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UNITED STATES DISTRICT COURT

DISTRICT OF OREGON

PORTLAND DIVISION

**XERCES SOCIETY FOR
INVERTEBRATE CONSERVATION
and CENTER FOR BIOLOGICAL
DIVERSITY,**

Case No.: 3:22-cv-790-HZ

Plaintiffs,

v.

**FIRST AMENDED
AND SUPPLEMENTAL
COMPLAINT**

**KEVIN SHEA, in his official capacity as
Administrator of the Animal and Plant
Health Inspection Service; and the
ANIMAL AND PLANT HEALTH
INSPECTION SERVICE,**

Defendants.

Plaintiffs Xerces Society for Invertebrate Conservation and the Center for Biological Diversity, on behalf of themselves and their members and supporters, allege as follows:

INTRODUCTION

1. Each year, about one billion pounds of conventional pesticides are applied across the United States. Application of these toxic chemicals has become par for the course as a supposedly quick fix for the control of many “pests.” In the long run, though, widespread pesticide use is not a fix for anything, but rather one of the drivers of the ongoing decline of insect abundance, diversity, and biomass—a decline that threatens to disrupt ecosystems. Many pollinator populations—including several species of bumble bee and the monarch butterfly—are declining at an alarming rate, threatening the long-term viability of the very food systems that pesticides are supposed to benefit.

2. The Animal and Plant Health Inspection Service (“APHIS”), an agency within the U.S. Department of Agriculture, contributes to this crisis by authorizing and funding the spraying of pesticides on public and private lands across 17 Western states as part of an effort to control populations of grasshoppers and Mormon crickets on federal rangelands.¹ In some years, APHIS treats millions of acres with pesticides.

3. Congress has instructed APHIS to take a holistic approach to grasshopper control, with pesticides as just one potential tool among many. *See* 7 U.S.C. § 7717; *see also* 7 U.S.C. § 136r–1. But, in recent years, APHIS has largely ignored Congress’s directions and instead focused its efforts almost entirely on the use of pesticides. In a typical year, APHIS authorizes and funds the application of pesticides to hundreds of thousands of acres of public and private lands throughout the American West, with little disclosure to or input from the public.

4. By statute, APHIS is allowed to treat grasshopper outbreaks only when they reach “levels of economic infestation.” 7 U.S.C. § 7717(c)(1). But APHIS does not have a consistent, reasonable method for determining when such levels are reached; on the contrary, APHIS has

¹ Hereafter, the term “grasshopper” refers to both grasshoppers and Mormon crickets, unless differentiation is necessary.

carried out its program under faulty assumptions about the economic severity of grasshopper outbreaks, likely leading to more pesticide treatments than are truly warranted.

5. Alarmingly, APHIS carries out its rangeland pesticides program with little transparency and insufficient analysis of the program's effects on the environment. The agency re-authorized the national program in 2019, but the environmental impact statement ("EIS") prepared pursuant to the National Environmental Policy Act ("NEPA") does not even disclose the locations of past pesticide applications. Nor does the 2019 EIS make any meaningful attempt to consider how APHIS's program combines with actions taken by other actors—private, state, tribal, and federal—to affect native pollinators, other invertebrates, or animals and plants that depend on these invertebrates for food or pollination. Subsequent annual environmental assessments ("EAs") for individual states prepared by APHIS under NEPA do not remedy these deficiencies, and instead leave the public in the dark as to the probable environmental consequences of APHIS's program. This is wholly inconsistent with NEPA's goals of informed agency decisionmaking and public participation.

6. APHIS also re-authorized its rangeland pesticides program in 2019 without completing programmatic consultation under the Endangered Species Act ("ESA") with the U.S. Fish and Wildlife Service ("FWS"). That consultation was started by 2015 but has yet to be completed, resulting in APHIS and FWS conducting informal and cursory annual consultations for each state in which APHIS conducts pesticide treatments. But those consultations do not, and cannot, substitute for a thorough programmatic consultation, because they cannot account for the cumulative effects of APHIS's rangeland pesticides program across multiple states and time.

7. APHIS's widespread, routine application of pesticides on public and private rangelands to manage grasshoppers—many of which never reach economic infestation levels—harms not just grasshoppers but also numerous non-target insect species critical to ecosystem functioning and productivity. This, in turn, has repercussions for birds, mammals, and plants that rely on these insects for food or pollination. Moreover, APHIS's approach to using pesticides to

treat grasshopper outbreaks may actually *increase* the frequency and severity of grasshopper outbreaks in the long run.

8. APHIS's program threatens to harm the humans that use these lands, as well. APHIS applies pesticides on and near iconic Western public lands that are biodiversity hotspots and provide popular recreation opportunities—such as several portions of the Oregon Desert Trail in southeastern Oregon and the War Horse National Wildlife Refuge in Montana, an area known for attracting birdwatchers.

9. In short, APHIS's rangeland pesticides program, as currently implemented, is both an economic and environmental loser: it contributes to the alarming decline of insect populations and harms ecosystems without making economic sense in the long run.

10. Plaintiffs bring suit to force APHIS to comply with the law by completing an environmental analysis under NEPA that properly considers the impacts of pesticide use on native ecosystems and imperiled species and adequately informs the public of pesticide treatments that the agency authorizes and funds.

11. Accordingly, Plaintiffs ask this Court to adjudge and declare that APHIS's EIS for its rangeland pesticides program violates NEPA, vacate the EIS and associated Record of Decision ("ROD"), and remand to APHIS to address the legal violations found therein. Similarly, Plaintiffs ask this Court to adjudge and declare that APHIS's currently operative state-level EAs for Oregon, Idaho, Wyoming, and Montana violate NEPA, vacate those EAs and their associated findings of no significant impact ("FONSI"), and remand to APHIS. Plaintiffs also ask this Court to adjudge and declare that APHIS's ROD and the currently operative state-level FONSI for Oregon, Idaho, Wyoming, and Montana violate the Plant Protection Act and the Federal Insecticide, Fungicide, and Rodenticide Act ("FIFRA"), and remand to APHIS. Finally, Plaintiffs ask this Court to adjudge and declare that APHIS has violated and continues to violate the ESA by reauthorizing and carrying out its rangeland pesticides program without first completing programmatic section 7(a)(2) consultation with FWS and award appropriate injunctive relief to remedy that violation.

JURISDICTION AND VENUE

12. Jurisdiction is proper in this Court under 28 U.S.C. § 1331 because this action arises under the laws of the United States, including NEPA, 42 U.S.C. § 4321 *et seq.*, the Administrative Procedure Act (“APA”), 5 U.S.C. § 701 *et seq.*, the Plant Protection Act 7 U.S.C. § 7711 *et seq.*, FIFRA, 7 U.S.C. § 136 *et seq.*, and the Equal Access to Justice Act, 28 U.S.C. § 2412 *et seq.* Jurisdiction is also proper under the ESA citizen suit provision, 16 U.S.C. § 1540(g), because this action seeks to enjoin Defendants from further violations of the ESA and its implementing regulations. An actual, justiciable controversy exists between the parties, and the requested relief is therefore proper under 28 U.S.C. §§ 2201–02, 5 U.S.C. §§ 701–06, and 16 U.S.C. § 1540(g).

13. Venue is proper in this Court under 28 U.S.C. § 1391(e) and 16 U.S.C. § 1540(g)(3)(A) for two independent reasons: (1) Plaintiff Xerces Society for Invertebrate Conservation resides in the District of Oregon and this case does not involve real property and (2) a substantial part of the events giving rise to Plaintiffs’ causes of action occurred, are occurring, or will occur in the District of Oregon.

14. The federal government has waived sovereign immunity in this action pursuant to 5 U.S.C. § 702 and § 704 and 16 U.S.C. § 1540(g)(1).

15. Plaintiffs have exhausted all administrative remedies and satisfied all other conditions precedent to bringing this suit, including providing more than 60 days notice of their intent to add the ESA claim to this action, 16 U.S.C. § 1540(g)(2)(A)(i).

PARTIES

Plaintiffs

16. Plaintiff **Xerces Society for Invertebrate Conservation** (“Xerces Society”) is a non-profit organization headquartered in Portland, Oregon that protects the natural world through the conservation of invertebrates and their habitats. On behalf of its members from across the United States, Xerces Society works to raise awareness about the plight of invertebrates and to gain protection for the most vulnerable species before they decline to a level at which recovery is

impossible. Destruction of habitat, climate change, diseases and invasives, and pesticides are all contributing to the loss of invertebrate species and thus are key concerns of Xerces Society and its members.

17. Plaintiff **Center for Biological Diversity** (the “Center”) is a non-profit environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center has more than 1.7 million members and online activists dedicated to the protection and restoration of endangered species and wild places. One of its main offices is in Portland, Oregon, where many staff, members, and supporters reside. The Center has worked for over 33 years to protect imperiled plants and wildlife, open space, air and water quality, and overall quality of life.

18. The use of pesticides on rangelands to suppress naturally occurring grasshoppers and Mormon crickets is of great concern to Xerces Society and the Center. Plaintiffs and their members, staff, and supporters have spent decades working to protect wildlife, pollinators, and natural resources from the harmful effects of pesticides. Many of Plaintiffs’ activities—including research and advocacy—have focused on conserving and protecting species and their habitats within the public lands subject to APHIS’s grasshopper pesticide treatments. Plaintiffs participated extensively in the NEPA processes for this program, both for the programmatic NEPA review and for annual state-level reviews for the past several years. For each of these processes, Plaintiffs submitted detailed comments to APHIS. Plaintiffs have thus exhausted all administrative remedies before bringing this action.

19. Plaintiff organizations have members, staff, and supporters who regularly visit and/or recreate on the public lands and adjacent areas that have been, and likely will continue to be, subject to or affected by applications of pesticides for the purposes of grasshopper and Mormon cricket suppression. Plaintiffs’ members, supporters, and staff derive recreational, aesthetic, scientific, inspirational, educational, and other benefits from their use of these public lands and adjacent areas and plan to continue these activities in the future. The application of pesticides in these areas harms their use and enjoyment of these lands. Both aerial pesticide

spraying and the ground application of pesticides prevents them and other members of the public from accessing and enjoying parts of these lands and adversely impacts their activities where they do occur. Plaintiffs' members, supporters, and staff are likely to avoid spending time in areas that have been recently treated with pesticides due to the health risk they may face if they come into contact with pesticide residue and/or pesticide-contaminated water or plant material. And, when they do recreate, collect data, manage their land, and/or conduct educational activities in areas that might be subject to pesticide treatments, Plaintiffs' members, supporters, and staff will reasonably experience anxiety about the possibility that such pesticide use may occur. These are actual, concrete injuries caused by Defendants' violations of law, and the relief sought herein would remedy, at least in part, these injuries.

20. Plaintiffs also have members, supporters, and staff who derive recreational, aesthetic, scientific, inspirational, educational, and other benefits from observing species that are negatively affected by Defendants' activities, including the monarch butterfly, yellow bumble bee, western bumble bee, Suckley's cuckoo bumble bee, greater sage-grouse, and Sullivan's sulphur (butterfly). The decline of these species means that there are fewer and fewer chances for Plaintiffs' members, supporters, and staff to observe them in the wild. Defendants' authorization and funding of pesticide applications threatens these species and contributes to their decline, thereby injuring Plaintiffs' members, supporters, and staff. These injuries stemming from decreased opportunities to observe species of interest to Plaintiffs and their members, supporters, and staff are actual, concrete injuries caused by Defendants' violations of law, and the relief sought herein would remedy, at least in part, these injuries.

