

Addendum 1 - 2010 Rangeland Grasshopper and Mormon Cricket Suppression Program, FONSI EA-OR-10-01 and EA-OR-10-02

Response to comments:

This represents APHIS' response to comments received to two Animal Plant Health Inspection Service (APHIS) Site-Specific Environmental Assessments for the Rangeland Grasshopper and Mormon Cricket Suppression Program in Oregon, EA Number: OR-10-01 and OR-10-02. Two letters were received with comments directed at this program.

One letter from the Klamath Tribes, dated March 29, 2010, requested revised wording in the EA pertaining mainly to tribal resources and resource areas. The letter is attached at the end of this Addendum. APHIS agrees with the suggested edits and has made the suggested revisions to both EAs.

Another letter, dated April 1, 2010, was received from the Confederated Tribes of the Umatilla Indian Reservation (CTUIR). CTUIR requested additional information on the residual toxicity of the program chemicals to humans who gather and/or consume treated vegetation. The tribe maintains treaty rights to resource gathering areas that cover a large portion of northeastern Oregon far beyond the reservation boundaries.

APHIS provides the following additional information on the toxicology of the program chemicals:

“Dimilin, which is the formulation that contains the active ingredient diflubenzuron, is the most commonly used insecticide in the APHIS grasshopper and Mormon cricket suppression program. Diflubenzuron is also widely used for insect control on a variety of crop and non-crop uses at rates in some cases greater than ten times the maximum rate proposed by APHIS for grasshopper control. Some of the upper use rates are for crops that are harvested for human consumption. Diflubenzuron is not considered to be systemic and half-lives (ie. the amount of time for half of the material to degrade) on plant surfaces ranges from approximately 8 days in crops to 40 days on trees based on available data. Degradation and dissipation in soil and water is considered short with half-lives typically less than 15 days. Diflubenzuron acts by inhibiting the synthesis of chitin which is critical in the development of invertebrates. Due to the unique mode of action for diflubenzuron, it exhibits low mammalian acute and chronic toxicity. Human health risk assessments for diflubenzuron at rates above those proposed in this program provide a wide margin of safety to humans including the more sensitive subgroups.

The other insecticides proposed for use in the APHIS grasshopper and Mormon cricket suppression program are carbaryl and malathion. Carbaryl which is a carbamate insecticide, may be applied as a liquid or a bait where malathion, an organophosphate insecticide, is applied only as a foliar liquid to rangeland. Carbaryl is the second most commonly used insecticide use in the program.

Carbaryl is currently registered for a large number of crop uses including a variety of fruits, vegetables and other commodities that are harvested for human consumption. Carbaryl tolerances for residues on crops have been established for more than 140 commodities with application rates that can exceed 15 lb ai/acre for some uses which is more than 30 times the maximum rate that would be used in the APHIS grasshopper and Mormon cricket suppression

program. Carbaryl also has multiple non-crop uses including home and garden. Carbaryl is not considered to be a systemic insecticide and half-lives on plant surfaces are typically less than four days based on an upper bound estimate from approximately 30 studies. The half life in soils and water is also considered short with typical values less than 10 days. A large number of acute and chronic toxicity studies have been conducted to characterize the potential effects from carbaryl exposure. Using the more sensitive endpoints obtained from these studies, and integrating the potential for exposure from application rates greater than those proposed in this program, results in a low probability of any significant long-term human health risk from carbaryl use.

Malathion is currently registered on a large number of crops that are harvested for human consumption and also has several non-crop uses. Application rates for crop uses can be as high as 6.75 lb ai/ac which is greater than 10 times the maximum rate that could be used in the grasshopper and Mormon cricket suppression program. Malathion is not a systemic insecticide and the half-life on plants surfaces is 5.5 days based on an upper bound estimate from more than 35 studies. Half-lives in soil and water are also considered short with values typically less than 8 days. Malathion has been registered since the 1950's therefore a large amount of mammalian acute and chronic toxicity data has been collected assessing a wide range of endpoints. Human health risk assessments based on the most sensitive endpoints using application rates and frequencies greater than those proposed in this program have shown that adverse human health impacts are not expected."

CTUIR also requested better identification of treated lands such as signs posted on entries to treated lands, and more advance notice of pending treatment programs.

