

May 23, 2024

The Honorable Thomas Vilsak, U.S. Department of Agriculture
The Honorable Debra Haaland, U.S. Department of Interior
The Honorable Stephanie Garcia Richard, New Mexico Commissioner of Public Lands

Dear Secretary Vilsack, Secretary Haaland, and Commissioner Garcia Richard,

The undersigned organizations are writing to express our concerns about multiple procedural and legal failures exposed in the June 2023 federal Animal and Plant Health Inspection Service (APHIS) plan to aeri ally spray insecticides over the Rio Chama watershed in Rio Arriba County, New Mexico.

We also want to acknowledge the rapid and positive actions taken by the New Mexico State Land Office in 2023 when we first made these concerns known. BLM also ultimately acted wisely and we thank both agencies for withdrawing from the spray plan.

We have examined and are [attaching a number of records](#) that were associated with the planned spray. These records reveal a disregard for important federal laws and policies by the officials implementing the grasshopper and Mormon cricket suppression program that may lead toward overuse of harmful insecticides over broad areas of the West.

The residents of New Mexico and other western states deserve better. New Mexico cares deeply about its public lands. The state recently passed landmark legislation that will invest hundreds of millions of dollars into protecting and preserving its lands and waterways ([S.B. 9](#)). The planned spraying by APHIS did not align with this mission and vision.

Within this letter we outline:

- A brief overview of the June 2023 planned spray
- Details of APHIS' failure to follow proper procedural and legal requirements
- Inadequate oversight of the planned spray by land management agencies
- Key reforms needed

We appreciate your attention to this important issue, especially since APHIS may be again preparing for a spray in May or June 2024 within the same area. The public remains very concerned about a potential spray of insecticides over public lands in Northern New Mexico, as illustrated by comments submitted to APHIS this spring on its new 2024 Environmental Assessment (EA) for grasshopper suppression within the same area. More than 1,600

commenters opposed aerial spraying of insecticide, opposed the use of carbaryl, urged greater transparency from APHIS, and identified a number of other concerns in their comments on the Draft EA. Yet, judging from the agency's Response to Comments in the Final EA posted May 16, 2024, many legitimate concerns and suggestions were brushed aside. We feel a sense of urgency to submit this letter given that APHIS has posted a presolicitation for a possible spray on sam.gov. With no assurance that the public will have advance notification of any spray, and no opportunity for an administrative process to resolve disputes to the EA, we ask for your review of what happened last year and your intervention before the same mistakes are repeated.

Overview of the June 2023 Planned Spray

On June 13, 2023, APHIS invited aviation contractors to submit bids to spray a neurotoxic insecticide—carbaryl, a likely human carcinogen—over 39 square miles of northern New Mexico, to kill native grasshoppers (**Attachments 1, 1a, 1b**). The land slated for spray was largely public, managed by the Bureau of Land Management (BLM) and the New Mexico State Land Office (SLO).

The planned spray area covered part of the watershed of the Rio Chama, which is a designated Wild and Scenic River, a beloved destination for boaters and hikers, a source of clean water relied on by acequia parciantes for organic farming, and home to the Monastery of Christ in the Desert, which practices sustainable agriculture and environmental stewardship within the Chama River Canyon. Included within the spray area were substantial portions of a Wilderness Study Area, Navajo Peak, and a designated Area of Critical Environmental Concern (ACEC) on BLM land. Yet until the spray map was discovered on a government contracting website just days before the spray was set to start, no one in New Mexico's recreational or environmental communities had heard about it.

As word spread about the planned spray, a huge public outcry ensued, triggering a flurry of media and an outpouring of calls and letters to federal, state, and local elected officials. Ultimately, BLM and the State Land Office withdrew from the project, canceling the spray plan.

BLM and SLO officials made the right decision to withdraw from the spray. Beyond the area's watershed, farming and recreational values, the proposed project threatened significant harm to biodiversity, especially non-target pollinators. The Southwest is a hotspot for wild bee and butterfly diversity in North America, with more than 2,000 native bee species and over 350 resident butterflies. Public lands like those that were slated to be sprayed are important, multi-use lands that provide crucial habitat for these pollinators and other insects that, together with native grasshoppers, support a rich diversity of birds, wildlife, and plants. The BLM has more explicitly acknowledged the importance of conservation values as part of its multiple use mandate with the recent release of its Public Lands Rule.

