, marshes, and ponds to form the floodplain ecosystem. This ecosystem provided habitat for a wide variety of terrestrial and aquatic species including the Rio Grande silvery minnow and Southwestern willow flycatcher.

## II. Listed Species in the San Acacia Reach and the Levee Project’s Impacts on Those Species

### A. Southwestern willow flycatcher (*Empidonax traillii extimus*)

43. The Southwestern willow flycatcher is a small migratory bird approximately six inches long. It has a grayish-green back and wings, whitish throat, light gray-olive breast, and pale yellow belly. The willow flycatcher is pictured here.<sup>2</sup>



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<sup>2</sup> Photo credit: Jim Rorabaugh (U.S. Fish & Wildlife Service)

44. The willow flycatcher inhabits streamside and wetland thickets of New Mexico and Arizona, and southern portions of Nevada, Utah, and California. River features such as broad floodplains, water, saturated soils, and fine sediments help maintain desirable flycatcher streamside habitats for nesting, foraging, migration, dispersal, and shelter.

45. On February 27, 1995, the Service listed the Southwestern willow flycatcher as an endangered species, and designated critical habitat on July 22, 1997. 60 Fed. Reg. 10,694 (Feb. 27, 1995); 62 Fed. Reg. 39,129 (July 22, 1997). Pursuant to Court order, the Service has modified its critical habitat designation for the flycatcher several times since the original designation in 1997 including, most recently, in 2013. 78 Fed. Reg. 344 (Jan. 2, 2013). At the time of listing, the known flycatcher population was estimated between 300 and 500 pairs. 60 Fed. Reg. at 10,711.

46. The Service designated critical habitat for the flycatcher in the Middle Rio Grande to include a 112-mile segment of the river starting below Isleta Pueblo and continuing downstream to the upper part of Elephant Butte Reservoir in Socorro County. 78 Fed. Reg. at 380. This critical habitat segment includes the San Acacia Reach.

47. In its listing rule, the Service found that the decline of the flycatcher resulted from loss of habitat, including adverse modifications of riparian habitat necessary for the breeding and successful reproduction of the flycatcher, as a result of human development, channelization, changes in surface water hydrologic regimes, introduction of alien species, and other activities. 78 Fed. Reg. at 10,714.

48. In its listing rule, the Service also found that reduced peak flows, channelization, and reduced sediment in the Middle Rio Grande below Cochiti Dam had eliminated thousands of acres of flycatcher habitat. The lack of large peak flows combined with channelization causes

narrowing of the Rio Grande channel and eliminates overbank flooding, both of which limit development of the backwater habitats necessary for willow flycatcher survival in the Middle Rio Grande. The 235 miles of levees between Cochiti Dam and Elephant Butte Reservoir that have restricted the width of the floodplain and disconnected the river from most of its natural floodplain have further reduced the amount and quality of suitable habitat for the willow flycatcher.

**B. Rio Grande Silvery Minnow (*Hybognathus amarus*)**

49. The Rio Grande silvery minnow is a small, relatively heavy-bodied minnow, with small eyes and a small oblique mouth. Adults reach about 3.5 inches in length. The back, sides, and abdomen of the minnow are silver with a green dorsal stripe. The silvery minnow is pictured here.<sup>3</sup>



50. The Rio Grande silvery minnow was historically one of the most abundant and widespread aquatic species in the entire Rio Grande, occurring from Espanola, New Mexico, downstream nearly 1,000 miles to the Gulf of Mexico. The silvery minnow also occurred in much of the Pecos River. The silvery minnow has been extirpated from more than 95% of its historical range. Today, the minnow only occupies patches of a 174-mile stretch of the Middle

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<sup>3</sup> Photo credit: Aimee Robetson (U.S. Fish & Wildlife Service)

Rio Grande in New Mexico from Cochiti Dam in Sandoval County to the headwaters of the Elephant Butte Reservoir in Socorro County.

51. This 174-mile stretch is fragmented by four diversion dam structures associated with the Middle Rio Grande Project:<sup>4</sup> the Cochiti, Angostura, Isleta, and San Acacia diversion dams. These structures constitute physical barriers to the upstream passage of silvery minnows.