21. Plaintiffs and their members, supporters, and staff are also directly injured by Defendants' continued application of pesticides throughout Western rangeland ecosystems without fully disclosing and evaluating the cumulative environmental impacts of those activities. They are injured by Defendants' failure to analyze alternatives to toxic pesticides to control grasshopper outbreaks, including preventative measures. They are also injured by Defendants' failure to consider program-wide impacts to federally-listed endangered and threatened species

in compliance with federal law. Plaintiffs and their members, supporters, and staff have a strong procedural interest in ensuring Defendants comply with all applicable federal statutes and regulations. Plaintiffs have worked to reform APHIS’s activities related to grasshopper suppression throughout the West—including in Oregon, Idaho, Montana, and Wyoming—and have a strong interest in ensuring that Defendants disclose to the public specific information about environmental impacts of the rangeland pesticides program and past treatment areas, and consider non-toxic alternatives to the program.

22. Defendants’ violations of law have injured and will injure the aesthetic, commercial, conservation, scientific, recreational, educational, wildlife preservation, procedural, and other interests of Plaintiffs and their staff, members, and supporters. These are actual, concrete injuries caused by Defendants’ violations of law, and the relief sought herein would redress these injuries. Plaintiffs have no adequate remedy at law, and thus the requested relief is appropriate.

Defendants

23. Defendant **Animal and Plant Health Inspection Service** is a federal agency that is part of the U.S. Department of Agriculture (“USDA”). APHIS is responsible for controlling outbreaks of grasshoppers and Mormon crickets when those outbreaks pose an economic threat to federal rangelands. *See* 7 U.S.C. § 7717.

24. Defendant **Kevin Shea** is sued in his official capacity as the Administrator of APHIS. As Administrator of APHIS, Defendant Shea has the ultimate responsibility for the agency’s activities and policies, including the rangeland pesticides program. *See* 7 C.F.R. § 2.80(a)(36) (delegation of authority to Administrator).

LEGAL BACKGROUND

APHIS’s Statutory Authority to Control Grasshoppers and Mormon Crickets

25. In 1934, Congress empowered the USDA to treat grasshopper outbreaks by appropriating money “[f]or the application of such methods of control of grasshoppers as . . . may be necessary.” Pub. L. No. 73-131, 48 Stat. 467, 498 (1934). Congress instructed that the

appropriated funds “shall be used for expenditures of general administration and supervision, purchase and transportation of poisoned bait, or materials for its manufacture, and such other expenses as in the discretion of the Secretary of Agriculture may be deemed necessary.” *Id.*

26. When APHIS was established in 1972, grasshopper control was put under its jurisdiction. 37 Fed. Reg. 6,327, 6,327 (Mar. 22, 1972).

27. In 1985, a boom in grasshopper population numbers led to APHIS treating 14 million acres of rangeland with pesticides. As APHIS itself has explained, “[t]he cost and concerns associated with large-scale applications of insecticides after the major [1985] outbreak . . . elevated the need for developing new and improved ways to manage grasshoppers. From that need, Congress authorized APHIS to undertake a program for the prevention, suppression, control, or eradication of grasshopper outbreaks.”²

28. Following that outbreak, Congress passed the Food Security Act of 1985, which included a new authorization for APHIS to treat grasshopper outbreaks. Pub. L. No. 99-198, tit. XVII, § 1773, 99 Stat. 1354, 1658 (1985). Unlike the previous authorization, this authorization did not explicitly mention the use of “poison” and instead directed APHIS to use preventive measures as well as reactive measures to control grasshoppers.

29. Additionally, in 1996, Congress instructed that “[f]ederal agencies shall use Integrated Pest Management techniques in carrying out pest management activities.” Federal Insecticide, Fungicide, and Rodenticide Act (“FIFRA”), 7 U.S.C. § 136r-1.

30. In 2000, Congress repealed the existing authorizations for grasshopper control and enacted a new authorization as part of the Plant Protection Act. Pub. L. No. 106-224, tit. IV, § 417, 114 Stat. 358, 447 (2000), *codified at* 7 U.S.C. § 7717. That statute—which is still the operative authorization for the rangeland pesticides program—is very similar to its predecessor. Its key features are as follows:

² 2002 EIS for the Rangeland Grasshopper and Mormon Cricket Suppression Program at A-2 to A-3.

- a. The statute generally instructs APHIS to “carry out a program to control grasshoppers and Mormon crickets on all Federal lands to protect rangeland.” 7 U.S.C. § 7717(a).
- b. The statute requires the Secretary of the Interior to transfer money to APHIS “for the prevention, suppression, and control of actual or potential grasshopper and Mormon cricket outbreaks on Federal lands under the jurisdiction of the Secretary of Interior.” *Id.* § 7717(b)(1). APHIS is supposed to request money from the Interior “as promptly as possible” and must use its own money before using money from Interior. *Id.* § 7717(b)(2)–(3).
- c. The statute requires APHIS to “immediately treat Federal, State, or private lands that are infested with grasshoppers or Mormon crickets at levels of economic infestation” when requested to do so by “the administering agency or the agriculture department of an affected State,” unless APHIS “determines that delaying treatment will not cause greater economic damage to adjacent owners of rangeland.” *Id.* § 7717(c)(1). The treatment must be for the purpose of “protect[ing] rangeland.” *Id.* For treatments on federal lands, APHIS must pay 100% of the treatment costs; for treatments on state lands, APHIS must pay 50% of the treatment cost; and for treatments on private lands, APHIS must pay 33% of the treatment cost. *Id.* § 7717(d).
- d. APHIS must also “provide adequate funding for a program to train personnel to accomplish effectively the objective of this section.” *Id.* § 7717(e).
- e. The statute instructs APHIS to “work in conjunction with other Federal, State, and private prevention, control, or suppression efforts to protect rangeland” when carrying out the rangeland pesticides program. *Id.* § 7717(c)(2).

The National Environmental Policy Act

31. NEPA is the United States’ basic “charter for protection of the environment.” 40 C.F.R. § 1500.1(a) (2019).³ Its purpose is to “promote efforts which will prevent or eliminate damage to the environment.” 42 U.S.C. § 4321. The Council on Environmental Quality (“CEQ”) has promulgated regulations implementing NEPA, which are binding on all federal agencies and govern APHIS’s decision-making. 40 C.F.R. §§ 1500–1518.4 (2019).

32. NEPA requires federal agencies to “take seriously the potential environmental consequences of a proposed action”—that is, to take a “hard look” at the effects the action will have on the environment. *Ocean Advocates v. U.S. Army Corps of Eng’rs*, 402 F.3d 846, 864 (9th Cir. 2005). The statute serves two principal purposes: (1) it ensures that agencies, in reaching decisions, will have available, and will carefully consider, detailed information concerning environmental impacts; and (2) it guarantees that the relevant information will be made available to the public so it may play a role in the decisionmaking process. “Environmental information [must be made] available to public officials and citizens before decisions are made and before actions are taken.” 40 C.F.R. § 1500.1(b).

33. NEPA requires federal agencies to prepare an environmental impact statement, or EIS, for all “major federal actions significantly affecting the quality of the human environment.” 42 U.S.C. § 4332(2)(C). An EIS is a “detailed statement” that includes discussions of, *inter alia*, “the environmental impact of the proposed action,” “any adverse environmental effects which cannot be avoided should the proposal be implemented,” and “alternatives to the proposed action.” *Id.*

34. When an EIS is not necessary, an agency may prepare an environmental assessment (“EA”) to fulfill its NEPA duties. 40 C.F.R. § 1508.9. An EA must include “brief discussions of the need for the proposal, of alternatives . . . , [and] of the environmental impacts of the proposed action and alternatives.” *Id.* An agency may “tier” a narrower NEPA analysis,

³ Unless otherwise indicated, this complaint cites the 2019 version of the NEPA regulations, which govern analysis of the 2019 EIS and the Idaho 2020 EA. The remaining EAs tier to the EIS and reference the NEPA regulations as they existed in 2019. Thus, they, too, are analyzed under the 2019 regulations.

like an EA, to a broader NEPA analysis by “incorporating by reference the general discussions and concentrating solely on the issues specific to the statement subsequently prepared.” *Id.* § 1508.28.

35. To satisfy NEPA, an EIS must include a purpose and need statement that “briefly specif[ies] the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action.” *Id.* § 1502.13. An agency must also “[r]igorously explore and objectively evaluate all reasonable alternatives,” “[d]evote substantial treatment to each alternative considered in detail including the proposed action,” and “[i]nclude reasonable alternatives not within the jurisdiction of the lead agency.” *Id.* § 1502.14(a)–(c).

36. Both EISs and EAs must discuss a proposed action’s direct, indirect, and cumulative impacts. 40 C.F.R. § 1502.16. Direct impacts are caused by the action and occur at the same time and place as the proposed project. *Id.* § 1508.8(a). Indirect impacts are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. *Id.* § 1508.8(b). Both types of impacts include “effects on natural resources and on the components, structures, and functioning of affected ecosystems.” *Id.* § 1508.8. A cumulative impact is 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.” *Id.* § 1508.7.

37. Generally, information used to inform NEPA analyses “must be of a high quality,” and “[a]ccurate scientific analysis . . . [is] essential to implementing NEPA.” *Id.* § 1500.1(b). The agency’s analysis must be based on professional and scientific integrity. *Id.* § 1502.24. The agency must also “discuss . . . any responsible opposing view which was not adequately discussed in the draft statement and shall indicate the agency’s response to the issues raised.” *Id.* § 1502.9(b).

38. Additionally, the “hard look” requirement demands that agencies assess and discuss the environmental “baseline” in the area of a proposed action. *ONDA v. Jewell*, 840 F.3d 562, 568–71 (9th Cir. 2016). An agency must also include in any NEPA document a sufficiently

detailed discussion of mitigation measures “to ensure that environmental consequences have been fairly evaluated.” *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350–52 (1989). To fulfill NEPA’s hard look and public disclosure and participation requirements, an agency must also evaluate in detail a project’s potential site-specific impacts.

The Endangered Species Act

39. The Endangered Species Act was enacted to “provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved [and] to provide a program for the conservation of such . . . species.” 16 U.S.C. § 1532(b).

40. Under section 7(a)(2) of the ESA, each federal agency must “insure that any action authorized, funded or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of [designated critical] habitat.” 16 U.S.C. § 1536(a)(2).

41. To ensure that agencies meet the substantive requirements of the ESA, section 7(a)(2) also imposes an important procedural requirement: if an agency’s proposed action “may affect” a listed species or its critical habitat, the action agency must first consult with the National Marine Fisheries Service (“NMFS”) or FWS. *Id.*; 50 C.F.R. § 402.14(a). NMFS is responsible for marine and anadromous species (fish that are born in freshwater, spend most of their lives in saltwater, and return to freshwater to spawn), and FWS is responsible for land and freshwater species.

