FINDING OF NO SIGNIFICANT IMPACT

Rangeland Grasshopper and Mormon Cricket Suppression Program
Environmental Assessment
in Coconino and Mohave County, Portion of the BLM-Arizona Strip District

EA Number: AZ-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 Coconino and Mohave County, portion of the BLM-Arizona Strip District. The EA, incorporated by reference in this document, is available from United States Department of Agriculture, Animal and Plant Health Inspection Service, Plant Protection and Quarantine 3640 East Wier Ave., Phoenix, Arizona 85040 and online at: https://www.aphis.usda.gov/aphis/ourfocus/planthealth/plant-pest-and-disease-programs/ea/grasshopper-cricket-ea/grasshopper-cricket-by-state.

Decision and Rationale

This EA includes an analysis of the potential impacts of three alternatives included in the EA. They included (1) No Action, (2) Insecticide Applications at Conventional Rates and Complete Area Coverage, which may or may not include experimental treatments (3) Reduced Agent Area Treatments (RAATs), the preferred alternative, which may or may not include experimental treatments. APHIS participation in this suppression program is at the official request from Federal, State and private land managers. When grasshopper populations reach a level of economic infestation in a specific area a suppression program will be considered. To reduce further destruction to rangeland vegetation, APHIS is authorized under the Plant Protection Act (PPA) 7 (United States Code ~ 7701 *et seq.*) to protect rangeland from economic damage by grasshopper or Mormon cricket infestations.

Carbaryl bait, or Diflubenzuron would be considered under the preferred alternative at the following application rates:

- 10.0 pounds (0.20 lb. a.i.) of 2% carbaryl bait per acre; or
- 10.0 pounds (0.50 lb. a.i.) of 5% carbaryl bait per acre; or
- 0.75 or 1.0 fluid ounce (0.016 lb. a.i.) of diflubenzuron per acre.

Applications of bait or spray would be made to no more than 50% of the land area within any specific treatment block.

APHIS has determined that the proposed suppression program, conducted in accordance with the APHIS Rangeland Grasshopper/Mormon cricket Suppression Program Aerial Application Statement of Work (treatment guidelines), which contains the operational procedures, will not significantly impact the quality of the human environment.

Finding of No Significant Impact
APHIS has determined that the proposed suppression program, conducted in accordance with the Guidelines for Treatment of Rangeland Grasshoppers and Mormon Crickets, which contains the operational procedures and managerial flexibility, will not significantly impact the quality of the human environment.

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

1. **Human health:** Potential exposures from RAATs application rates are commensurately lower than from conventional application rates. These low exposures to the general public, workers, livestock, and wildlife pose no risk of direct toxicity, carcinogenicity, neurotoxicity, genotoxicity, reproductive toxicity, or developmental toxicity. The areas for planned treatment on rangeland are in remote locations, away from the normal movement of the general public, and in general have limited or restrictive access. All APHIS treatments will strictly adhere to label requirements and further protection measures as outlined in the 2021 Treatment Guidelines and Operational Procedures. No human health effects are likely.

2. **Non-targets:** Chemical label instructions and APHIS Treatment Guidelines and Operational Procedures will be strictly followed. This will mitigate any adverse effects on non-targets. The use of insecticides at reduced rates and over reduced area of coverage would reduce further effect on pollinators than from conventional rates and coverage. Pre-treatment and post-treatment environmental monitoring is part of the APHIS treatment guidelines and is a strictly adhered work activity (APHIS Directive 5640.1). No adverse effects are likely for non-targets. No vertebrate animal species would be exposed to toxic levels of insecticides. Reduction in insects as prey species for insectivores would be reduced by the insecticide choices and by the reduction in area coverage. Plants would not be exposed to toxic levels of insecticides and any reduction of pollinators would be minor and temporary due to the insecticide choices and by the reduction in area coverage. Impacts on aquatic arthropods would be avoided or minimized by utilizing buffers around 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 Fish and Wildlife Services (FWS) for any action authorized, funded, or affected by a Federal agency that may affect listed endangered or threatened species or their critical habitats. An APHIS, Arizona State Office Biological Assessment (BA) to determine the potential impact from the proposed treatment was prepared and submitted to FWS. Concurrence was granted to APHIS, January 19, 2021 by FWS Region 2, Ecological Services staff in Phoenix, Arizona. Protection measures that resulted from the national and local consultation processes with US 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. The general public is the main consumer segment that relies on these animal products and can be economically affected by limited and inconstant supply. The county and state property value base for tax purposes and supporting revenue for community services also becomes less. Losses caused by Grasshoppers and Mormon crickets would not be as significant under the preferred alternative, as under the No Action Alternative.

5. **Cultural resources and events:** No county or Tribal cultural resources or events will be affected negatively by the proposed treatment. In fact, a suppression treatment should help reduce the insect annoyance and property damage concerns at some of these events and be considered an actual benefit.

6. **Executive Orders; 12898** (low income and minorities), 13045 (children), and 13186 (migratory birds): The proposed action should provide some assurance of stable work and income by mitigating potential disruptions in local employment. "No Affect" with children for health and safety. "No Affect" on migratory birds.

The time between receipt of a request for treatment and the start of a suppression program is very short. To inform the public and give them time to submit comments on the proposed program, APHIS made this EA available for a 30-day comment period which ended March 2, 2021.

Determination

Based on the analysis of potential environmental impacts contained in the EA, the 2002 and 2019 EIS, and the implementation of the treatment guidelines and the protection measures for endangered and threatened species, it is my determination that conventional or RAATS application of carbaryl bait, or diflubenzuron does not constitute a major Federal action significantly affecting the quality of the human environment. I find that the mitigation measures for RAATs treatments, specified in the EA, and the 2002 and 2019 EIS, will result in a "not affect" or "not likely to adversely affect" determination to threatened, endangered or proposed species, critical habitat, and/or proposed critical habitat and is consistent with Executive order 13186, "Migratory bird Act" and the "Bald and Golden Eagle Protection Act (BGEPA). I find that the environmental process undertaken for this program is entirely consistent with Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" and Executive Order No. 13045, "Protection of Children From Environmental Health Risks and Safety Risks." I have determined that the proposed suppression program will not significantly impact the quality of the human environment.

MICHAEL WALLACE Digitally signed by MICHAEL WALLACE
Date: 2021.04.29 06:41:48 -07'00'

Michael D. Wallace
Arizona – State Plant Health Director
Animal and Plant Health Inspection Service
Plant Protection and Quarantine

4/29/2021

Date