FINDING OF NO SIGNIFICANT IMPACT

Rangeland Grasshopper and Mormon Cricket Suppression Program
Environmental Assessment for New Mexico
EA Number: NM-20-01

Introduction

The U.S. Department of Agriculture (USDA), 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 New Mexico. The 2020 draft EA was posted for public comment on March 18th, 2020 and available until April, 23rd, 2020. APHIS received comments from two entities on this document. The 2020 Environmental Assessment, incorporated by reference in this document, is available for review at USDA-APHIS-PPQ at 125 Valencia Drive NE Suite B, Albuquerque, NM 87108 or USDA-APHIS-PPQ at 270 South 17th Street, Las Cruces, New Mexico 88005.

Decision and Rationale

The EA includes an analysis of the potential impacts of three alternatives. They included No Action (1), Insecticide Applications at Conventional Rates and Complete Area Coverage or Reduced Agent Area Treatments (RAATs) (2), and Experimental Treatments (3). The Reduced Agent Area Treatment alternative is considered to be the preferred alternative. APHIS participation in this suppression program is at the official request for technical assistance from Federal, State and private land managers, when grasshopper populations have a reached level of economic infestation in a specific area. In an effort to reduce the further destruction to rangeland vegetation, APHIS is authorized under the Plant Protection Act (PPA) 7 (United States Code ~ 7701 *et seq.*), and state law to protect rangeland from economic damage by grasshopper or Mormon cricket infestations.

Alternatives Considered

No Action alternative results in continued economic damage and losses, and extended recovery time. Conventional Rates and Complete Area Coverage alternative results in additional chemical needed, time and work load increases, and higher application costs. Reduced Agent Area Treatments alternative would result in reduced chemical needed, decreases in time and workload and lower application costs. This is the preferred alternative. Experimental Treatment alternatives may be done as research projects and are included on page 9 and in Appendix F of the EA.

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 for 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 and workers pose a negligible risk. The rural areas for planned treatment on rangeland are away from the normal movement of the general public, and in general have limited or restrictive access. Experimental treatments are limited in scope and therefore pose a low risk to human health, non-target fish and wildlife.

2. Non-targets: Risk is low for most non-target fish and wildlife. The use of RAATs reduces the risk for terrestrial vertebrates and invertebrates. Proposed buffers will ensure aquatic habitats and riparian areas are protected. While some sensitive terrestrial invertebrates may be impacted, our pre-treatment, treatment and post-treatment environmental monitoring is part of the APHIS treatment guidelines (APHIS Directive 5640.1) and is a work activity strictly adhered to. These monitoring and program measures are designed to select and use pesticides that will reduce risk to non-targets.

3. APHIS has determined that the proposed action will have no effect on the black-footed ferret, (*Mustela nigripes)*, Canada lynx (*Lynx canadensis*), jaguar (*Panthera onca*), Mexican long-nosed bat (*Leptonycteris nivalis*), Mexican gray wolf (*Canis lupus baileyi*), least tern --- interior populations (*Sterna antillarum*), Mexican spotted owl (*Strix occidentais lucida*), Northern Aplomado falcon (*Falco femoralis septentrionalis*), Piping plover (*Charadrius melodus)*, southwestern willow fly-catcher (*Empidonax traillii extimus*), Yellow-billed cuckoo (*Coccyzus americanus*), Narrow-headed gartersnake (*Thamnophis rufipunctatus*), New Mexico ridge-nosed rattlesnake (*Crotalus willardi obscurus*), Northern Mexican gartersnake (*Thamnophis eques megalops*), Chiricahua leopard frog (*Rana chiricahuensis*), Jemez Mountains salamander (*Plethodon neomexicanus*), Arkansas River shiner (*Notropis girardi*), beautiful shiner (*Cyprinella formosa*), Chihuahua chub (*Gila nigrescens)*, Colorado pikeminnow (*Ptychocheilus lucius)*, Gila chub (*Gila intermedia*), Gila topminnow (*Poeciliopsis occidentalis*), Gila trout (*Oncorhynchus gilae)*, Loach minnow (*Tiroga cobitis*), Pecos bluntnose shiner (*Notropis simus pecosensis*), Pecos gambusia (*Gambusia nobilis)*, Razorback sucker (*Xyrauchen texanus*), Rio Grande silvery minnow (*Hybognathus amarus*), spikedace (*Meda fulgida*), Zuni bluehead sucker (*Catostomus discobolus yarrowi*), Texas hornshell (*Popenaias popei*), Alamosa springsnail (*Psuedotryonia alamosae*), Chupadera springsnail (*Pyrgulopsis chupaderae*), Koster's springsnail (*Juturnia kosteri*), Pecos assiminea snail (*Assiminea pecos*), Roswell springsnail (*Pyrgulopsis roswellensis*), Socorro springsnail (*Pyrgulopsis neomexicana*), Noel's Amphipod (*Gammerus desperatus*), Socorro isopod (*Thermosphaeroma thermophilus*), Holy Ghost Ipomopsis (*Ipomopsis sancti-spiritus*), Knowlton's cactus (*Pedicactus knowltonii*), Kuenzler hedgehog cactus (*Echinocereus fendleri var, kuenzleri*), Lee pincushion cactus (*Coryphantha sneedii var. leei*), Mancos milk-vetch (*Astragalus humillimus*), Mesa Verde cactus (*Sclerocactus mesae-verdae*), Sacramento Mountain thistle (*Cirsium vinaceum*), Sneed pincushion cactus (*Coryphantha sneedi var. sneedi*), Todsen's pennyroyal (*Hedeoma todsenii*), or the Zuni fleabane (*Erigeron rhizomatus*).

   APHIS has determined the suppression program may affect, is not likely to adversely affect

the New Mexico meadow jumping mouse (*Zapus hudsonius luteus*), lesser prairie-chicken (*Tympanuchus pallidicinctus*), Gypsum wild-buckwheat (*Eriogonum gypsophilum*), Pecos sunflower (*Helianthus paradoxus*), and the Sacramento prickly poppy (Argemone pleiacantha spp. pinnatisecta), APHIS submitted a 2015 Biological Assessment to the U.S. Fish and Wildlife Service (USFWS) New Mexico Ecological Services field office in Albuquerque, New Mexico and received concurrence (Consultation #02ENNM00-2015-I-0244) on the proposal to conduct rangeland grasshopper suppression activities from 2015 through 2020. All required buffers and other protective measures will be verified with the USFWS prior to treatment. Furthermore, appropriate environmental monitoring will occur before, during and after chemical application.

4. Socioeconomic issues: Ranchers (livestock owners) are the major social group impacted by rangeland grasshopper infestations. Losses occur from reduced range forage for livestock. Reduced forage on rangeland results in lower quality forage for livestock, which could impact the health of the animals, and the need to purchase supplemental feed or reduce the number of livestock grazing which results in an economic hardship for the rancher.

5. Cultural resources and events: No cultural resources or events will be affected negatively by any proposed treatments. 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.

The time between the receipt of a request for treatment and the start of a suppression program is very short. In order to inform the public and give them time to submit comments on the proposed program, APHIS is making this EA available at this time. Once a treatment request is received and it has been determined that a suppression program will take place, APHIS will prepare a supplemental determination to re-examine potential program effects on the quality of the human environment. The supplemental determination will be provided to all parties that commented on the 2020 EA by APHIS.

Based on the analysis of potential environmental impacts discussed in the EA, the implementation of the treatment guidelines (containing the operational procedures) and protective measures for endangered and threatened species, I have determined that the proposed suppression program will not significantly impact the quality of the human environment.

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