42. During the consultation process, the action agency typically prepares a biological assessment (“BA”) to evaluate the potential “effects of the action” on listed species and critical habitat and determine whether any species or its habitat is likely to be adversely affected by the action. 50 C.F.R. § 402.12.

43. Consultation concludes when NMFS or FWS either (1) issues a written concurrence with the action agency’s determination that the proposed action “is not likely to adversely affect [any] listed species or critical habitat,” *id.* § 402.13; or else (2) issues a “biological opinion” (“BiOp”), *id.* § 402.14.

44. Once a biological opinion or letter of concurrence has been issued, the action agency may proceed with the action. However, the action agency and the relevant consulting agency—NMFS or FWS—must reinitiate section 7(a)(2) consultation under certain circumstances, including when “the identified action is subsequently modified in a manner that causes an effect to [any] listed species or critical habitat that was not considered in the biological opinion or written concurrence.” *Id.* § 402.16(a)(3). The agencies must also reinitiate consultation “[i]f a new species is listed or critical habitat designated that may be affected by the identified action.” *Id.* § 402.16(a)(4).

FACTUAL BACKGROUND

Western Rangelands Contain Precious Biodiversity and Natural Resources

45. Under APHIS’s rangeland pesticides program, pesticides are applied to huge swaths of lands containing unique terrain with tremendous biological diversity. These lands are home to many species, including federally-listed threatened and endangered species such as the yellow-billed cuckoo, black-footed ferret, bull trout, Wyoming toad, Ute ladies’-tresses, and Snake River physa snail; special status species such as the greater sage-grouse; and thousands of species of important native pollinators such as the monarch butterfly, yellow bumble bee, and western bumble bee. These lands are also home to an immense variety of other organisms that are important to the healthy functioning of range ecosystems.

46. Western rangelands also contain many of the United States’ most popular recreation destinations, including areas known for hiking, bird-watching, camping, fishing, and biking. For large numbers of people—many of whom travel from great distances—these lands serve as a respite from urban or suburban life and a significant source of aesthetic, spiritual, and emotional fulfillment. For instance, in Oregon, the Steens Mountain Cooperative Management and Protection Area, which contains a section of the iconic Oregon Desert Trail and is a biodiversity hotspot, is a popular destination for hiking, birdwatching, and other recreation. In Montana, War Horse National Wildlife Refuge provides important habitat for migratory birds and serves as a popular destination for fishing, hiking, and wildlife viewing. In Idaho, within an

hour's drive of Boise, the Owyhee Front offers numerous off-highway vehicle trails as well as many opportunities for hiking, swimming, cycling, horseback riding, and kayaking. And in Wyoming, the Middle Fork of the Powder River draws many visitors to its campgrounds, trails, and historic sites, like the Hole-in-the-Wall trail and historic site.

Pesticides Pose Serious Risks to Western Rangeland Ecosystems

47. Pesticides are toxic substances intended to kill organisms that are considered to be pests. Each year, roughly one billion pounds of pesticides are applied in the United States across many industries. Pesticides can have devastating impacts on non-target species, human health, and ecosystems as a whole.

48. Insecticides are a class of pesticides that specifically target insects. They can act to kill insects in different ways, such as by disrupting the nervous system, inhibiting growth and development of the exoskeleton (chitin formation), and obstructing protein function. They can be applied as sprays or baits and by ground or aerial application. Like pesticides generally, many insecticides are broad-spectrum and thus necessarily have impacts beyond the target species, including to natural arthropod predators, native pollinators, and other beneficial species.

49. The widespread use of pesticides is contributing to the ongoing decline of insect abundance, diversity, and biomass, which can negatively affect pollination, food systems for birds and fish, and other important functions. Biodiversity is declining globally faster than at any other time in human history, and pollinators and other beneficial invertebrates are disappearing at alarming rates. A 2021 paper in the *Proceedings of the National Academy of Sciences* reported that, where studied, insect abundance is declining on average 1% to 2% per year. There is also evidence that insects are declining in Western rangelands specifically: a recent study published in the journal *Science* found a 1.6% annual reduction in the number of individual butterflies observed over the past four decades. Insects make up over 90% of animal biodiversity and perform vital ecosystem services—they pollinate crops and wildflowers; recycle dung, leaves, and corpses; help regulate soil health; control pests; and much more. Insects also serve as important food sources for birds, fish, frogs, and other species. They are a critical, albeit often

overlooked, part of a functioning planet and society. The loss of insects has severe negative impacts on ecosystems.

50. Pesticides can also cause adverse impacts to humans who come into contact with them, such as people who may be recreating in an area at the time pesticides are applied or shortly thereafter. Pesticides can cause short-term human health effects—such as nausea, respiratory problems, and skin irritation—as well as chronic and severe long-term effects—such as cancer, tumors, reproductive problems, brain and nervous system damage, and cardiovascular disease. For some pesticides, like DDT and neonicotinoids, their true impact has only been revealed after decades of use and harm to non-target species and humans.

51. Integrated pest management (“IPM”) is a more sustainable and less harmful solution to addressing pests. IPM was developed in response to the overuse of toxic pesticides and their associated environmental harms and is an ecologically-based strategy to managing pests designed to minimize reliance on pesticides. IPM relies on prevention, avoidance, monitoring, and suppression techniques in order to decrease pest pressure using a combination of biological, cultural, and chemical controls. It is the standard framework used by many agencies and land managers to control pests.

52. By authorizing the use of pesticides across millions of acres of public rangelands rather than employing a robust IPM approach, APHIS stands to worsen the plight of pollinators, insects, and native ecosystems as a whole.

Overview of the Rangeland Pesticides Program

53. In recent years, APHIS has authorized and funded the application of toxic pesticides to millions of acres of public and private lands across the West, primarily for the benefit of rangeland vegetation used for livestock grazing as well as adjacent agricultural crops. In doing so, APHIS has relied on false assumptions and faulty economic analyses, and has not properly analyzed site-specific environmental impacts, cumulative impacts, and impacts to imperiled species. APHIS has also carried out its program without sufficient transparency,

neglecting to disclose to the public the locations of past pesticide treatments and the probable locations of future treatments—even though it could easily do so.

54. The total amount of acres treated under the rangeland pesticides program varies widely from year to year, but in some years, millions of acres of public and private lands are treated. In 2021, for instance, APHIS authorized and funded the application of pesticides to “protect” 1.3 million acres in Montana alone.

55. Pesticide treatments under the program typically occur during the late spring and summer, as early as May and as late as September.

56. To predict where grasshopper outbreaks may occur in a given year, APHIS conducts surveys. APHIS first creates a “hazard map” near the end of each calendar year based on surveys of adult grasshoppers. The hazard map shows where adult density populations were highest during the preceding year; this is then used to forecast the locations where outbreaks are likely to occur the following year.

57. APHIS begins receiving requests for treatments from land managers early in each calendar year, before spring nymphal surveys have been conducted. The locations for which treatments have been requested are not disclosed to the public by APHIS.

58. Before the treatment season, in either late winter or early spring, APHIS prepares a set of draft environmental assessments for those states where treatments may occur. Draft EAs may cover a single spraying season, like in Montana, or multiple spraying seasons, like in Oregon, Idaho, and Wyoming. For some states, like Oregon, Idaho, and Wyoming, there is one EA that covers the entire state. In other states, like Montana, APHIS prepares several EAs, each of which covers part of the state. These EAs tier to the EIS, incorporating much of its analysis by reference. After the Draft EAs are released for public comment for 30 days, Final EAs and findings of no significant impacts (“FONSI”) are issued before any treatments occur.

59. APHIS then conducts surveys of grasshopper nymphs—young, immature grasshoppers—in the spring. Detection surveys are first conducted to determine which areas are

most likely to be considered for treatment. Delimiting surveys are then conducted to determine precise areas of treatment.

60. Before treating a grasshopper outbreak, APHIS must receive a request from a land owner or manager, such as a federal land management agency or a state agriculture department (on behalf of a state or local government, or private group or individual). After receiving a treatment request, APHIS must then determine whether the outbreak rises to the level of economic infestation, thus permitting treatment under the rangeland pesticides program's authorizing statute. *See* 7 U.S.C. § 7717(c).

61. Most of the time, if not all of the time, APHIS uses contractors to actually conduct pesticide treatments. APHIS first issues a Statement of Work each spring outlining the general contours of treatment operations, such as technical specifications that contractors must meet, buffer zone requirements, and procedures to be followed before, during, and after pesticide application. Then, when APHIS decides that a particular area should be treated, the agency puts out a "request for quote" with details about that treatment. The typical time between the issuance of a request for quote and actual treatment is very short—a matter of a week or so.

62. APHIS does not notify the general public about impending pesticide treatments. APHIS claims to give 48-hour notice to registered beekeepers located in treatment areas, but not every state has a beekeeper registry, and, even in states with such a registry, not all beekeepers are registered.

63. Following treatment, APHIS is supposed to survey treated sites to determine whether treatment was effective. APHIS is also supposed to conduct environmental monitoring in treated areas to ensure that treatments have been carried out in accordance with applicable requirements and that any adverse environmental effects were anticipated and properly considered during the NEPA process.

The 2019 Programmatic Environmental Impact Statement

Prior Environmental Impact Statements

64. In 1987, APHIS prepared a programmatic environmental impact statement for its rangeland pesticides program. In that 1987 EIS, APHIS chose as its preferred alternative an IPM alternative. 52 Fed. Reg. 12,950, 12,950 (Apr. 20, 1987). The IPM alternative in the 1987 EIS included the use of pesticides as one possible component, but it also included the use of biological controls, investigation and development of new non-chemical methods of control, and cultural and mechanical controls. APHIS described “[t]he primary aims of the IPM alternative” as “develop[ing] means by which outbreaks could be predicted and prevented and . . . develop[ing] alternative methods of grasshopper control (for both prevention and suppression) that reduce the use of chemical pesticides.”⁴

65. In 2002, a new EIS “revised” the 1987 EIS. The 2002 EIS narrowed the scope of the program analyzed under NEPA: rather than consider an IPM alternative, APHIS focused on the application of pesticides in response to treatment requests from land managers. According to the 2002 EIS, “implementing [IPM] strategies is not within the purview of APHIS. Rather, these strategies are best implemented and normally studied in the context of rangeland management programs by the respective land managers of Federal, State, private lands.”

66. APHIS’s shift away from an IPM approach in the 2002 EIS was criticized by, among others, the Environmental Protection Agency (“EPA”). EPA urged APHIS to “consider[] other alternatives that incorporate other control methods or the use of” IPM.

67. In 2019, APHIS released a new EIS to re-authorize the rangeland pesticides program and include in the program: (1) the addition of chlorantraniliprole as a possible new chemical insecticide treatment and (2) an “adaptive management” scheme.

⁴ 1987 EIS for the Rangeland Grasshopper Cooperative Management Program at 2-16.

Alternatives Considered in the 2019 EIS

68. Like the 2002 EIS, the 2019 EIS focuses on the use of pesticides in response to treatment requests. As APHIS itself put it in responding to criticisms that the EIS is too narrowly focused, “[t]he scope of the document is on the actions APHIS may consider after making a determination whether treatments are warranted.”