Conducting aerial sprays over vast areas is inherently risky. The insecticides used by APHIS (including but not limited to carbaryl) can harm a range of beneficial insects. Insects provide important ecosystem services on rangelands by breaking down livestock manure, recycling nutrients, breaking pest cycles, and improving soil health. As explained by USDA in its [2023 Pollinator Week Press Release](#), “Pollinator species, such as bees, other insects, birds and bats play a critical role in producing more than 100 crops grown in the United States. Honeybee pollination alone adds more than \$18 billion in value to agricultural crops annually.” Additionally, rangeland forbs (flowering plants) provide nutritious forage for cattle and rely on pollinators to reproduce year after year.

Subsequent to the spray cancellation, a local citizen requested state and federal agency records under the New Mexico Inspection of Public Records Act (IPRA) and Freedom of Information Act (FOIA). Records received to date under IPRA have revealed multiple procedural and legal failures, which illustrate just how misconceived this project really was. Although it is nearly a year later, no responses have yet been received from FOIA requests to APHIS and BLM that were submitted in July 2023.

APHIS Failed to Follow Proper Procedural and Legal Requirements

1. APHIS was perilously close to violating the Endangered Species Act. The project required concurrence from the U.S. Fish and Wildlife Service (FWS) to ensure that the spray would not adversely affect endangered and threatened species, but the concurrence from FWS addressed only the use of diflubenzuron, not carbaryl, a far more toxic insecticide. In addition to being highly toxic to insects, carbaryl is toxic to other wildlife including fish, aquatic crustaceans, and mammals. **(Attachment 2)**
2. The planned spray would likely have violated federal pesticide law (FIFRA). The label for the planned insecticide (Sevin XLR Plus) clearly specifies “*Do not apply to target crops or weeds in bloom.*” The project was planned for late June, and primrose, penstemon, prickly pear cactus and mariposa lilies, among other plants, were all in full bloom (many with pollinators actively foraging on them), as shown on the attached photos taken within the treatment area June 22, 2023. **(Attachment 3; Attachments 4a, 4b, 4c, 4d, 4e, and 4f)**
3. In the 2023 Finding of No Significant Impact (FONSI) approving the project, APHIS stated that it would “prepare a supplemental determination to re-examine potential program effects on the quality of the human environment” and would provide the supplemental determination “to all parties who had commented on the 2023 EA [Environmental Assessment] by APHIS” once it had determined that a suppression program would take place. APHIS never posted or sent this promised supplemental document to commenters. **(Attachment 5)**

4. Under federal policy (e.g., Executive Order 13175; Joint Secretarial Order 3403; PIM 2022-011), agencies have a duty to inform and consult with Tribes on planned actions. The APHIS NEPA documents contain no evidence that such consultation occurred. This pattern was repeated in Arizona in the spring of 2024, when APHIS released a grasshopper suppression Draft EA that could have resulted in insecticide sprays over the newly designated Baaj Nwaavjo I'tah Kukveni - Ancestral Footprints of the Grand Canyon National Monument—with no evidence of prior consultation with the thirteen Tribes of the Grand Canyon Coalition. **(Attachment 6, see Appendix D)**
5. The watershed for the treatment area drains into the Rio Chama, a designated Wild and Scenic River and a source of drinking water for municipalities including Albuquerque and Santa Fe. APHIS planned to spray liquid carbaryl, a chemical the EPA describes as a likely human carcinogen with wide ranging adverse effects to species, across 39 square miles of mostly public land. Carbaryl can be relatively short-lived or strongly persistent, with half-lives that range from 4-252 days in aerobic soil, as documented in the APHIS EA. It is generally accepted that it takes about 5 half-lives for a chemical to degrade, thus carbaryl may have lasted in the system for 20-1,260 days.