52. Because diversion dams associated with the Middle Rio Grande Project prevent the species from migrating back upstream once the eggs are hatched downstream, approximately 70% of the entire population of Rio Grande silvery minnow currently exists below the San Acacia Diversion Dam in a 58-mile stretch of the San Acacia Reach.

53. Monitoring data shows that during some periods of the year, almost the entire silvery minnow population exists downstream of the San Acacia Diversion Dam in the San Acacia Reach. This is the reach of the Middle Rio Grande which is most susceptible to river drying.

54. The Service listed the Rio Grande silvery minnow as an endangered species under the ESA in 1994 due to reductions in stream flow, dewatering of extended lengths of the river channel as a result of diverting river flow for agricultural purposes, alteration of the natural hydrograph by dams and other artificial features such as levees, and channelization. 59 Fed. Reg. 36,988 (July 20, 1994). The Service designated a 157-mile reach of the Middle Rio Grande as critical habitat for the minnow in 1999. 64 Fed. Reg. 36,274 (July 6, 1999). The initial rule designating critical habitat for the silvery minnow was vacated by court order in 2000. The

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<sup>4</sup> Authorized by Congress in the 1948 and 1950 Flood Control Acts, the Middle Rio Grande Project included a comprehensive plan for flood control, rehabilitation of irrigation and drainage facilities, and river channelization works in the Middle Rio Grande Basin. As part of the Middle Rio Grande Project, Congress authorized the Corps to construct flood control reservoirs and levees for flood protection.

Service issued a new rule re-designating critical habitat in early 2003. 68 Fed. Reg. 8,088 (Feb. 19, 2003).

55. In the critical habitat rule for the minnow, the Service identified stream bed aggradation (i.e., rising of the river bottom due to sedimentation) in the San Acacia Reach, caused by levees that straightened the river's natural channel, as compounding degradation of minnow habitat in that Reach. 68 Fed. Reg. at 8,090. Although minnow habitat in the San Acacia Reach was already degraded, and this Reach is the most susceptible to drying during the irrigation season, the Service recognized that designating critical habitat within this Reach was essential to minnow survival because the area could provide connecting corridors for fish movement between areas with sufficient stream flow for the minnow. *Id.* at 8,094.

56. In April of 2013, the Middle Rio Grande Endangered Species Collaborative Program (a consortium of 17 federal agencies, state agencies, Pueblos, and the MRGCD which was founded by former U.S. Senator Domenici) released a report analyzing silvery minnow population trends since 1993. The report concludes that the population of silvery minnows in 2012 (the latest data set available at the time that the report was prepared) was lower by an order of magnitude than the population of silvery minnows in 1994 when the species was listed.

57. The authors of the report state that changes in silvery minnow populations “appear to be closely related to the timing, magnitude, and duration of flows during spring and summer.”

58. The report's authors note that population monitoring efforts in October of 2012 failed to yield any silvery minnows at all, the first time that such an event had occurred since population monitoring began in February of 1993.

59. In further connection with the declining trend in silvery minnow populations, the report states that “[t]he estimated densities of Rio Grande silvery minnow were significantly lower . . . in 2010, 2011, or 2012 as compared with 2007, 2008, or 2009.”

60. Finally, the report’s authors conclude that “[t]he extremely low densities of Rio Grande silvery minnow in 2012 appear to indicate that current management efforts (e.g. stocking, salvage, habitat restoration, flow manipulation, etc.) are not sufficiently buffering the population against substantial declines” and that “it appears that additional efforts/activities will be required to yield robust self-sustaining populations of Rio Grande silvery minnow in the Middle Rio Grande over time.”

61. More recent data, appearing in the March 3, 2014 Salvage Report prepared by the Middle Rio Grande Endangered Species Collaborative Program, shows that the silvery minnow population continued to decline in 2013. The Salvage Report’s authors state that “[w]e found fewer [minnows] in 2013 than in any year since 2003.” The authors further state the lack of a spring spawning flow and river drying in the early summer of 2013, combined with the already low level of silvery minnows in the river from the preceding year, “resulted in extremely few wild [silvery minnows] collected during 2013 salvage operations” and that this finding “reinforces the severity of the situation.”