69. The 2019 EIS examines three alternatives:

- a. A “no action” alternative in which the program would continue to be implemented as it has been since 2002.
- b. A “no suppression” alternative in which “APHIS would not fund or participate in any program to suppress grasshopper outbreaks.”
- c. The preferred alternative, which would involve “[i]nsecticide applications at conventional rates or reduced agent area treatments [(“RAATs”)] with [an] adaptive management strategy.” “APHIS would apply one insecticide to a treatment area at the . . . conventional rate used for grasshopper suppression treatments, or apply as RAATs. The RAATs strategy uses a reduced rate of insecticide from conventional levels by alternating treatment swaths in a spray block, reduced application rates, or both. . . . An adaptive approach of either conventional rates or RAATs will allow the Program to make site-specific suppression applications using a range of application rates to ensure adequate suppression.”

70. In preparing the 2019 EIS, APHIS refused to consider a broader range of alternatives—including a more holistic IPM or IPM-like alternative—despite the authorizing statute’s focus on preventive measures, *see* 7 U.S.C. § 7717; despite a separate statutory mandate to “use IPM techniques in carrying out pest management activities,” 7 U.S.C. § 136r–1; despite APHIS’s adoption of such an alternative in the 1987 EIS; and despite requests from Plaintiffs and others to do so. APHIS also did not give full consideration to the use of biological controls

such as mycoinsecticides (fungi that harm grasshoppers) and microsporidia (unicellular parasites that harm grasshoppers).

The Preferred Alternative

71. In a Record of Decision (“ROD”) signed in December 2019, APHIS selected the preferred alternative from the 2019 EIS, approving the conventional or RAATs application of four insecticides for purposes of grasshopper suppression: malathion, carbaryl, diflubenzuron, and chlorantraniliprole. The ROD also authorizes the use of new pesticides if approved by EPA, provided such pesticides “pose[] no greater risk[]” than the pesticides analyzed in the EIS.

72. APHIS determines which pesticide to apply based on the “identification of specific pests and their life stage.”

73. Dimilin is the trade name for diflubenzuron. Dimilin acts as an insect growth inhibitor by arresting chitin synthesis, *i.e.*, the formation of an insect’s shell. As such, Dimilin is effective at the larval stage of an insect’s development. Dimilin can also kill insect eggs.

74. Dimilin applied to foliage tends to remain adsorbed to leaf surfaces for several weeks, with little or no absorption or translocation from plant surfaces. This persistence on leaves may result in exposure and toxic effects to non-target species as late as the fall when plants drop their leaves.

75. Diflubenzuron is associated with some human health impacts: it is a mild eye irritant, and it also damages mammalian hemoglobin, affecting the transport of oxygen. Diflubenzuron causes the formation of methemoglobin, a form of hemoglobin that is not able to transport oxygen.

76. Carbaryl is a carbamate insecticide. It inhibits the action of an enzyme acetyl cholinesterase (“AChE”) that is an essential component of insect, bird, fish, and mammal nervous systems. By inhibiting the function of AChE, carbaryl causes loss of normal muscle control and, ultimately, death. Carbaryl has been associated with a large number of human health problems, including suppression of immune system functions, genetic damage, reproductive

problems, and cancer. EPA recently determined that use of carbaryl in the United States is likely to adversely affect 1,640 different species listed under the ESA—some 91% of all listed species.

77. Malathion is an organophosphate insecticide. It is in a class of pesticides that is chemically related to nerve gases used in World War II. Like carbaryl, malathion attacks the nervous system by inhibiting AChE. Malathion can also inhibit liver enzymes that effect biological membrane function. Malathion has also been associated with numerous human health problems, including cancer, genetic defects, birth defects, reproductive problems, immune system suppression, and vision impairment. EPA recently determined that use of malathion in the United States is likely to adversely affect 1,778 different species listed under the ESA—some 97% of all listed species.

78. Chlorantraniliprole is part of a newer class of insecticides. It is a paralytic insecticide that can shut down muscle control of insects and is most effective when ingested via treated plant material. It is labeled for commercial use to control grasshoppers, various moths, beetles, and caterpillars. It has a long half-life of more than 500 days, is highly soluble, and is readily transported in water. Because it is a newer insecticide, there are few field studies of its effects that are applicable to rangeland ecosystems, and limited studies have been conducted assessing its effects to mammals and humans.

The EIS's Discussion of Past Treatments and Monitoring Results

79. The 2019 EIS lacks any detailed information about past pesticide treatments under the rangeland pesticides program. Although it contains information about the total number of acres treated in past years across the 17 states covered by the EIS, there is no information about where those treatments occurred or whether the treatments involved aerial or ground applications of pesticides.

80. The EIS also contains little or no information about the findings of past environmental monitoring efforts at treatment sites. APHIS is supposed to conduct environmental monitoring at treatment sites to ensure that treatments have been carried out in accordance with applicable requirements and that any adverse environmental effects were

anticipated and properly considered in the NEPA process. In fact, each year, APHIS prepares an Environmental Monitoring Plan that sets forth guidelines for conducting such monitoring. Despite this, there is little or no discussion in the EIS of whether monitoring has occurred and, if it has, the results of that monitoring.

Discussion of Mitigation Measures

81. The EIS's discussion and analysis of mitigation measures fails to consider scientific evidence that contradicts the claimed efficacy of the proposed measures and ignores factors relevant for assessing the adverse impacts of pesticides to aquatic resources, non-target species, members of the public, and rangeland ecosystems as a whole.

82. The EIS largely relies on compliance with pesticide labels, RAATs, and application buffers to mitigate the impacts of pesticide applications on non-target species and the environment. But the EIS does not grapple in any meaningful way with how effective these measures will be. And under the preferred alternative, APHIS has complete discretion to determine whether to use RAATs or the conventional method. APHIS does not even address mitigation for when conventional methods are used.

83. As to compliance with pesticide labels, the EIS repeatedly asserts that pesticide applicators will comply with label requirements. But there is little discussion of what those requirements are, how effective they are likely to be in preventing environmental harm, or what harm is likely to occur even if labels are followed. Moreover, it is unclear from the EIS what steps APHIS will take to ensure that contractors comply with label requirements.

84. As for buffers, the EIS discusses APHIS's use of various buffer zones—swaths of land that are left untreated—to protect different resources. For water bodies that are not designated critical habitat under the ESA, the EIS states that APHIS maintains 500-foot buffers for aerial sprays, 200-foot buffers for ground sprays, and 50-foot buffers for bait applications. For aerial pesticide applications in federally listed salmonid habitat, APHIS applies a 3,500-foot buffer for carbaryl and malathion and a 1,500-foot buffer for diflubenzuron. For other federally listed threatened or endangered species, “APHIS [has] proposed a chemical-specific application

buffer[] from listed species and their critical habitats.” The EIS does not specify what those buffers are.

85. In general, the EIS fails to provide scientific support for the buffers and their effectiveness at protecting aquatic species, or to acknowledge existing science on pesticide drift that undermines the assumed efficacy of the buffers.

86. For instance, APHIS has received complaints from private residential homeowners who observed impacts of aerial pesticide spraying associated with APHIS’s rangeland pesticides program within their property lines despite adherence to a 1,000-foot buffer from the edge of their property. Samples taken inside the private property after such complaints detected pesticides within the property lines. This suggests that APHIS’s assumptions about drift that underlie its application buffers and other mitigation measures are incorrect, and that those buffers are inadequate to prevent pesticides from reaching non-target areas and organisms.

87. Furthermore, an accurate analysis of drift potential requires consideration of droplet size, wind speed, and release height. Neither the diflubenzuron and carbaryl labels nor the EIS require a minimum droplet size or maximal release height for aerial applications.

88. As for the RAATs method, the EIS overstates the efficacy of that method as a means of reducing adverse impacts of spraying on non-target species and the environment. When the reduced treatment area method of RAATs is used, the amount of land that must go untreated is highly variable and unlikely to be sufficiently protective. For instance, the EIS states that “[f]or aerial applications, the skipped swath width is typically no more than 20 feet for malathion, 100 feet for carbaryl, and 200 feet for diflubenzuron.” As discussed above, drift from aerial spraying—which has been documented to go *beyond even 1,000-foot* buffers—may lead to substantial quantities of insecticides making it to “untreated” swaths, thus rendering the skipped swath method of RAATs ineffective at substantially lowering the risk to non-target species.

89. Other aspects of APHIS’s mitigation analysis in the EIS are also problematic. For instance, the EIS discusses “notifying beekeepers within 1 mile of treatment areas at least 48 hours before product is applied” to give beekeepers a chance to take measures to prevent harm to

their hives. In response to comments, though, APHIS admitted that it will not be able to locate all hives in the treatment area in many, if not most, instances, and that some beekeepers may not be able to take effective preventive measures in time even with 48 hours of notice. And though the EIS states that APHIS will abide by pesticide label requirements that mandate buffers around honey bee hives, such buffers cannot possibly be effective in those instances where APHIS does not even know where the hives are. Further, this mitigation measure is only relevant to honey bees; there is no similar mitigation for native bees, and it is unclear how APHIS could effectively buffer for native bees.

Discussion of Impacts to Non-Target Species, Humans, and the Environment

90. The EIS's impacts analysis understates the risks the pesticides used in the program pose to non-target species. The four broad-spectrum pesticides used in the program—carbaryl, diflubenzuron, malathion, and chlorantraniliprole—all negatively affect bees, butterflies, moths, ants, and other invertebrates to some degree. The risk analysis mischaracterizes or minimizes studies that demonstrate risk to non-target species, while overemphasizing studies that found little risk. The EIS also fails to consider impacts from a holistic, ecosystem-wide perspective.

91. The most obvious impact of the rangeland pesticides program is the killing of grasshoppers—billions of grasshoppers in some years. Grasshoppers play an important role in nutrient cycling and serve as an important food source for wildlife, including reptiles, small mammals, fish, and birds, particularly the imperiled greater sage-grouse. While grasshopper population numbers can rise to a level where they cause short-term damage to cropland and privately owned livestock that graze on rangelands, grasshoppers are a natural part of range ecosystems, and boom years for grasshopper populations can have long-term benefits for these ecosystems. As one Idaho Bureau of Land Management (“BLM”) biologist put it, large outbreaks “play an important ecological role.” The EIS does not take into account the long-term impact of repeatedly killing large numbers of grasshoppers across Western rangelands.

92. Applying pesticides to millions of acres of rangelands also harms species other than grasshoppers. The chemicals used in the program can kill various butterflies, moths, beetles, and termites, and they are toxic to bumble bees. And the Idaho branch of FWS has expressed concerns about the adverse effects application of pesticides to control grasshoppers will have on non-target aquatic species, specifically mentioning that “extensive areas of wetlands . . . might be difficult to exclude from an aerial spraying program” and that “the effects of malathion and carbaryl on many aquatic organisms is known to be harmful.”

93. Further, studies show that applications of diflubenzuron, even at reduced rates, can cause severe impacts to bee reproduction. The EIS and the accompanying risk assessment for diflubenzuron underestimate the risk to native bees by, among other things, relying heavily on honey bee studies. Native bees and honey bees have distinct life histories that make the impacts to native bees even more troubling. For instance, native bees have inherently low fecundity and thus would recover more slowly from pesticide-induced declines; unlike honey bees, native bee queens forage; native bee larvae eat raw pollen; and native bees have smaller nests and social organization. This oversight is concerning given that the states subject to grasshopper suppression efforts are home to many native bee species that are already in decline.