Operational guidelines described within the APHIS EA did not include spray buffers for seasonally dry watercourses, even though monsoons were imminent (monsoon season in New Mexico traditionally runs from June 15-September 30, though active thunderstorm patterns commonly begin as early as the start of May). Rains following a spray could have resulted in rapid discharge of carbaryl residue into water, especially given the prevalence of exposed and bare soil within the treatment area. **(Attachment 7; also see Attachments 4b, 4c, 4e, and 4f)**

No Clean Water Act (NPDES) permit to address potential water pollution was obtained, although [EPA rules](#) appear to require these. State officials remained unclear about the need for such a permit after receiving a question from APHIS about the permit on May 10, 2023 (after the close of the comment period for the Draft EA). **(Attachment 8)**

6. APHIS was aware that carbaryl has been associated with serious human health effects; an [APHIS 2019 assessment of carbaryl's risks](#) that accompanied its 2019 EIS stated: ““Carbaryl is a hazard to human health mainly due to its neurotoxicity...Carbaryl can cause AChE inhibition (i.e., overstimulation of the nervous system) in humans resulting in nausea, headache, dizziness, anxiety, and mental confusion, as well as convulsions, coma, and respiratory depression at high levels of exposure.” Yet from the available evidence APHIS made no attempts to notify water managers, the general public, or the full set of those who commented on the Draft EA that it was actively planning a spray of liquid carbaryl within the Rio Chama watershed.
7. Under federal law (7 U.S.C. § 7717(c)(1)), APHIS cannot conduct a spray unless and until grasshopper populations have reached “levels of economic infestation.” Adult grasshopper densities can vary substantially from year to year, and grasshopper population surveys that would have been needed to show an “economic infestation” in 2023 had not even started before APHIS announced plans to prepare a Detailed Work

Plan for a spray in an April interagency meeting (**Attachment 9**). Moreover, APHIS does not make a practice of sharing actual survey density records with the public or even, apparently, with the land management agencies that must authorize the spray to occur on the public lands they steward; both agencies showed through the language they used in their letters of support that they learned about high grasshopper densities from the prior year through others. This makes it difficult for land managers to fully understand whether the situation is urgent and whether sprays over vast areas are truly warranted.

During May 2023, while the spray was being planned, only one survey point out of eight showed total grasshopper density greater than eight per square yard, so there was no indication of a problem yet for 2023 (**Attachment 10, 10a**). Three weeks later, another message from APHIS reported densities “all over the place,” suggesting that a pronounced trend toward high grasshopper densities was not yet being seen. Yet planning for a spray continued (**Attachment 11**). Ultimately, even though the spray never took place, summertime adult surveys in 2023 showed grasshopper counts below the commonly used economic threshold of eight adults per square yard throughout the area, suggesting the planned spray may have been unwarranted. (**Attachment 12**)

8. Of the 400+ species of grasshoppers native to Western rangelands, the vast majority do not cause economic damage, instead serving as valuable prey for hundreds of birds, mammals, fish, and other species. In its 2019 programmatic EIS, APHIS identified only 15 species considered to have “economic importance.” To ascertain whether any of these species were present in the proposed treatment area, APHIS collected samples on the 15th, 24th, and 25th of May 2023. The samples were not received by the state taxonomist until June 13, and species identification was not complete until June 19, six days **after** APHIS advertised the spray. Species composition assessment is necessary to determine whether the grasshopper species present are even pests that might warrant control. The last sample from May 25, 2023 showed that *Melanoplus occidentalis* (not considered a damaging species) was the dominant species present. (**Attachments 13, 13a, 13b, and 13c**)
9. APHIS appears to have made no attempt to work with the land management agencies to prevent an outbreak, though this is within their legal mandate. Because concerns for high densities arose in the summer of 2022, there could have been efforts to slow or disrupt grasshopper nymph development rates, such as by retaining more vegetation in grazing allotments. Even a small slowing in development time has been shown to result in large density differentials. (**Attachment 14**)
10. A large portion of the area designated for treatment overlapped with lands holding special designations, including a Wilderness Study Area and an Area of Critical Environmental Concern (Chama Canyons), established to protect exceptional recreation opportunities and trout fishing, among other values. Other public lands with special designations, including a Wilderness Area, a Wild and Scenic River, and an Important Bird Area were nearby and could have been affected by drift and/or runoff. The analysis in the Final EA dismissed concerns about impacts to these sensitive sites, stating that

APHIS “relies on treatment requests from land managers” and “it is taken for granted” that sensitive areas such as Wilderness Study Areas and ACECs would not be proposed for treatment. **(Attachment 15)**