62. The March 3, 2014 Salvage Report concludes that “[s]alvage data make it apparent that river conditions and management over the last three years cannot support [silvery minnow] recruitment” and that “[i]f no changes to in-stream water availability occur, [silvery minnows] will continue to be fully dependent on hatchery stocking.”

### **III. 65-Year History of the Corps' San Acacia Levee Project**

63. On May 20, 2014 the Corps' issued a Record of Decision for the Rio Grande Floodway, San Acacia to Bosque del Apache Unit Flood Risk Management Project, Socorro County, New Mexico, authorizing construction of 43 miles of engineered levees along the Rio Grande in the San Acacia Reach. This project, however, dates back 65 years to the Flood Control Acts of 1948 and 1950.

64. Congress passed the Flood Control Acts of 1948 (Public Law 80-858, June 30, 1948) and 1950 (Public Law 81-516, May 17, 1950) (collectively "Flood Control Acts" or "Acts"), to address flood problems in the Rio Grande Basin. These Acts authorized construction of a comprehensive flood management plan for the Rio Grande and its tributaries, known as the Rio Grande Floodway Project, that included the San Acacia Reach.

65. In addition to the authority granted to the Corps to build dams and levees in the Rio Grande Basin, the Acts also granted the United States Bureau of Reclamation ("Reclamation") authority to assume ownership, control, and authority over all assets and operations of the Middle Rio Grande Conservancy District including water rights; El Vado Dam and Reservoir; four permanent diversions dams; two river canal headings; a canal siphon across the Rio Grande; several hundred miles of irrigation canals, laterals, and drains; 180 miles of riverside levees; and jetties and other flood control works.

66. Under authority granted as part of the Acts, Reclamation constructed the low flow conveyance channel ("LFCC") between 1951 and 1959. The LFCC is a 54-mile long artificial channel that runs parallel to the west of the Rio Grande between San Acacia and Elephant Butte Reservoir. The purpose of the LFCC is to transmit river flows more efficiently to Elephant Butte to help New Mexico meet its delivery obligation to Texas under the Rio Grande Compact.

67. Reclamation used the spoil material excavated from the LFCC to construct the non-engineered, earthen levees that exist along the west bank of the Rio Grande in the San Acacia Reach. Known as spoil bank levees, these earthen walls were built to prevent flooding of nearby communities and infrastructure. Reclamation continues to maintain the spoil bank levees and repair any damage caused by high or flood flows in the Rio Grande.

68. The spoil bank levees built along the west side of the river in the San Acacia Reach during the early part of the 20th century have confined the river to a narrow channel and raised it 10 to 12 feet above the adjacent historic floodplain.

69. This artificially “perched” river channel has altered the natural ecosystem once present along the San Acacia Reach. In its Supplemental EIS for the Levee Project, the Corps reports that since the 1930s, “surface area covered by wet meadows, marshes, and ponds declined by 73% along the middle Rio Grande floodplain.” The Corps also discusses the disappearance of cottonwood forests and displacement of native species by non-native plants and animals along the San Acacia Reach since construction of the spoil bank levees. The Corps notes that changes in river channel morphology along the San Acacia Reach have reduced overbank flooding and floodplain connectivity, which limits regeneration of riparian habitat.

70. Despite the disruptions to the natural ecosystem caused by construction of spoil bank levees and a perched river channel, the San Acacia Reach still supports designated critical habitat for the Rio Grande silvery minnow and Southwestern willow flycatcher.

71. Because existing spoil bank levees were not uniform in grade or construction standards, the Flood Control Acts also sought to modify and supplement existing levees to withstand a “standard project flood” of 40,000 cubic feet per second (“cfs”) at San Acacia diminishing to 30,000 cfs at San Marcial.