94. Diflubenzuron is also highly toxic to various moth and butterfly species when applied at rates similar to what is expected to be used by APHIS. Diflubenzuron applied to plants remains adsorbed to leaf surfaces for several weeks and many insect larvae, including caterpillars, eat leaf tissue. Thus, diflubenzuron applied to kill grasshoppers could affect other species, like monarch butterflies, for weeks after an application. This is especially troubling given the presence of monarch breeding areas in rangelands where grasshopper treatments are administered.

95. The pesticides applied to control grasshoppers also impact insects that act as natural predators and parasitoids of grasshoppers. In other words, these pesticides reduce the very organisms that help regulate grasshopper populations naturally. This effect was not

analyzed sufficiently in the EIS and important field studies addressing this issue were mischaracterized.

96. The rangeland pesticides program also poses a special threat to the food supply of certain birds (many of which naturally regulate grasshopper populations)—perhaps most significantly, the greater sage-grouse. The health of this bird is an indicator of the health of every other species in the same ecosystem, including pygmy rabbits, falcons, mule deer, pronghorn elk, and redband trout, and over 180 migratory and resident bird species. Once numbering in the millions, sage-grouse populations have declined by over 90% and the sage-grouse is now an imperiled species. Remaining sage-grouse populations live in the very rangeland areas most likely to be subject to APHIS’s pesticide treatments.

97. Sage-grouse chicks rely on grasshoppers, beetles, and other invertebrates as a source of food. By killing off this food supply, grasshopper pesticide treatments can force sage-grouse chicks to seek alternative food sources at a precarious time in their young lives. At least one study has found the reduction of insects as a result of rangeland grasshopper control can reduce brood sizes in sage-grouse populations. This study is not mentioned in the EIS. Instead, the EIS suggests, without any citation to scientific authority, that grasshoppers could actually *compete* with sage-grouse for resources during outbreaks, justifying treatments.

98. The disruptions associated with pesticide treatments can also negatively affect sage-grouse, which are notoriously skittish and prone to abandoning disturbed areas. According to BLM, “[t]reatment application methods (air and ground) as well as application timing could potentially disturb Sage-Grouse, particularly during early brood rearing.” Sage-grouse are highly sensitive to habitat conditions and require large, intact habitat to complete their annual life history. Disturbances, like human-administered pesticide treatments, can result in behavioral avoidance, causing sage-grouse to avoid otherwise suitable habitat, or behavioral changes in the birds. This in turn can result in loss of habitat quantity and quality, habitat fragmentation, reduced habitat connectivity, and altered seasonal movements and habitat use. The EIS does not discuss any of these probable effects of APHIS’s rangeland pesticides program.

99. The EIS also entirely fails to analyze the impacts pesticide spraying would have on sensitive areas such as wilderness areas, wilderness study areas, areas of critical environmental concern, and wildlife refuges. For instance, pesticide treatments have occurred and/or will likely occur within or around various sensitive areas in Oregon, including the Steens Mountain Cooperative Management and Protection Area, the Pueblo Mountains Wilderness Study Area, and the Malheur National Wildlife Refuge. Pesticide treatments have occurred and will likely reoccur within and near sensitive areas in other states, too—in Idaho, the Morley Nelson Snake River Birds of Prey National Conservation Area; in Montana, the War Horse National Wildlife Refuge; and in Wyoming, the Gardner Mountain Wilderness Study Area.

Discussion of Cumulative Impacts

100. The EIS's cumulative effects discussion focuses largely on the possible cumulative effects of multiple treatments undertaken pursuant to the rangeland pesticides program, with little analysis of how the program interacts with other pesticide applications conducted by APHIS, other federal agencies, states, and private actors. For example, many of the rangeland ecosystems likely to be treated under the program are adjacent to croplands that are heavily treated with pesticides. Although the EIS acknowledges that “[o]ther entities, such as private landowners, may make [pesticide] applications,” it does not analyze the potential impacts of such applications when considered in combination with the rangeland pesticides program, for the irrelevant reason that “those treatments would not be funded by APHIS.”

101. Indeed, the EIS contains *no* quantitative information about pesticide applications conducted by others, despite the fact that many such operations occur near areas treated under the rangeland pesticides program and involve pesticides that affect the same species. For example, the Idaho State Department of Agriculture distributes tens of thousands of pounds of carbaryl bait to farmers each year to combat grasshopper outbreaks on croplands, but the EIS does not include this information or analyze its significance.

102. Furthermore, cattle and other livestock that graze on rangelands are often treated prophylactically with powerful pesticides to prevent lice, mites, ticks, and other parasites. As

cattle graze, these pesticides are washed off their bodies or excreted through waste, contaminating surrounding land and water. The EIS does not mention this at all, let alone attempt to quantify the amount of pesticide released by such activities or analyze how these activities might combine with APHIS's rangeland pesticides program.

103. The cumulative impacts analysis does contain one paragraph that mentions all of the other APHIS programs that involve application of pesticides, but the discussion is lacking any quantitative information or meaningful analysis. Rather, the EIS dismisses these other application programs because of the supposed difficulty in “[e]stimating the potential for overlap” between the rangeland pesticides program and other APHIS programs despite the fact that APHIS is responsible for administering all these programs. APHIS punts any further analysis of such cumulative impacts of its programs to later EAs.

104. Even in its discussion of the impacts flowing from multiple treatments under the rangeland pesticides program, the EIS does not contain a full and accurate analysis of cumulative effects. For one thing, the EIS does not discuss or even acknowledge how the combination of multiple treatments throughout the West might affect species whose range extends across the region and multiple potential treatment areas, such as the greater sage-grouse, yellow-billed cuckoo, monarch butterfly, Ute ladies'-tresses, and various species of bumble bee.

105. In addition, the EIS's statement that the “same area” is unlikely to be treated under the rangeland pesticides program twice in the same year or multiple years in a row is misleading and understates the possible cumulative effects flowing from multiple grasshopper treatments. Treatment records⁵ show that there are certain areas that have been treated repeatedly in recent years, though the precise treatment locations have varied from year to year. These areas include the area east of Steens Mountain in Oregon; the Owyhee Front in Idaho; the western part of Petroleum County, including part of the War Horse National Wildlife Refuge, in Montana;

⁵ Critically, Plaintiffs were only able to obtain this information—and then only partially—via Freedom of Information Act requests. APHIS does not include this information in the EIS, *see supra* ¶ 79, or in the “site-specific” EAs, *see infra*.

and part of the western edge of the Powder River Basin in Wyoming, south of the Bighorn National Forest. All of these areas contain popular recreation sites as well as habitat for federally listed species, other imperiled species, and/or important pollinators.

106. The EIS's cumulative effects discussion invokes some of the mitigation measures mentioned throughout the EIS, including adherence to label requirements and RAATs. But, as explained above, the EIS's analyses of the effectiveness of these mitigation measures is either nonexistent or ignores important facts (*e.g.*, substantial drift of pesticides into "untreated" swaths).

107. Overall, the EIS's discussion of cumulative impacts relies on generalizations and neglects to do the work of actually determining the possible additive or synergistic effects of the rangeland pesticides program combined with other pesticide applications throughout the West.

Discussion of Threshold for Providing Treatment

108. The statute authorizing APHIS's rangeland pesticides program allows the agency to treat only those outbreaks that rise to the level of "economic infestation[s]." 7 U.S.C. § 7717(c)(1). And, even if a particular infestation is "economic," APHIS need not immediately treat the infestation if it "determines that delaying treatment will not cause greater economic damage to adjacent owners of rangeland." *Id.*

109. The EIS describes "economic infestation" as follows:

The "level of economic infestation" is a measurement of the economic losses caused by a particular population level of grasshoppers to the infested rangeland. This value is determined on a case-by-case basis with knowledge of many factors including, but not limited to, the following: economic use of available forage or crops; grasshopper species, age, and density present; rangeland productivity and composition; accessibility and cost of alternative forage; and weather patterns. In decision-making, the level of economic infestation is balanced against the cost of treating to determine an "economic threshold" below which there would not be an overall economic benefit for the treatment. Short-term economic benefits accrue during the years of treatments, but additional long-term benefit may accrue and be considered in deciding the total value gained by a treatment.

110. Aside from this description, the EIS does not detail how the threshold for treatment is determined. There is no explanation of how APHIS applies or weighs the listed

factors, nor are there any examples of how APHIS has applied these factors in the past to determine whether to treat an infestation.

111. The discussion in the EIS suggests that, in evaluating whether an outbreak constitutes an economic infestation, APHIS does not adequately weigh the short-term benefits of grasshopper control against the long-term costs of applying insecticides to native rangeland ecosystems.

112. For instance, the EIS discusses the soil damage that may result from a grasshopper outbreak and notes that such damage can result in other disruptions to ecological processes that are important to rangeland ecosystems. However, this assertion is based off a single study examining a grasshopper outbreak in a non-rangeland ecosystem in Hawaii. And according to one BLM biologist, “[c]rickets clearly can have big impacts on private lands . . . but . . . there is little evidence that they negatively impact vegetation *over the long-term*. They are episodic, locally impactful, a natural important component of the landscape, and also a high protein food source for sage-grouse and several other animals.” The EIS cites no studies examining the length of time that grasshopper damage lasts, suggesting that APHIS is concerned chiefly with short-term damage.

113. The EIS does not grapple with the fact that regularly using pesticides to treat grasshopper outbreaks may very well cause future outbreaks to be more severe and/or frequent. Prior to the use of pesticides to suppress grasshoppers, grasshopper outbreaks were regulated by natural processes, including by natural predators, diseases, and competition. Because pesticide use could also harm populations of natural predators and otherwise disrupt these natural ecosystem cycles, APHIS’s grasshopper program may have a counterproductive impact in the long term. This must be factored in to any assessment of whether an infestation is “economic,” and yet the EIS does not explain how APHIS will address this issue when deciding whether to treat an outbreak.

114. The EIS also does not explain how APHIS will determine whether “delaying treatment will not cause greater economic damage to adjacent owners of rangeland.” This is a

vital part of the rangeland pesticides program’s authorizing statute: it dictates whether APHIS must treat an infestation immediately or can instead wait to treat.

The Record of Decision for the 2019 EIS

115. The record of decision (“ROD”) for the 2019 EIS memorializes APHIS’s decision to adopt the preferred alternative from the EIS to re-authorize the rangelands pesticides program. The ROD states that, in addition to the activities analyzed in the EIS (*i.e.*, pesticide treatments), APHIS “conducts survey activities and provides technical assistance” and has prepared a handbook to help land managers use IPM. The ROD states that APHIS “promotes the use of IPM.” But the ROD does not explain why APHIS cannot play a larger role in implementing prevention measures and other IPM components, particularly in light of Congress’s command to APHIS to “*prevent[], suppress[], and control . . . actual or potential grasshopper and Mormon cricket outbreaks*” threatening federal rangelands, 7 U.S.C. § 7717(b)(1), and Congress’s command that all “[f]ederal agencies shall use [IPM] techniques in carrying out pest management activities,” 7 U.S.C. § 136r–1.