11. The correspondence received through records requests reflect that the lead APHIS official for the project regularly communicated with local ranchers who had requested the spray, but did not communicate in the same way with other interested parties, such as those who had commented on the Draft EA **(Attachment 11, Attachment 16, Attachment 17)**. APHIS claims that its need to suppress grasshoppers constitutes an emergency, precluding its ability to communicate where and when a spray is planned. The record shows that there were weeks to months of preparation in advance of the spray being advertised, including the communications cited above. In addition, APHIS planned to prepare an initial outline of the area to be treated (“Detailed Work Plan”) shortly after an interagency meeting in April 2023, two months before the spray was advertised to aerial contractors. Even then, there was no public posting of the spray on the APHIS or BLM website. **(Attachment 9)**

Unfortunately, we do not believe these failings were out of the ordinary, or an unusual aggregation of agency missteps. From our review of other APHIS suppression projects elsewhere, what happened in New Mexico in 2023 fits a familiar pattern: APHIS using its authorization to treat grasshopper outbreaks as emergencies as a rationale for avoiding public transparency (even when planning is underway for months); a disregard for important federal laws like the Endangered Species Act, the National Environmental Policy Act, the National Historic Preservation Act, and the Clean Water Act; and an indifferent approach to specially designated public lands and lands with cultural significance to affiliated Tribes and Pueblos.

Land Managers (BLM and SLO) Should Have Exercised Better Oversight on the Plan

While APHIS is primarily the responsible party, we are concerned that federal and state land management agencies have shown a tendency to rubber stamp APHIS proposals. Both BLM and SLO have independent responsibility to ensure that all actions on the lands they administer comply with all applicable federal and/or state law, regulation, and policy. We are very appreciative that both BLM and SLO recognized the need to withdraw from the spray last year. Yet we noticed places in the process where both agencies might have exercised better oversight, as illustrated in the examples below.

12. APHIS had met with local ranchers who held public lands grazing leases in November 2022, pointing to high grasshopper counts noted in Rio Arriba County during the summer of 2022. By April 2023, APHIS had already received requests from five ranchers for treatments on their leased federal and/or state land **(Attachment 9)**. Grasshopper population surveys that would have been needed to show an “economic infestation” in 2023 had not even started before BLM signed its letter of support in March 2023. In their letters of support, it appears that BLM and SLO accepted the assessment that a

spray might be necessary based on hearsay from their permittees rather than by independently reviewing actual survey records. Both agencies also based their approvals on 2022 counts, not on 2023 data (**Attachment 18, Attachment 19, 19a**). Moreover, both agencies appeared to accept the idea that grasshopper densities alone should warrant a treatment—rather than encouraging APHIS to conduct a more thorough analysis of treatment necessity, including rangeland productivity and composition; accessibility and cost of alternative forage; and weather patterns, as outlined in the 2019 [APHIS Programmatic FEIS](#), page 6.

13. While it appears that APHIS initially planned to spray diflubenzuron, at some point plans changed, and APHIS decided to spray carbaryl rather than diflubenzuron. We have no records to show that the agencies seriously questioned the switch of chemicals before the spray was advertised. As described above (**2**), the use of carbaryl over blooming plants is not permitted under the carbaryl label, a violation of the federal pesticide law FIFRA. An SLO staffer did notice and raise this concern on June 26 once the controversy had begun, but downplayed her own concern: “It does seem imperative to not spray when anything is blooming due to the “bee caution” warning, but I would guess we don’t have control over that. My two cents.” (**Attachment 20**). In addition, carbaryl can have serious human health effects, as documented in APHIS documents cited above. Again, there is nothing to show that this concern was raised by the land management agencies with APHIS prior to the spray being advertised.
14. In violation of its own policy, the BLM appears to have never completed or signed a Pesticide Use Proposal (PUP), in advance of authorizing the treatment. The PUP that did exist in the files was written by APHIS, not BLM. (**Attachments 21, 21a**)
15. APHIS included a Wilderness Study Area on BLM lands within the planned treatment area. This is inconsistent with BLM Manual 6330, which references the Congressional mandate to manage Wilderness Study Areas “so as not to impair the suitability of such areas for preservation as wilderness” and does not include blanket exceptions for pesticide sprays. The APHIS EA did not even analyze the effects on the Wilderness Study Area as required by BLM Manual 6330.
16. BLM’s recognition that the project suffered from severe flaws came late in the process. In its press release announcing its withdrawal from the spray plan on June 29, 2023, BLM acknowledged that “Additional environmental analysis and outreach for this project is necessary, and we are dedicated to doing so in an open and transparent manner....extra steps are necessary before making a final decision.” However, this conclusion came only after public outcry. (**Attachment 22**)