72. Thus, the Flood Control Acts authorized construction of a continuous levee through the San Acacia Reach. In 1961, the Senate passed a resolution requiring further review of the measures authorized by the Acts. This review resulted in a report by the Corps' Chief of Engineers recommending construction of flood and sediment control dams in lieu of levee rehabilitation in the San Acacia Reach. In 1977, the Corps completed an EIS evaluating construction of sediment control dams on the Rio Puerco and Rio Salado. Design work on the sediment control dams continued until 1985 when the State of New Mexico withdrew its support for the project.

73. In 1989, the Corps reformulated the project and prepared a Reevaluation Report that concluded the continuous levee was "still a technically viable, economically feasible, and implementable alternative as authorized in 1948." In 1992, the Corps completed a supplemental EIS evaluating levee construction along existing spoil banks in the San Acacia Reach. In 1992, the Corps initiated Phase I engineering plans for the continuous levee. These plans were put on hold in 1994 due to new issues including: changes in hydrologic data analysis, endangered species (listing of Rio Grande silvery minnow, Southwestern willow flycatcher, and Pecos sunflower), and changes in levee design methodology criteria.

74. In 1995, the Corps initiated a Reevaluation Report and supplemental EIS to reassess the project under current Corps policies and environmental information. However, this supplemental EIS was put on hold in 1999 pending a decision from Reclamation on the future of the LFCC. Reclamation was considering the feasibility of abandoning or realigning the LFCC.

75. In 2002, when Reclamation decided to maintain the LFCC in its current location, the Corps resumed work on its supplemental EIS. The Corps completed the 2002 supplemental

EIS in 2013. This document forms the basis of the Record of Decision (“ROD”) for the Corps’ Levee Project challenged here.

#### **IV. The Corps’ Planning and NEPA Processes for the Levee Project**

##### **A. The Corps’ Water Resources Planning Process**

76. The Corps’ planning process for the Levee Project is governed by a set of Principles and Guidelines (“P&G”) approved in 1983 pursuant to the Water Resources Planning Act of 1965 (P.L. 89-90). The P&G directs the format for the Corps’ evaluation of water resources projects, including flood control, by providing a consistent planning framework for the formulation and evaluation of project implementation studies.

77. Section II(a) of the P&G reiterates the Water Resources Planning Act’s principle that the “Federal objective of water . . . resources planning is to contribute to national economic development consistent with protecting the Nation’s environment, pursuant to national environmental statutes, applicable executive orders, and other Federal planning requirements.”

78. To facilitate evaluation and effects of alternative plans, Section VII of the P&G created four “accounts” or planning criteria that address monetary and non-monetary costs and benefits of alternative plans. The four accounts are:

- National Economic Development (“NED”): identifies the beneficial and adverse *monetary* effects of each alternative on the national economy. The alternative that maximizes net economic benefits is known as the “NED Plan.”
- Environmental Quality (“EQ”): identifies the beneficial and adverse *non-monetary* effects of each alternative on significant environmental resources. This category analyzes effects to ecological, cultural, and aesthetic attributes of natural resources.

- Regional Economic Development (“RED”): identifies the regional and localized economic effects of each alternative on regional income and employment.
- Other Social Effects (“OSE”): identifies long-term community impacts in the areas of public facilities and services, recreational opportunities, transportation and traffic, and man-made natural resources.

79. Section VII.1.7.1(a) of the P&G states that “[t]hese four accounts encompass all significant effects of a plan on the human environment as required by [NEPA].”

80. Section VII.1.7.1(b) of the P&G also stipulates that the NED account is the only account the Corps is required to analyze to comply with the Water Resources Planning Act. Analyses performed under the remaining three accounts are used to comply with the requirements of other environmental laws, such as NEPA.

81. The P&G directs the federal agency to select the NED Plan as the recommended alternative unless there are overriding reasons for selecting a different alternative.

82. This planning process does not relieve the Corps of its responsibility to comply with the requirements of NEPA in planning water projects such as the Levee Project.

**B. The SEIS and Record of Decision for the Levee Project**

83. In April 2012, the Corps released its draft Supplemental EIS (“SEIS”) for the Levee Project for public review and comment.