116. The ROD admits that, as of late 2019, APHIS and FWS had not completed programmatic consultation over the rangeland pesticides program, even though APHIS had submitted a biological assessment to FWS in 2015.

The Environmental Assessments for Oregon, Idaho, Montana, and Wyoming

APHIS’s “Site-Specific” Environmental Assessments Generally

117. The 2019 EIS analyzes the environmental effects of the rangeland pesticides program at the programmatic level, leaving the analysis of site-specific effects for later. The state-level EAs purport to be those “site-specific” analyses. Draft EAs are prepared in late winter or early spring for any states where treatments may occur and may cover a single spraying season, like in Montana, or multiple spraying seasons, like in Oregon, Idaho, and Wyoming. Draft EAs are released for 30 days for public comment. Then, a Final EA is completed and a FONSI is issued that authorizes the pesticide program for that state for the covered years. These EAs are completed before APHIS decides what treatments will occur will each year.

118. For individual treatment operations conducted during a given year, APHIS assesses whether those operations are adequately analyzed by the state-level EAs and supposedly issues “supplemental determinations” or similar findings of consistency before treatment. Although APHIS’s 2008 Grasshopper Guidebook states that the public will have an opportunity to comment when APHIS issues “supplemental determinations” for individual treatment actions, there are no additional opportunities for public comment after the 30-day comment period on the Draft EAs.

Oregon’s 2022 Environmental Assessment

Site-Specificity of the EA

119. Oregon’s 2022 EA analyzes the potential effects of the rangeland pesticides program in May through August of 2022 and 2023 in 17 Oregon counties, including Jefferson County and Wasco County. The FONSI approves the conventional or RAATs application of carbaryl bait or diflubenzuron for the rangeland pesticides program in Oregon and concludes it will not significantly impact the quality of the human environment.

120. Although the 2022 Oregon EA discusses some of the broad features of the major ecoregions represented by the 17 counties (such as watersheds, weather conditions, and topography), it does not discuss any specific places where spraying is likely to occur and thus does not analyze the environmental baseline or impacts of pesticide treatments in those areas.

121. The 2022 Oregon EA states that “it is not possible to predict the precise locations where grasshopper outbreaks will occur in any given year,” and so limits its “site-specific” analysis to broad generalizations at a regional level. But the EA does not adequately explain why it cannot use information about past treatments, treatment requests received before the Draft EA was published, annual hazard maps, and/or other survey data to make educated assumptions about where treatments will occur and then actually analyze the environmental effects to the unique resources and species present in those areas. And while APHIS suggests that such site-specific analyses are impossible because grasshopper outbreaks present “emergencies,” APHIS has not, on information and belief, invoked NEPA’s emergency procedures in recent years.

122. This failure to analyze site-specific impacts undermines the EA’s impacts analysis and conclusions. For instance, the 2022 Oregon EA states that “[t]he general public uses rangelands in the proposed suppression area for a variety of recreational purposes,” but concludes that the risk of harm to humans is low because of, among other things, “low population density in the treatment areas.” But it does not mention any specific recreation sites or make any attempt to analyze the amount of recreation use by residents and visitors combined, even though well-known areas like Steens Mountain (which contains popular recreation opportunities like the Oregon Desert Trail) and Mann Lake have repeatedly been subject to treatments and, based on APHIS’s “hazard map,” are likely to be treated again in 2022–2023. Indeed, the FONSI contains the easily refuted conclusion that the “areas for potential treatment are on rangeland in remote locations, with generally limited (or restricted) access of any kind and away from areas of habitation, congregation, or transportation, as utilized by the general public.” This failure to analyze site-specific impacts leaves in the dark members of the public who reside near or recreate on these public lands.

123. Further, without information about the actual locations of expected treatment areas, it is impossible to determine whether applications might occur in ecologically sensitive areas or in the habitat of federally listed species and other at-risk species, like the Oregon spotted frog, bull trout, yellow-billed cuckoo, sage-grouse, and many species of native bees and butterflies that exist in Oregon.

Discussion of Past Treatments and Species Locations

124. Like the EIS, the 2022 Oregon EA contains no detailed information about past treatments. Although it includes a map displaying economic infestations in Oregon from 1953 through 2020, there is no information about where treatments actually occurred based on those infestations or what the size of those treatments were. It is impossible to determine from the EA what the scope of the rangeland pesticides program has been in recent years in Oregon.

Discussion of Direct, Indirect, and Cumulative Impacts

125. According to the EIS, the EAs are supposed to discuss the environmental impacts of the rangeland pesticides program at a site-specific level. But the 2022 Oregon EA relies primarily on the EIS's impacts analysis and provides minimal additional analysis.

126. For instance, the EIS states that “site-specific EA[s] would better address” the potential overlap of the rangeland pesticides program and other pesticide uses. However, the cumulative impacts analysis in the Oregon EA is even more sparse than the analysis in the EIS and contains the same flaws. Like the EIS, Oregon's 2022 EA contains *no* quantitative information about pesticide applications conducted by others, despite acknowledging the fact that “[t]here may be an increased use of these insecticides in an area under suppression when private, State, or Federal entities make applications to control other pests.” The EA does not even mention the fact that the Oregon Legislature appropriated five million dollars for state grasshopper suppression efforts over the next two years and it does not analyze the potential cumulative impacts of such pesticide use.

127. The EA also does not discuss or even acknowledge how the combination of multiple treatments throughout the West might affect species whose range extends across the region and multiple potential treatment areas, such as the greater sage-grouse and yellow-billed cuckoo. Additionally, the geographic area covered by Oregon's EA could be home to up to 1,000 species of native bees, yet there is little analysis of potential impacts to these important pollinators.

128. Strikingly, Oregon's 2022 EA—as well as the letter of concurrence APHIS received in 2022 from the Oregon FWS office—authorizes the application of diflubenzuron at a rate of 2.0 fluid ounces per acre, which is twice as much as in previous years and twice as much as the application rate analyzed in the 2019 EIS. The EA does not acknowledge this deviation from past practice and prior analyses, much less analyze the potential effects of doubling the application rate of the rangeland pesticides program's most commonly-used insecticide.

Idaho's 2020 Environmental Assessment

129. Idaho’s 2020 EA covers pesticide treatments through 2023 for over two million acres in 34 counties in Idaho “which might host outbreaks that would require suppression.” The FONSI approves the conventional or RAATs application of malathion, carbaryl, carbaryl bait, or diflubenzuron for the rangeland pesticides program in Idaho and concludes it will not significantly impact the quality of the human environment.

130. Unsurprisingly—since all the EAs are drafted off the same template—Idaho’s EA suffers from many of the same flaws as the Oregon EA. The Idaho EA fails to adequately analyze site-specific impacts and cumulative impacts and does not contain adequate information about past grasshopper pesticide treatments or overlap of treatments with locations of endangered and other at-risk species.

131. For example, the Idaho EA’s cumulative impacts analysis states that “most of the land where program treatments occur is uncultivated rangeland and additional treatments by landowners or managers are very uncommon making possible cumulative or synergistic chemical effects extremely unlikely.” Yet, the EA also states that “[t]he proposed grasshopper suppression area is limited to federal rangelands within one (1) mile of private agricultural lands,” where significant pesticide use would undoubtedly occur. Thus, the assumption that cumulative or synergistic chemical effects would be “extremely unlikely” is undermined by the necessarily close proximity of croplands to rangeland areas treated under the program. Given that many nontarget species, like native bees and other pollinators, would be mobile between the rangelands and nearby croplands, those species could face potential cumulative impacts from pesticide use on both public and private lands.

Montana’s 2022 Environmental Assessments

132. In Montana, APHIS completed three EAs, each of which covers pesticide treatments in a section of the state through the 2022 season. The EA for the eastern portion of the state covers nearly 17 million acres of rangeland in 24 counties. The EA for the central portion of the state covers more than 13 million acres of rangeland in 16 counties. The EA for the western portion of the state covers more than 26.5 million acres of rangeland in 17 counties. The FONSI

approve the conventional or RAATs application of malathion, carbaryl, carbaryl bait, or diflubenzuron for the rangeland pesticides program in Montana and conclude it will not significantly impact the quality of the human environment.

133. Montana's EAs suffer from the same flaws as the Oregon and Idaho EAs. Like those EAs, they fail to adequately analyze site-specific impacts and cumulative impacts. They also do not contain adequate information about past grasshopper pesticide treatments or overlap of treatments with locations of federally-listed species and other vulnerable species. Indeed, even though APHIS has elsewhere admitted that it "protected" 1.3 million acres in Montana in 2021, that information is nowhere to be found in the Montana EAs.

Wyoming's 2022 Environmental Assessment

134. Wyoming's 2022 EA covers grasshopper treatments through the 2027 season for the entire state.

135. Wyoming's EA suffers from the same flaws as the Oregon, Idaho, and Montana EAs, because it fails to adequately analyze site-specific impacts and cumulative impacts, and does not contain adequate information about past grasshopper pesticide treatments or overlap of treatments with locations of federally-listed species and other at-risk species.

APHIS's Compliance with the Endangered Species Act

136. Many species listed as threatened or endangered under the ESA have occupied habitat, potential habitat, and/or critical habitat in areas that may be affected by the rangeland pesticides program. Some of these species have habitat and ranges that span across multiple Western states. For example, the Oregon spotted frog, yellow-billed cuckoo, black-footed ferret, bull trout, Ute ladies'-tresses, and Spalding's catchfly are each present in multiple states in which the program operates. APHIS and FWS have acknowledged that many of these and other ESA-listed species may be affected by pesticides sprayed on rangelands due to the toxic chemicals used. There can be direct effects to ESA-listed species from pesticide exposure, which can affect reproductive, neurological, and/or physical well-being, as well as indirect effects, such as loss of prey or loss of plant pollinators.

137. From 1987 through 1995, APHIS consulted with FWS on the listed species that may be impacted by the rangeland pesticides program as a whole, and FWS issued annual biological opinions at the national, programmatic level. The 1995 programmatic BiOp was the last programmatic BiOp or programmatic letter of concurrence issued by FWS for the rangeland pesticides program.

138. In the 2002 EIS, APHIS stated that it was “preparing the [biological assessment] that will be used to conduct a new programmatic consultation with FWS” for the rangeland pesticides program. But APHIS apparently took more than a decade to complete this biological assessment: on March 9, 2015, APHIS finally submitted a programmatic BA to FWS. On information and belief, APHIS has since submitted an updated BA. However, no programmatic BiOp or letter of concurrence was completed prior to issuance of the 2019 ROD, and the 1995 BiOp remains the last programmatic ESA document prepared by FWS.

139. Through the 2019 ROD, APHIS authorized and has since carried out a program that may affect listed species and critical habitat in at least two major ways that were not addressed by the 1995 BiOp. First, diflubenzuron, was added and is now the most-used pesticide in the program. This pesticide works in a different manner than other pesticides and thus may affect listed species in different ways. Second, several species listings and critical habitat designations have occurred since the last programmatic consultation, so there are harms to listed species and designated critical habitats that have never been considered by FWS. These species include the yellow-billed cuckoo, red knot, bull trout, slickspot peppergrass, Spalding’s catchfly, desert yellowhead, Western glacier stonefly, Northern Idaho ground squirrel, Northern long-eared bat, Preble’s meadow jumping mouse, and Oregon spotted frog.