Key Reforms Are Needed

To improve management of the program, and regain the trust of the taxpayers who fund the program, we urge the U.S. Department of Agriculture, the U.S. Department of Interior, and the New Mexico State Land Office to promptly implement key reforms.

- First and foremost, we urge APHIS, BLM, and other land managers to work together to adopt more holistic and sustainable approaches, shifting the focus away from suppression efforts and toward proactive management aimed at preventing grasshopper outbreaks and maintaining rangeland health. In the face of numerous declining invertebrate species across Western lands (the monarch butterfly and Western bumblebee are just two examples of many), continuing the broad-scale aerial use of insecticides as the main tool for dealing with grasshoppers no longer makes sense. Instead, APHIS and public land managers should work together to maintain healthy landscapes less favorable for grasshopper outbreaks.
- APHIS should improve its methods of determining if and when grasshoppers have reached levels of economic infestation. APHIS decides to treat by comparing counts of newly hatched **juvenile** grasshoppers with treatment thresholds designed decades ago for **adult** grasshopper counts. Most grasshoppers do not survive to adulthood, so higher juvenile numbers don't necessarily signal a problem. Moreover, the 2019 Final Programmatic EIS envisioned a much more robust and thoughtful decision-making process that identifies several considerations beyond density that must play into any decision to treat: including rangeland productivity and composition, accessibility and cost of alternative forage, and weather patterns. There is no evidence in any of the records we have reviewed that anything other than grasshopper density was considered in the Rio Chama case. Poor decision-making can result in unwarranted treatment of enormous areas and an array of unintended consequences, including impacts to biodiversity, water quality, and human health.
- We urge the agencies to adopt a "hands-off" strategy for ACECs, Wilderness and Wilderness Study Areas, areas of cultural significance to Indigenous communities, and other sensitive sites. Such areas should be treated with the utmost care and respect. The biodiversity these protected areas contain should not be subjected to insecticide sprays, given the harm sprays can cause. The public reasonably expects that land managers will consider and prioritize biodiversity and human health in all management decisions. In all APHIS projects, the areas planned for spray should remain as small as possible.
- APHIS has resisted sharing important details of its surveys and sprays with the public. In the 2024 federal appropriations bill passed by Congress and signed by the President (Consolidated Appropriations Act, 2024. Pub. L. No. 118-42, 138 Stat. 25), Congress expressed concern about the lack of APHIS transparency and directed APHIS to share more information with the public about where sprays are occurring. We strongly urge APHIS and land management agencies to overhaul their approach to public involvement when insecticide applications are being considered on public lands. Specifically, the

agencies should proactively involve a diversity of stakeholders in any spray plan efforts and commit to far greater transparency for this program, including posting survey data, notifying stakeholders who care about public lands issues about any spray requests made for public lands, and posting planned and completed spray maps.

- We ask that land management agencies such as the BLM and SLO improve their procedures for independently vetting pesticide application plans led by other agencies. On federal lands, BLM has an independent obligation to ensure that federal actions are conducted in accordance with all federal laws and policy, and any spray plans must be carefully evaluated and weighed under the agency’s multiple use and sustained yield mission to meet this important responsibility.

The land management agencies should follow clear procedures including ensuring the planned spray has received all necessary compliance, interested parties have been notified in a timely manner, and the spray is in conformance with the pesticide label. In addition, the land management agencies should review the complete set of survey data collected by APHIS and confirm that considerations such as species and age classes, rangeland productivity and composition, accessibility and cost of alternative forage, and weather patterns have all been part of the decision making process. Any authorizing documents (such as the Pesticide Use Proposal) should be authored by a land management agency official, not an external agency or party.

Thank you for your attention to this important issue. We look forward to receiving a response from you and would welcome an opportunity to meet and discuss our concerns.

Sincerely,

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