84. On June 11, 2012 Guardians provided comments on the draft SEIS for the Levee Project.

85. Guardians’ comments on the draft SEIS questioned the Corps’ summary dismissal of all non-structural alternatives. In its comments on the draft SEIS, Guardians encouraged the Corps to substantively analyze alternatives that included levee setbacks, flowage easements,

relocation and elevation of structures, and other non-structural alternatives. Guardians also encouraged the Corps not to use the National Economic Development Plan framework to limit the alternatives the Corps carried forward for substantive study in the SEIS.

86. Guardians' comments on the draft SEIS also expressed concern that the Corps did not analyze the environmental impacts of continued aggradation of the river channel and elimination of vegetation from riparian areas under each alternative.

87. On July 26, 2013 Guardians provided supplemental comments on the draft SEIS because of significant new information that had become available since its release.

88. Guardians' supplemental comments on the draft SEIS asked the Corps to incorporate new information on species impacts from levee construction articulated by the Service in its BiOp for the Levee Project. Guardians also asked that the Corps consider the Service's final rule revising the critical habitat designation for the willow flycatcher.

89. The Corps issued the General Reevaluation Report and Final SEIS for the Levee Project in October 2013 ("2013 SEIS").

90. On February 24, 2014 Guardians provided comments on the Final SEIS.

91. Guardians' comments on the Final SEIS noted that the Corps had failed to analyze the full range of project impacts to listed species based on the impacts identified by the Service in its BiOp for the Levee Project.

92. On May 20, 2014 the Corps' Director of Civil Works signed the ROD adopting the Recommended Plan as analyzed in the 2013 SEIS.

93. In the 2013 SEIS, the Corps did a preliminary evaluation of five classes of alternatives to reduce the risk of flood damage within the San Acacia Reach. This preliminary set of alternatives included structural and non-structural flood control measures.

94. In the 2013 SEIS, the Corps eliminated all but the engineered levee alternatives from further detailed study. The Corps evaluated each of the non-engineered levee alternatives in isolation, and determined that each was economically infeasible, impracticable, or ineffective for flood control in the San Acacia Reach.

95. In the 2013 SEIS, the Corps brought six alternatives forward for detailed analysis, including the “No Action” alternative. The selected alternative (“Alternative K+4ft” or “recommended plan”) proposed to replace the existing spoil bank with a 43-mile long levee four feet higher than the current spoil bank.

96. Each of the action alternatives varied only with regard to levee length and height. None of the alternatives analyzed in detail included either a non-structural alternative or an alternative combining structural and non-structural measures that would reduce the risk of flood damage in the project area while also providing environmental benefits.

97. Insofar as the analysis of impacts to listed species was concerned, the Corps did not analyze the impacts of levee construction, which will occur over a 20-year period, on the endangered Rio Grande silvery minnow and Southwestern willow flycatcher.

98. For the Rio Grande silvery minnow, the Corps limited its effects analysis to the effects of the *completed* project on the silvery minnow and its critical habitat. In the 2013 SEIS, the Corps discusses the post-construction project effects on water depth and velocity within the floodway, and notes that sufficient refugia areas for the minnow would remain *after* levee replacement to avoid flushing silvery minnow from the San Acacia Reach.

99. For the Southwestern willow flycatcher, the Corps limits its effects discussion to disclosing the amount of flycatcher critical habitat that would be cleared for levee construction.

100. The recommended plan for construction of the 43-foot long levee is divided into 14 phases and six segments that would be constructed over a 20-year period, with the Levee Project complete in 2032. In the SEIS, the Corps does not analyze impacts to the minnow or flycatcher during this 20-year construction period.

101. Engineered levee construction consists of excavating and processing the existing spoilbank levee with heavy machinery; installing riprap blankets, floodwalls, and soil cement embankments; and building a temporary river crossing and sluice gates. All of these ground-disturbing activities will have some level of temporary disturbance to minnow and flycatcher critical habitat, yet the Corps has not analyzed the impacts of any of these activities on these listed species.