140. Although APHIS has been consulting with FWS regional offices on a state-by-state, annual basis concerning state-specific grasshopper pesticide treatments, these annual consultations cannot substitute for a programmatic consultation that assesses the effects of the program as a whole and over time. Each year, APHIS submits state-level BAs to the various FWS regional offices, and FWS issues letters concurring with APHIS’s “no effect” and “not

likely to adversely affect” determinations as to that treatment year. FWS’s concurrences are contingent on APHIS implementing mitigation measures such as buffers and other treatment restrictions.

141. State or regional level analyses are not comparable in the scope or scale of consultation at the programmatic level. Without a completed programmatic consultation, APHIS has not fully considered the impacts to species that occur in multiple states, such as the cumulative impacts of pesticide use across a species’ habitat and range. In other words, while the use of pesticides may appear to not adversely affect a species when viewed over only one treatment season at a site-specific level, when viewed across a species’ range in multiple states over the course of several years, there may be adverse impacts on the survival and recovery of that species. For example, diflubenzuron is highly toxic to most terrestrial invertebrate larvae including invertebrate pollinators that plants, like the threatened Ute ladies’-tresses and Spalding’s catchfly, require for reproduction. Even if such impacts are not likely to adversely affect the species when viewed in one state and one year in isolation, when considering the use of pesticides across the species’ habitat in multiple states across several years, there may be adverse impacts on the species through the cumulative reduction of potential pollinator populations.

142. Additionally, mitigation measures can vary state by state even for the same species. In Montana and Idaho, a three-mile buffer is required for aerial treatments near Ute ladies’-tresses habitat, yet in Wyoming, no buffer is required for aerial treatments of diflubenzuron near Ute ladies’-tresses habitat or occupied locations. Further, the 2022 Oregon letter of concurrence requires APHIS to avoid grasshopper pesticide treatments in “known *or potentially occupied* threatened and endangered species habitat,” whereas the 2022 Montana letter of concurrence approves APHIS’s plan to avoid only *known occurrences* or critical habitat.

143. Programmatic consultation is required to fully assess the effects of the rangeland pesticides program as a whole to threatened and endangered species and their critical habitats, and is necessary to ensure that protective measures take into account cumulative impacts to

species across time and cumulative impacts to species that have habitat and ranges spanning across multiple states.

144. On May 24, 2022, Plaintiffs sent a 60-day notice-of-intent-to-sue letter to APHIS, FWS, and the Department of the Interior. *See* 16 U.S.C. § 1540(g)(2)(A)(i). The last notice was delivered more than 60 days ago.

FIRST CLAIM FOR RELIEF
THE EIS VIOLATES NEPA

145. Plaintiffs reallege and incorporate by reference the allegations in paragraphs 1 through 144, inclusive.

146. This first claim for relief challenges APHIS's violations of NEPA and its implementing regulations, due to the 2019 EIS's unreasonably narrow purpose and need statement, its consideration of an unlawfully narrow range of alternatives, its failure to take a hard look at the likely environmental effects of the alternative actions, and its vague description of the preferred alternative. This claim for relief is brought against APHIS and Defendant Shea under NEPA and the APA.

147. The EIS's focus on the need for pesticide treatments to control grasshoppers is unreasonably narrow in light of 7 U.S.C. § 7717, which instructs APHIS to take a holistic approach to controlling grasshopper outbreaks. 40 C.F.R. § 1502.13. By focusing only on reactive grasshopper suppression, the EIS's purpose and need statement is unreasonably narrow given the program's underlying statutory authorization.

148. Relatedly, the EIS fails to consider all reasonable alternative actions. The EIS does not consider an IPM alternative or any other alternative with a focus on prevention, nor does the EIS consider alternatives emphasizing the use of biological controls or other non-pesticide methods. Such non-toxic and preventative alternatives are reasonable and should have been fully considered. *Id.* § 1502.14.

149. The EIS fails to take a hard look at the likely environmental effects of re-authorizing the rangeland pesticides program in ways including but not limited to the following:

- a. The EIS does not adequately discuss or analyze baseline conditions because, *inter alia*, it contains no detailed information about past pesticide treatments or the results of environmental monitoring efforts. This failure frustrated the ability of the public to participate in the NEPA process and deprived agency decisionmakers of the information they needed to make an informed decision about how to carry out the grasshopper program. *Id.* § 1500.1(b).
- b. The EIS fails to adequately discuss or analyze mitigation measures. Rather than provide a “detailed discussion” and an “assessment of whether the proposed mitigation measures can be effective,” the EIS simply mentions use of application buffers, adherence to label requirements, and RAATs with little or no discussion and scientific support for how these measures will be effective, and little or no acknowledgment of facts and data that undermine these measures’ assumed efficacy.
- c. The EIS does not analyze or disclose to the public the direct, indirect, and cumulative impacts of the rangeland pesticides program and alternatives in ways including but not limited to the following:
 - i. The EIS understates and fails to adequately analyze the risks the four broad-spectrum pesticides pose to non-target species and the environment as a whole. For instance, the EIS fails to adequately analyze impacts to native bees, fails to adequately consider toxicity of diflubenzuron to butterfly larvae, does not adequately consider the impact to insects that act as natural predators and parasitoids of grasshoppers, and underestimates the impact to birds, such as the imperiled sage-grouse. *Id.* § 1508.8.
 - ii. The EIS does not adequately respond to or discuss responsible opposing views regarding the pesticides’ impacts to non-target species, even though such opposing views are reasonable. *Id.* § 1502.9(b).

- iii. The EIS fails to analyze the impacts of pesticide spraying to sensitive areas such as wilderness areas, wilderness study areas, areas of critical environmental concern, and wildlife refuges even though spraying has occurred and will likely continue to occur in such areas. *Id.* § 1508.8.
- iv. The EIS does not discuss how the combination of multiple program treatments throughout the West might affect species whose range extends across the region. And, while the EIS admits that other agency programs as well as other federal, state, and private programs may apply insecticides and herbicides in or near areas likely to be treated for grasshopper infestations, there is little or no quantified or detailed information offered about those other treatments and how their impacts might combine with impacts from the rangeland pesticides program. *Id.* § 1508.7.

150. Finally, the EIS fails to describe the preferred alternative in sufficient detail due to vagueness and indeterminacy concerning the threshold for treating grasshopper outbreaks. The EIS (and ROD) contain no detailed or useful information about when or how APHIS assesses whether an outbreak has risen to the level of an “economic infestation.” The EIS defines the term “economic infestation” and the factors it may consider, but does not explain how such factors are considered or weighed to make a determination. This prevents the public from understanding how APHIS makes its treatment decisions. Moreover, the EIS does not discuss at all how APHIS will determine whether “delaying treatment will not cause greater economic damage to adjacent owners of rangeland.” As a result, the contours of the preferred alternative are impossible to determine from the EIS and ROD.

151. In sum, the EIS contains an unreasonably narrow purpose and need statement, does not consider a reasonable range of alternatives, fails to take a hard look at the effects of re-authorizing the rangeland pesticides program, and contains an insufficiently definite description of the preferred alternative, all in violation of NEPA. By approving this unlawful EIS and

adopting its preferred alternative, the ROD also violates NEPA. Accordingly, the EIS and ROD are arbitrary, capricious, an abuse of discretion, and not in accordance with the law, and must be set aside pursuant to the APA, 5 U.S.C. § 706(2)(A).

SECOND CLAIM FOR RELIEF
OREGON'S 2022 EA VIOLATES NEPA

152. Plaintiffs reallege and incorporate by reference the allegations in paragraphs 1 through 144, inclusive.

153. This second claim for relief challenges APHIS's 2022 EA for Oregon for violating NEPA and its implementing regulations, due to the EA's failure to take a hard look at the likely environmental effects of the 2022–2023 rangeland pesticides program in Oregon. This claim for relief is brought against APHIS and Defendant Shea under NEPA and the APA.

154. The Oregon 2022 EA fails to take a hard look at the likely environmental effects of the preferred alternative for the rangeland pesticides program in Oregon in ways including but not limited to the following:

- a. Despite being the “site-specific” analysis for the rangeland pesticides program in Oregon, the EA does not adequately analyze the site-specific impacts of the rangeland pesticides program in Oregon. The EA fails to disclose or analyze likely treatment areas, the current baseline conditions in those areas, and the impacts of pesticide treatments on the resources located in those areas, including impacts to popular recreation destinations like the Steens Mountain and Mann Lake areas as well as impacts to native bees and other populations of sensitive species.
- b. The EA fails to disclose past treatment locations as well as the amount of pesticides applied in those areas and fails to disclose or analyze any information about the effects of those past treatments on the environment.
- c. The EA does not analyze or disclose to the public the direct, indirect, and cumulative impacts of the rangeland pesticides program in Oregon. For

example, the EA does not adequately analyze the potential cumulative impacts of the rangeland pesticides program in Oregon combined with pesticide applications conducted by other federal agencies, state actors, Native American tribes, and private actors.

155. In sum, the Oregon 2022 EA fails to take a hard look at the likely effects of the rangeland pesticides program in Oregon, in violation of NEPA. By approving this unlawful EA and adopting its preferred alternative, the FONSI also violates NEPA. Accordingly, the 2022 Oregon EA and FONSI are arbitrary, capricious, an abuse of discretion, and not in accordance with the law, and must be set aside pursuant to the APA, 5 U.S.C. § 706(2)(A).

THIRD CLAIM FOR RELIEF
IDAHO'S 2020 EA VIOLATES NEPA

156. Plaintiffs reallege and incorporate by reference the allegations in paragraphs 1 through 144, inclusive.

157. This third claim for relief challenges APHIS's 2020 EA for Idaho for violating NEPA and its implementing regulations, due to the EA's failure to take a hard look at the likely environmental effects of the 2020–2023 rangeland pesticides program in Idaho. This claim for relief is brought against APHIS and Defendant Shea under NEPA and the APA.

158. The 2020 Idaho EA fails to take a hard look at the likely environmental effects of the preferred alternative for the rangeland pesticides program in Idaho in ways including but not limited to the following:

- a. Despite being the “site-specific” analysis for the rangeland pesticides program in Idaho, the EA does not adequately analyze the site-specific impacts of the rangeland pesticides program in Idaho. The EA fails to disclose or analyze likely treatment areas, the current baseline conditions in those areas, and the impacts of pesticide treatments on the resources located in those areas, including impacts to popular recreation destinations like the Owyhee Front.

- b. The EA fails to disclose past treatment locations as well as the amount of pesticides applied in those areas and fails to disclose or analyze any information about the effects of those past treatments on the environment.
- c. The EA does analyze or disclose to the public the direct, indirect, and cumulative impacts of the rangeland pesticides program in Idaho. The EA's assumption that cumulative or synergistic chemical effects would be "extremely unlikely" is undermined by the close proximity of treatment areas to croplands where pesticide use almost certainly occurs.

