FINDING OF NO SIGNIFICANT IMPACT

Rangeland Grasshopper and Mormon Cricket Suppression Program
Environmental Assessment for New Mexico
EA Number: NM-16-01

Introduction

The U.S. Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), submitted a 2016 Biological Assessment to Ecological Services of the Fish and Wildlife Services (F&WS) and received their concurrence (Consultation # 02ENNM00-2015-I-0244) on the proposal to conduct potential rangeland grasshopper suppression activities. The New Mexico office of APHIS has prepared an environmental assessment (EA) that analyzes alternatives for suppressing grasshopper and Mormon cricket outbreaks on rangeland in New Mexico. The 2016 Environmental Assessment, incorporated by reference in this document, is available for review at USDA-APHIS-PPQ at 6200 Jefferson Street NE, Suite 117, Albuquerque, NM 87109 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 four alternatives. They included (1) No Action, (2) Insecticide Applications at Conventional Rates and Complete Area Coverage, (3) Reduced Agent Area Treatments (RAATs), and (4) Experimental Treatments. The Reduced Agent Area Treatment alternative (3) 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 (1) results in continued economic damage and losses, and extended recovery time. Conventional Rates and Complete Area Coverage alternative (2) results in additional chemical needed, time and work load increases, and higher application costs. Reduced Agent Area Treatments alternative (3) would result in reduced chemical needed, decreases in time and workload and lower application costs. This is the preferred alternative. Experimental Treatments alternative (4) may be done as a research project and would be added to the site specific appendix.

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. 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. The no action alternative would increase the public safety risk during travel on roads and highways, if large infestations of Mormon crickets or grasshoppers migrated over road surfaces and became a slippery traction condition.

2. Non-targets: Natural pollinators may be found in the proposed area. The use of insecticides at reduced rates and over reduced areas of coverage would reduce further effect on pollinators than from conventional rates and coverage. Birds and reptiles may be affected, but not adversely affected, from this action. 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.

3. Endangered and threatened species: In accordance with section 7 of the Endangered Species Act (ESA), a 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 state office Biological Assessment (BA) to determine the potential impact from the proposed treatment was prepared and submitted to FWS. Concurrence was granted by the regional Ecological Services staff.

4. APHIS has determined that the proposed action will have no effect on the black-footed ferret, (*Mustela nigripes)*, Mexican gray wolf (*Canis lupus baileyi*), jaguar (*Panthera onca*), Mexican long-nosed bat (*Leptonycteris nivalis*), lesser long-nosed (Sanborn's) bat (*Leptonycteris curasocea yerbabuenae*), Canada lynx (*Lynx canadensis*), Mexican spotted owl (*Strix occidentais lucida*), least tern --- interior populations (*Sterna antillarum*), Yellow-billed cuckoo (*Coccyzus americanus*), southwestern willow fly-catcher (*Empidonax traillii extimus*), northern aplomado falcon (*Falco femoralis septentrionalis*), Piping plover (*Charadrius melodus*), Rio Grande silvery minnow (*Hybognathus amarus*), beautiful shiner (*Cyprinella formosa*), Gila trout (*Oncorhynchus gilae),* Gila chub (*Gila intermedia*), Chihuahua chub (*Gila nigrescens),* Loach minnow (*Tiroga cobitis*), Gila topminnow (*Poeciliopsis occidentalis*), spikedace (*Meda fulgida*), Arkansas River shiner (*Notropis girardi*), Pecos bluenose shiner (*Notropis simus pecosensis*), Pecos gambusia (*Gambusia nobilis),* Colorado pikeminnow (*Ptychocheilus lucius),* Zuni bluehead sucker (*Catostomus discobolus yarrowi*), Razorback sucker (*Xyrauchen texanus*), Socorro isopod (*Thermosphaeroma thermophilus*), Noel's Amphipod (*Gammerus desperatus*), Chiricahua leopard frog (*Rana chiricahuensis*), Jemez Mountains salamander (*Plethodon neomexicanus*), New Mexico ridge-nosed rattlesnake (*Crotalus willardi obscurus*), Narrow-headed gartersnake (*Thamnophis rufipunctatus*), Northern Mexican gartersnake (*Thamnophis eques megalops*), Alamosa springsnail (*Psuedotryonia alamosae*), Chupadera springsnail (*Pyrgulopsis chupaderae*), Socorro springsnail (*Pyrgulopsis neomexicana*), Roswell springsnail (*Pyrgulopsis roswellensis*), Koster's springsnail (*Juturnia kosteri*), Pecos

assiminea snail (*Assiminea pecos*), Texas hornsnail (*Popenaias popei*), Holy Ghost Ipomopsis (*Ipomopsis sancti-spiritus*), Todsen's pennyroyal (*Hedeoma todsenii*) , Zuni fleabane (*Erigeron rhizomatus*), Sacramento Mountain thistle (*Cirsium vinaceum*), Mesa Verde cactus (*Sclerocactus mesae-verdae*), Lee pincushion cactus (*Coryphantha sneedii var. leei*), Sneed pincushion cactus (*Coryphantha sneedi var. sneedi*), Knowlton cactus (*Pedicactus knowltonii*), Mancos milk-vetch (*Astragalus humillimus*), or the Kuenzler hedgehog cactus (*Echinocereus fendleri var, kuenzleri*).

APHIS has determined the suppression program may affect, is not likely to adversely affect the lesser prairie-chicken (*Tympanuchus pallidicinctus*), New Mexico meadow jumping mouse (*Zapus hudsonius luteus*), Pecos sunflower (*Helianthus paradoxus*), Gypsum wild-buckwheat (*Eriogonum gypsophilum*), and the Sacramento prickly poppy (Argemone pleiacantha spp. pinnatisecta).

APHIS has determined that the suppression program may affect, is not likely to adversely affect critical habitat. All required buffers and other protective measures will be used and verified before treatment. Furthermore, appropriate environmental monitoring will occur before, during and after chemical application.

5. 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 affected.

6. Cultural resources and events: No county 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.

7. Executive Orders; 12898 (*Low Income and Minorities*), 13045 (*Children*), 13175 (*Consultation and Coordination with Tribal Governments*), 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. And "No Affect" on migratory birds.

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 2016 EA by APHIS.

Based on the analysis of potential environmental impact contained in the EA, the implementation of the treatment guidelines (containing the operational procedures) and the 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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May 19, 2016

Date