APHIS makes every attempt to alert the public, including tribes, when a grasshopper suppression program is being considered. An adult survey map showing areas of grasshopper population build-up is provided to the public and interested parties, including Tribes, each fall, http://www.oregon.gov/ODA/PLANT/docs/pdf/ippm_gh_map_report09.pdf. These maps show the most likely areas to have economic grasshopper populations the following summer. Follow-up survey is conducted in early summer after grasshopper hatch, to confirm predictions and locate impending economic populations. APHIS provides this information to land owners/managers and county extension offices as timely as is possible.

APHIS only considers a suppression program when it receives a written request from a land owner or land managing agency. The time between receipt of a request and actual treatment, if treatment is determined to be necessary, is very short, a few days for ground application to up to two weeks for a large aerial contract.

When a request for suppression is received, APHIS' practice is to provide tribal authorities maps of any proposed treatment block(s). APHIS agrees to redouble efforts to immediately alert tribes in the affected area when a suppression request is received so tribal authorities have the maximum opportunity to evaluate the proposal. APHIS agrees to provide tribal authorities with maps of proposed treatment blocks as soon as possible so they can determine if any resource areas are in or near a proposed treatment block. In consultation with tribal authorities, determination will be made whether signs on entries to resource gathering areas will be needed during actual application and/or for the re-entry period specified on the label for the product being used.

Comment letters received:



COPY

The Klamath Tribes Natural Resource Department

March 29, 2010

Mitchell G. Nelson
PPQ State Plant Health Director, Oregon
6135 NE 80th Avenue
Suite A-5
Portland, OR 97218

RE: Klamath Tribes comments on EA Number OR-10-02

Dear Mr. Mitchell:

The Klamath Tribes Natural Resource Department has reviewed the Site-Specific Environmental Assessment Rangeland Grasshopper and Mormon Cricket Suppression Program, Oregon, Klamath County, EA Number: OR-10-02. The attached recommended edits were generated are to ensure that resource concerns affecting the Klamath Tribes are addressed when planning grasshopper treatments in the Tribes' area of concern.

If you have questions, or need to communicate further on this issue, please contact Don Gentry, Klamath Tribes Natural Resource Specialist, Extension 126, Klamath Tribes Natural Resource Department.

Sincerely,

Will Hatcher, Director
Klamath Tribes Natural Resource Department

Enclosures: 1



Klamath Tribes Recommended Edits

Site-Specific Environmental Assessment Rangeland Grasshopper and Mormon Cricket Suppression Program **OREGON**

Klamath County

EA Number: OR-10-02

Page 1, paragraph 3: Insert "affected tribes" as indicated

If outbreaks develop, contacts and coordination will be made with involved landowners, land managers, and federal, state, affected tribes and local government officials. A request for APHIS assistance is voluntary. In response to requests from land owners/managers, APHIS would determine if an outbreak has reached an economically or environmentally critical level. If so, an appropriate treatment strategy would be developed, taking into account additional site specific information.

Page 20: Insert the following paragraph

The general public uses rangelands in the proposed suppression area for a variety of recreational purposes including hiking; camping; wildlife, bird, and insect collecting and watching; hunting; falconry; shooting; plant collecting; rock and fossil collecting; artifact collecting; sightseeing; and dumping. Members of the general public traverse rangelands in or near the proposed suppression area by various means including on foot, horseback, all terrain vehicles, bicycles, motorcycles, four-wheel drive vehicles, snowmobiles, and aircraft.

Comment [dg1]: Artifact collecting on federal lands is illegal. It is advisable to delete this from the document.

The Klamath Tribes exercise court affirmed treaty rights within the 1954 former Klamath Reservation Boundary, which includes the Klamath Marsh National Wildlife Refuge and large portions of the Fremont-Winema Forests. In addition to treaty resources in this area, cultural resources extend beyond the 1954 Reservation Boundary to the aboriginal homelands of the Klamath Tribes.

Artificial surfaces in or near the proposed suppression area include the walls and roofs of buildings, painted finishes on automobiles, trailers, recreational vehicles, and road signs. See 2002 FEIS pp 71-72

Top of page 30: Replace paragraph

Where Native American tribal lands will be involved in a program area, or when tribal resources may be impacted, affected tribes will be consulted. Tribal representatives will be provided the opportunity to identify any cultural sites, native plants use areas, or other resources which might be impacted. Consultation will allow for mitigation of impacts to these sites and resources.