159. In sum, the 2020 Idaho EA fails to take a hard look at the likely effects of the rangeland pesticides program in Idaho, in violation of NEPA. By approving this unlawful EA and adopting its preferred alternative, the FONSI also violates NEPA. Accordingly, the 2020 Idaho EA and FONSI are arbitrary, capricious, an abuse of discretion, and not in accordance with the law, and must be set aside pursuant to the APA, 5 U.S.C. § 706(2)(A).

FOURTH CLAIM FOR RELIEF
MONTANA'S 2022 EAs VIOLATE NEPA

160. Plaintiffs reallege and incorporate by reference the allegations in paragraphs 1 through 144, inclusive.

161. This fourth claim for relief challenges two of APHIS's 2022 EAs for Montana⁶ for violating NEPA and its implementing regulations due to their failure to take a hard look at the likely environmental effects of the 2022 rangeland pesticides program in Montana. This claim for relief is brought against APHIS and Defendant Shea under NEPA and the APA.

162. The Montana 2022 EAs fail to take a hard look at the likely environmental effects of the preferred alternative for the rangeland pesticides program in Montana in ways including but not limited to the following:

⁶ Plaintiffs are challenging the EA for the eastern portion of the state, EA Number MT-22-01, and the EA for the central/northern portion of the state, EA Number MT-22-02.

- a. Despite being the “site-specific” analyses for the rangeland pesticides program in portions of Montana, the EAs do not analyze the site-specific impacts of the rangeland pesticides program in those portions of the state. The EAs fail to disclose or analyze likely treatment areas, the current baseline conditions in those areas, and the impacts of pesticide treatments on the resources located in those areas, including impacts to sensitive areas such as the War Horse National Wildlife Refuge.
- b. The EAs fail to disclose past treatment locations as well as the amount of pesticides applied in those areas and fail to disclose or analyze any information about the effects of those past treatments on the environment.
- c. The EAs do not analyze or disclose to the public the direct, indirect, and cumulative impacts of the rangeland pesticides program and alternatives. For example, the EAs do not adequately analyze the potential cumulative impacts of the rangeland pesticides program in Montana combined with pesticide applications conducted by other federal agencies, state actors, Native American tribes, and private actors.

163. In sum, the 2022 Montana EAs are inadequate because they fail to take a hard look at the likely effects of the rangeland pesticides program in Montana, in violation of NEPA. By approving this unlawful EA and adopting its alternatives, the FONSI also violates NEPA. Accordingly, the 2022 Montana EAs and FONSIs are arbitrary, capricious, an abuse of discretion, and not in accordance with the law, and must be set aside pursuant to the APA, 5 U.S.C. § 706(2)(A).

FIFTH CLAIM FOR RELIEF
WYOMING’S 2022 EA VIOLATES NEPA

164. Plaintiffs reallege and incorporate by reference the allegations in paragraphs 1 through 144, inclusive.

165. This fifth claim for relief challenges APHIS's 2022 EA for Wyoming for violating NEPA and its implementing regulations, due to the EA's failure to take a hard look at the likely environmental effects of the 2022–2027 rangeland pesticides program in Wyoming. This claim for relief is brought against APHIS and Defendant Shea under NEPA and the APA.

166. The 2022 Wyoming EA fails to take a hard look at the likely environmental effects of the preferred alternative for the rangeland pesticides program in Wyoming in ways including but not limited to the following:

- a. Despite being the “site-specific” analysis for the rangeland pesticides program in Wyoming, the EA does not analyze the site-specific impacts of the rangeland pesticides program in Wyoming. The EA fails to disclose or analyze likely treatment areas, the current baseline conditions in those areas, and the impacts of pesticide treatments on the resources located in those areas.
- b. The EA fails to disclose past treatment locations as well as the amount of pesticides applied in those areas and fails to disclose or analyze any information about the effects of those past treatments on the environment.
- c. The EA does not analyze or disclose to the public the direct, indirect, and cumulative impacts of the rangeland pesticides program in Wyoming. For example, the EA does not adequately analyze the potential cumulative impacts of the rangeland pesticides program in Wyoming combined with pesticide applications conducted by other federal agencies, state actors, Native American tribes, and private actors.

167. In sum, the 2022 Wyoming EA fails to take a hard look at the likely effects of the rangeland pesticides program in Wyoming, in violation of NEPA. By approving this unlawful EA and adopting its preferred alternative, the FONSI also violates NEPA. Accordingly, the 2022 Wyoming EA and FONSI are arbitrary, capricious, an abuse of discretion, and not in accordance with the law, and must be set aside pursuant to the APA, 5 U.S.C. § 706(2)(A).

SIXTH CLAIM FOR RELIEF
FAILURE TO COMPLETE PROGRAMMATIC ESA CONSULTATION

168. Plaintiffs reallege and incorporate by reference the allegations in paragraphs 1 through 144, inclusive.

169. This sixth claim for relief challenges APHIS's re-authorization of its rangeland pesticides program in the 2019 EIS and ROD, as well as its continued implementation of the program, without first completing programmatic ESA consultation with FWS. Alternatively, this claim challenges APHIS's failure to reinitiate consultation at the programmatic level. This claim is brought pursuant to the ESA citizen provision, 16 U.S.C. § 1540(g)(1)(A).

170. The signing of the 2019 ROD was an agency action that re-authorized APHIS's rangeland pesticides program. APHIS was required to complete ESA consultation over the effects of that program as a whole to ensure the program would not jeopardize the survival and recovery of any ESA-listed species or modify any designated critical habitat. 16 U.S.C. § 1536(a)(2). By failing to complete a new programmatic consultation before signing the ROD, APHIS violated section 7(a)(2) of the ESA.

171. APHIS also failed to reinitiate consultation at the programmatic level to incorporate new species listings and critical habitat designations as well as changes to the program since its 1995 programmatic consultation with FWS, as required by the ESA regulations. 50 C.F.R. § 402.16(a).

172. Each year, APHIS continues to take affirmative agency action by carrying out its rangeland pesticides program across the West. By doing so under the outdated 1995 biological opinion, APHIS risks overlooking effects that its program taken as a whole may have across time and on threatened and endangered species that are present in multiple Western states.

173. APHIS has thus violated and continues to violate the procedural requirements of section 7(a)(2) of the ESA, 16 U.S.C. § 1536(a)(2), and its implementing regulations, 50 C.F.R. §§ 402.14, 402.16(a). This Court can review this claim and remedy these violations by awarding Plaintiffs injunctive relief pursuant to the ESA citizen suit provision. 16 U.S.C. § 1540(g)(1)(A)

(allowing courts “to enjoin any person, including the United States and any other governmental instrumentality or agency . . . , who is alleged to be in violation of” the ESA).

SEVENTH CLAIM FOR RELIEF

THE RANGELAND PESTICIDES PROGRAM SELECTED IN THE ROD AND STATE-LEVEL FONSI VIOLATE THE PLANT PROTECTION ACT and FIFRA

174. Plaintiffs reallege and incorporate by reference the allegations in paragraphs 1 through 144, inclusive.

175. This seventh claim for relief challenges APHIS’s decisions to adopt the preferred alternative in the 2019 ROD, 2022 Oregon FONSI, 2020 Idaho FONSI, 2022 FONSIs for eastern (MT-22-01) and central/northern (MT-22-02) Montana, and 2022 Wyoming FONSI, as well as its actions implementing the preferred alternative while carrying out the rangeland pesticides program. These decisions and actions are all final agency actions challenged under the APA, 5 U.S.C. § 706(2)(A).

176. APHIS’s rangeland pesticides program must comply with the laws authorizing and otherwise governing the program: the Plant Protection Act, 7 U.S.C. § 7717, and FIFRA, 7 U.S.C. § 136r–1. These statutes require federal agencies to implement IPM techniques. APHIS’s decisions to adopt the preferred alternative in the 2019 ROD and state-level FONSIs, and its actions implementing the rangeland pesticides program, are arbitrary, capricious, and/or not in accordance with these laws for at least the following reasons:

- a. APHIS based its decisions and actions, at least in part, on the legally erroneous premise that implementing most IPM measures on federal land is beyond its authority.
- b. APHIS failed to provide a reasoned explanation for how the program selected in the ROD and FONSIs comports with the requirements of 7 U.S.C. § 7717 and 7 U.S.C. § 136r–1, both of which require an emphasis on IPM techniques.

- c. The program selected by APHIS is not in accordance with law because it is inconsistent with 7 U.S.C. § 7717 and 7 U.S.C. § 136r-1, both of which require an emphasis on IPM techniques.

177. Accordingly, the 2019 ROD, 2022 Oregon FONSI, 2020 Idaho FONSI, 2022 FONSIs for eastern (MT-22-01) and central/northern (MT-22-02) Montana, and 2022 Wyoming FONSI must be set aside as arbitrary, capricious, an abuse of discretion, and not in accordance with law pursuant to the APA. 5 U.S.C. § 706(2)(A).

PRAYER FOR RELIEF

Plaintiffs respectfully pray that this Court grant the following relief:

- A. Adjudge and declare that APHIS's EIS for its rangeland pesticides program violates NEPA and the APA;
- B. Adjudge and declare that APHIS's 2022 EA for Oregon, 2020 EA for Idaho, 2022 EAs for eastern (MT-22-01) and central/northern (MT-22-02) Montana, and 2022 EA for Wyoming violate NEPA and the APA;
- C. Adjudge and declare that APHIS's failure to complete programmatic ESA consultation with FWS before re-authorizing the rangeland pesticides program in the 2019 ROD, as well as its continued implementation of the program without reinitiating consultation over the 1995 programmatic BiOp, violates the ESA and its implementing regulations;
- D. Adjudge and declare that APHIS's ROD for its rangeland pesticides program violate FIFRA, the Plant Protection Act, and the APA;
- E. Adjudge and declare that APHIS's 2022 FONSI for Oregon, 2022 FONSI for Idaho, and 2022 FONSIs for eastern (MT-22-01) and central/northern (MT-22-02) Montana, and 2022 FONSI for Wyoming violate the Plant Protection Act, FIFRA, and the APA;
- F. Vacate the EIS and associated ROD and remand to APHIS to address the legal violations alleged herein;

G. Vacate the 2022 EA and FONSI for Oregon, 2020 EA and FONSI for Idaho, 2022 EAs and FONSIs for eastern (MT-22-01) and central/northern (MT-22-02) Montana, and 2022 EA for Wyoming and remand to APHIS to address the legal violations alleged herein;

H. Order APHIS to complete programmatic ESA consultation with FWS over the rangeland pesticides program by a date certain;

I. Order such other declaratory relief; temporary, preliminary, or permanent injunctive relief, and/or vacatur as may be prayed for hereafter by Plaintiffs to remedy Defendants' violations of law;

J. Award Plaintiffs their reasonable costs, litigation expenses, and attorneys' fees associated with this litigation under the Equal Access to Justice Act, 28 U.S.C. § 2412 *et seq.*, the ESA, 16 U.S.C. § 1540(g) and all other applicable authorities; and/or

K. Grant such further and additional relief as the Court deems just and proper in order to remedy the violations of law alleged herein and to protect the interests of Plaintiffs

Dated: September 2, 2022

Respectfully submitted,

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