#### **V. The Service's Biological Opinion for the Levee Project**

102. On February 28, 2013 the Service issued a final programmatic BiOp on the effects of the Corps' proposed Levee Project.

103. The Service concluded that construction, operation, and maintenance of the Levee Project would result in adverse effects to the silvery minnow, temporary adverse effects to 64 acres of minnow critical habitat, and permanent adverse effects to 13.5 acres of minnow critical habitat.

104. The Service also concluded that construction, operation, and maintenance of the Levee Project would result in adverse effects to 11 flycatcher territories, temporary adverse effects to 94.8 acres of flycatcher critical habitat, and permanent adverse effects to between 60 and 200 acres of flycatcher critical habitat. The Service also predicted that the Levee Project had

the potential to alter, for the long-term, 460 acres of flycatcher critical habitat as a result of sediment accumulation in the floodway and riparian vegetation separation from groundwater.

105. The Service identified vertical sediment accumulation within the river channel, exacerbated by confinement of the river within the existing levee system, as a primary factor potentially impacting minnow and flycatcher critical habitat. This condition, known as a “perched” river channel because the channel is perched above the floodplain, increases water velocity and washes away the fine-grained sediments required for minnow habitat. A perched river channel also increases the depth to groundwater which will negatively impact the health and distribution of riparian vegetation that is part of the flycatcher’s critical habitat.

106. Although the Service mentioned that continued sediment accumulation could potentially impact critical habitat for the minnow, the Service did not include the effects of this “perched” river channel in its environmental baseline.

107. Neither did the Service analyze the future effects of the perched channel on the silvery minnow or its critical habitat that would result from construction of the 43-mile engineered levee. For the flycatcher, the Service determined that over the life of the engineered levee the accumulation of sediment in the floodway would increase the separation of riparian vegetation from groundwater, causing loss of up to 460 acres of flycatcher critical habitat supporting 20 flycatcher territories.

108. The Service’s analysis of the Levee Project’s impacts to listed species focused on temporary impacts to critical habitat from various construction activities. Although construction impacts were considered “temporary,” these impacts will occur over the nearly 20-year construction period (2012-2029). The Service does not indicate the length of these various construction activities that will temporarily impact critical habitat within the 20-year period. The

minnow has a 2.5-year lifespan. Construction activities that degrade minnow habitat over the course of construction have the potential to disrupt minnow propagation over several generations.

109. Despite the impacts to the minnow and flycatcher enumerated in the BiOp, the Service concluded that the Levee Project is not likely to jeopardize the continued existence of the minnow or flycatcher and is not an adverse modification to their respective critical habitats.

### **CLAIMS FOR RELIEF**

#### **First Claim for Relief:**

#### **Violation of NEPA: The Corps Failed to Consider a Reasonable Range of Alternatives**

110. Each and every allegation set forth in this Petition is incorporated herein by reference.

111. The 2013 SEIS is legally inadequate because the Corps failed to analyze any reasonable, non-structural alternative for flood control.

112. Previous studies of flood control measures in the San Acacia Reach identified a number of structural and non-structural measures in addition to a continuous, engineered levee. Non-structural measures included flood warning systems, flood proofing methods, and buyouts or acquisitions. Structural measures included local levees to protect communities such as Socorro, intermittent levee replacement, levee setbacks, and use of the Tiffany Basin for sediment deposition.

113. The Corps did not advance any of these reasonable alternatives for detailed study in the SEIS. Instead, the Corps summarily dismissed these alternatives without legally adequate justifications for doing so.

114. The Corps' approval of the Levee Project is arbitrary, capricious, an abuse of discretion, and otherwise not in accordance with the law and procedures required by law,

because the Corps failed to consider reasonable alternatives as required by NEPA. 42 U.S.C. 4332(C)(iii); 5 U.S.C. § 706(2); 40 C.F.R. §§ 1502.14, 1502.16.

