

FINDING OF NO SIGNIFICANT IMPACT

Rangeland Grasshopper and Mormon Cricket Suppression Program Environmental Assessment in Esmeralda, Lincoln, Nye, and White Pine Counties NV-21-02

The U.S. Department of Agriculture, Animal and Plant Health Inspection Service (APHIS), has prepared an environmental assessment (EA) that analyzes alternatives for suppressing grasshopper and Mormon cricket outbreaks on rangeland in Esmeralda, Lincoln, Nye, and White Pine counties. The EA, incorporated by reference in this document, is available from USDA, APHIS, PPQ, 8775 Technology Way, Reno, NV 89521 and online at: <https://www.aphis.usda.gov/aphis/ourfocus/planthealth/plant-pest-and-disease-programs/ea/grasshopper-cricket-ea/grasshopper-cricket-by-state>.

The EA includes an analysis of the potential impacts of two alternatives: (1) No Action, (2) Insecticide Applications at Conventional Rates or Reduced Agent Area Treatments (RAATs) with Adaptive Management Strategy. The alternative methods analyzed included chemical control by malathion, carbaryl and diflubenzuron sprays, carbaryl ground and aerial bait and no action. The environmental impacts of each method and potential mitigation measures are described in the attached Environmental Assessment (EA). The operational procedures and mitigation measures identified in the attached EA would ensure that no significant adverse environmental impacts other than those identified in the APHIS EIS 2019 would occur to the human environment. The alternative selected is Insecticide Applications at Conventional Rates or Reduced Agent Area Treatments (RAATs) with Adaptive Management Strategy.

The finding of no significant impacts was determined on the following:

1. **Human health:** Potential exposures to the general public from traditional application rates are infrequent and of low magnitude. Program insecticides pose minimal risk to human health including the public and applicators based on available toxicity data, and label restrictions and Program measures that are designed to reduce exposure.
2. **Non-targets:** APHIS Directive 5640.1 commits APHIS to a policy of monitoring the effects of Federal programs on the environment. Environmental monitoring includes such activities as checking to make sure the insecticides are applied in accordance with the labels, and that sensitive sites and organisms are protected. The environmental monitoring recommended for grasshopper suppression programs involves monitoring sensitive sites such as bodies of water used for human consumption or recreation or which have wildlife value, habitats of endangered and threatened species, habitats of other sensitive wildlife species, edible crops, and any sites for which the public has expressed concern or where humans might congregate (e.g., schools, parks, hospitals). APHIS evaluated the risk of Program treatments to nontarget fish and wildlife. Risks are generally low for most taxa depending on the chemical and application method. APHIS reduces risk to non-target fish and wildlife through adherence to label restrictions and Program measures designed to reduce exposure to fish and wildlife. Other common mitigation measures include reduced application rates compared to label rates, the use of alternating swaths and single applications per season that collectively reduce exposure to fish and wildlife water. Impacts on non-target terrestrial arthropods would be

minimized by the insecticide choices and by the reduction in area coverage.

3. **Endangered and threatened species:** In accordance with section 7 of the Endangered Species Act (ESA) consultation is conducted with United States Fish and Wildlife Services (USFWS) for any action authorized, funded, or affected by a Federal agency that may affect listed endangered or threatened species or their critical habitats. The APHIS PPQ Nevada State Office provided a Biological Assessment (BA) to USFWS to determine the potential impact from the proposed treatment. Concurrence was granted by USFWS to APHIS on March 26, 2021 by local USFWS staff in Reno, Nevada for the 2021, 2022, and 2023 treatment seasons. The USFWS letter of concurrence can be found in appendix D of the EA. After treatment blocks are established, site specific consultation with USFWS will take place before treatments are made to identify any sensitive species at a local scale. Protection measures that resulted from the national and local consultation processes with U.S. Fish and Wildlife Service will be implemented and therefore, the proposed suppression program is not likely to adversely affect endangered or threatened species or their habitats.
4. **Socioeconomic issues:** Ranchers (livestock owners) are the major social group that is economically impacted by rangeland grasshopper infestations. Extensive grasshopper infestations deplete the natural plant resources. Losses occurred from reduced available range forages for livestock and wildlife can be considerable, and thus cause starvation, sickness, and mortality among these animals. Socioeconomic issues are expected to be less significant under the preferred alternative, as anticipated under the No Action Alternative.
5. **Cultural resources and events:** No local or Tribal cultural resources or events are likely to be affected negatively by the proposed treatment. Suppression efforts generally take place outside of culturally significant areas that have been impacted by past and current land use activities. All treatments are done under request of the land manager. In areas of cultural significance, the requesting land manager would indicate sensitive or culturally significant areas. APHIS would adhere to all buffers and/or mitigation measures put in place by the land manager, thereby negating adverse effects to cultural resources and events.
6. **Executive Orders 12898 (low income and minorities), 13045 (children), and 13186 (migratory birds):** Low-income farmers and ranchers would comprise, by far, the largest group affected by APHIS program efforts in this area of concern. APHIS intervention to locally suppress damaging grasshopper infestations would stand to greatly benefit, rather than harm, low-income farmers and ranchers by helping them to control grasshopper threats to their livelihood. Suppressing grasshopper infestations on adjacent public or private rangelands would increase inexpensive available forage for their livestock and would significantly decrease economic losses to their crop lands by invading grasshoppers. APHIS strictly adheres to chemical label instructions and APHIS Treatment Guidelines and Operational Procedures that will mitigate potential effects on low income and minority populations in and around proposed treatment areas.

Impacts on children would be minimized by the implementation of the Treatment Guidelines: Aerial Broadcast Applications of Liquid Insecticides

- Notify all residents in treatment areas, or their designated representatives, prior to proposed operations. Advise them of the control method to be used, the proposed method of application, and precautions to be taken (e.g., advise parents to keep children and pets indoors during ULV treatment). Refer to label recommendations related to restricted entry period.
- No treatments would occur over congested urban areas. For all flights over congested areas, the contractor must submit a plan to the appropriate FAA District Office and this office must approve of the plan; a letter of authorization signed by the city or town authorities must accompany each plan. Whenever possible, plan aerial ferrying and turnaround routes to avoid flights over congested areas, bodies of water, and other sensitive areas that are not to be treated.

Aerial Application of Dry Insecticidal Bait

- Do not apply within 500 feet of any school or recreational facility.

Ultra-Low-Volume Aerial Application of Liquid Insecticides

- Do not spray while school buses are operating in the treatment area.
- Do not apply within 500 feet of any school or recreational facility.

Based on the analysis in the protection measures, we have determined that there would likely be no significant impact to children within any potential treatment zone of the area of concern.

Through APHIS' strict adherence to chemical label instructions and APHIS Treatment Guidelines and Operational Procedures along with additional mitigations measure set in place by the land manager and/or USFWS, Migratory Bird species protected under the Migratory Bird Treaty Act and Executive order 13186 are not likely to be adversely affected by treatments in the project area.

Based on the analysis of potential environmental impacts contained in the EA, the implementation of the treatment guidelines (containing the operational procedures), the protection measures for endangered and threatened species, and the joint MOU between USDA Plant Protection and Quarantine (PPQ), Bureau of Land Management (BLM), United States Fish and Wildlife Service (USFWS), Nevada Department of Agriculture (NDA), and Nevada Department of Wildlife (NDOW) with respect to mitigation measures for sage grouse habitat, I have determined that the proposed suppression program will not significantly impact the quality of the human environment.

Alana Wild
State Plant Health Director

Date