If Native American tribal lands will be involved in a program area, tribes will be consulted. Tribal representatives will have the opportunity to identify any cultural sites, such as native plants use areas, which might be impacted. Consultation will allow for mitigation of impacts to these sites.

Page 35: Replace paragraph

Cultural resources and events

The availability of grasshoppers for fish bait and other human uses would be reduced from outbreak levels to more normal levels. The availability of grasshoppers would be somewhat greater than under Insecticide Applications at Conventional Rates Alternative. Persons using rangelands for recreation would respond to grasshoppers as they do under normal conditions versus under outbreak conditions.

Where Native American tribal lands will be involved in a program area, or when tribal resources may be impacted, affected tribes will be consulted. Tribal representatives will be provided the opportunity to identify any cultural sites, native plants use areas, or other resources which might be impacted. Consultation will allow for mitigation of impacts to these sites and resources.

If Native American tribal lands will be involved in a program area, tribes will be consulted. Tribal representatives will have the opportunity to identify any cultural sites, such as native plants use areas, which might be impacted. Consultation will allow for mitigation of impacts to these sites, which will be roughly equivalent to the impact under the Conventional Rates Alternative.

**Confederated Tribes of the
Umatilla Indian Reservation**

Department of Natural Resources



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April 1, 2010

Mitchell G. Nelson
PPQ State Plant Health Director, Oregon
United States Department of Agriculture
6135 NE 80th Avenue
Suite A-5
Portland, Oregon 97218

Dear Mr. Nelson,

The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) Department of Natural Resources would like to submit comments on the Environmental Assessment for Rangeland Grasshopper and Mormon Cricket Suppression Program for counties in eastern Oregon, EA Number OR-10-01.

The CTUIR Department of Natural Resource's (DNR) mission statement is to protect, restore, and enhance the first foods - water, salmon, deer, cous, and huckleberry - for the perpetual cultural, economic, and sovereign benefit of the CTUIR. We will accomplish this utilizing traditional ecological and cultural knowledge and science to inform: 1) population and habitat management goals and actions; and 2) natural resource policies and regulatory mechanisms.

There are certain times throughout the year that CTUIR tribal members gather plant resources for subsistence and medicinal use and we would like to be able to properly notify CTUIR tribal members when chemicals are being sprayed or applied in resource gathering areas to avoid short and long-term health effects.

The CTUIR DNR have the following questions that were not addressed in the EA:

How toxic or persistent is Dimilin, Carbaryl, Diflubenzuron, Malathion, or other insecticides proposed for use? What are their half-lives or the time which humans should stay away from it? To what degree are these chemicals absorbed into plants that may be consumed by humans? While the 2002 EIS contains information about the known toxicological nature of the chemicals, it does not translate the terminology to the practical effects of exposure. For instance, all three chemicals pose either a slight acute or moderate acute oral toxicity. It would be helpful for APHIS to provide any information they have to the CTUIR about persistence and plant absorption and whether the pesticides are applied to crops grown for human consumption.

Can signs be posted on lands or in the areas entering the lands where chemicals will be or have been applied and the chemical's potential health effect(s) on humans? It would be helpful to have signs on the borders of accessible lands and stay up until the chemical(s) is no longer harmful to humans if there is any threat from direct exposure or consumption of resources treated with pesticides.

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The more lead time we are given on when and where chemical applications are occurring would allow us a better chance to notify tribal members who may gather plant resources in the affected area. The EA provides for notification of individuals with "hypersensitivity" to the insecticides.

The CTUIR have no serious concerns with the EA and generally supports the plan and concept however we also need to ensure our tribal members are not going to be harmed when gathering traditional foods and medicines. Thank you for allowing us the opportunity to comment. We look forward to a response to our questions and concerns.

Please contact me or Audie Huber, Intergovernmental Affairs Manager at (541) 276-3447 if you have questions or comments.

Respectfully,



Teara Farrow Ferman
Acting Director
Department of Natural Resources

Cc: Gary Brown, USDA
Gordy Schumacher, DNR Agriculture, Range & Forestry Manager, CTUIR
Audie Huber, DNR Intergovernmental Affairs Manager, CTUIR