**Second Claim for Relief:  
Violation of NEPA: The Corps Failed to Take a Hard Look at Direct, Indirect, and  
Cumulative Impacts to Endangered Species in the Project Area**

115. Each and every allegation set forth in this Petition is incorporated herein by reference.

116. The SEIS is legally inadequate because the Corps failed to analyze the direct, indirect, and cumulative impacts to the Rio Grande silvery minnow, the Southwestern willow flycatcher, and their designated critical habitats, from: (1) disturbance activities associated with removal of the existing levees and construction of the engineered levee, and (2) continued vertical sediment accumulation in both the floodway and floodplain caused by the new, engineered levee.

117. In the SEIS, the Corps limits its discussion of the Levee Project's impacts on the flycatcher to the number of acres of riparian vegetation that will be removed to accommodate the wider footprint of the engineered levee alternatives.

118. In the SEIS, the Corps also limits its discussion of the Levee Project's impacts on the silvery minnow to estimated changes in the floodway's water depths and velocities after construction of the new levee.

119. The Corps' SEIS does not include any discussion of whether there will be significant impacts to the minnow, flycatcher, and their designated critical habitats during the 20-year construction period for the new levee. The SEIS also does not include any evaluation of impacts to these listed species and their habitats from continued vertical sediment accumulation within the floodway and adjacent floodplain over the 50-year functional life of the new levee.

120. In the Levee BiOp, the Service recognized that the Corps had failed to fully analyze impacts to listed species' critical habitat from confinement of the floodplain both within the existing system of spoil bank levees and within the proposed system of engineered levees.

121. The Corps' approval of the Levee Project is arbitrary, capricious, an abuse of discretion, and otherwise not in accordance with the law and procedures required by law, because the Corps failed to take a hard look at the direct, indirect, and cumulative impacts of levee construction on the Rio Grande silvery minnow and Southwest willow flycatcher as required by NEPA. 42 U.S.C. 4332(C)(i,ii); 5 U.S.C. § 706(2); 40 C.F.R. § 1502.16.

**Third Claim for Relief:**

**Violation of the ESA: The Fish and Wildlife Service's Biological Opinion is Arbitrary**

122. Each and every allegation set forth in this Petition is incorporated herein by reference.

123. The Service's conclusions that the Levee Project will not jeopardize the minnow and flycatcher and not adversely modify their designated critical habitats are arbitrary for the reasons discussed throughout this Petition including, but not limited to:

- the Service does not provide the bases for its no jeopardy and no adverse modification conclusions;
- the Service fails to consider the long-term impacts of the perched river channel created by the new levee on listed species and their critical habitats;
- the Service fails to take into account the duration of impacts to listed species from various construction activities within the 20-year construction time frame; and
- the record contradicts the no jeopardy and no adverse modification conclusions.

124. The Service's BiOp for the Levee Project is arbitrary, capricious, an abuse of discretion, and otherwise not in accordance with the law and procedures required by law. 16 U.S.C. § 1536(b)(3); 5 U.S.C. § 706(2).

**PRAYER FOR RELIEF**

WHEREFORE, Petitioner WildEarth Guardians respectfully requests that this Court:

- A. Declare that the Corps of Engineers violated NEPA and the APA by approving the Levee Project;
- B. Vacate and remand the Corps of Engineers' decision to approve the Levee Project;
- C. Enjoin the Corps of Engineers from re-issuing the Levee Project approval until such time as it has complied with NEPA and the APA;
- D. Declare that the U.S. Fish and Wildlife Service has violated the ESA and the APA by its issuance of the 2013 Biological Opinion for the Levee Project;
- E. Declare that the U.S. Fish and Wildlife Service's 2013 Biological Opinion for the Levee Project is invalid;
- F. Enjoin the Corps of Engineers from proceeding with any levee construction beyond the two phases currently underway to protect the town of Socorro until the Corps has complied with NEPA and the U.S. Fish and Wildlife Service has issued a new Biological Opinion for the Levee Project;
- G. Grant WildEarth Guardians its costs of litigation including reasonable attorneys' fees as provided by the Equal Access to Justice Act, 28 U.S.C. § 2412; and
- H. Grant WildEarth Guardians such additional and further relief as the Court deems just and proper.

Respectfully submitted this 24th day of February 2015.

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