PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT FOR RODENT & MONGOOSE CONTROL FREQUENTLY ASKED QUESTIONS

The U.S. Fish & Wildlife Service and the Hawaii Department of Land and Natural Resources are developing a programmatic environmental impact statement (PEIS) that will describe principles and methods for controlling or eradicating rodents and mongooses in conservation areas to protect native species. This document will compile research, experience with control methods, and input from the public and other interested parties. The PEIS is for informational and planning purposes and does not initiate any specific project. Input from the public is critical to the process: we want to hear what methods we should consider, what concerns people have, and what impacts are important. Once these issues have been identified through the public comment process currently underway, a Draft PEIS document will be released for the public to review and comment on. During March 2016, numerous public open houses were held on all islands to explain the project, the process, and to answer questions.

1) Why is a programmatic environmental impact statement necessary?

(A) Many of our native plants and animals are threatened or endangered as a result of predation by rodents and mongooses. Tools and methods for controlling rodent and mongoose populations in urban and agricultural settings are fairly well-developed. However, planning rodent or mongoose control in remote forests and on steep cliffs has hampered resource managers charged with protecting native species. The PEIS proposes to broaden the toolbox available for rodent and mongoose control or eradication in Hawaii to facilitate management of these pests. It also proposes to make Integrated Pest Management (IPM) a standard for planning rodent and mongoose control and eradication projects. The fundamental principle of IPM is to select those methods that are feasible, effective, and yet most protective of non-target, unintended resources, including the public; it includes careful planning through identification of action thresholds, monitoring, and evaluation of effectiveness and of risks of the control methods.

2) Is it really feasible to eradicate rodents and mongooses from Hawai'i?

(A) No. There are very limited situations where eradication (complete removal) is possible, such as offshore islets or very small islands, and within areas that are fenced to keep these species out, such as Kaena Point. Otherwise, resource managers must consider how to control the damage caused by rodents and mongooses to our native plants, birds, tree snails, and more. They need a comprehensive resource to guide them on how best to manage populations of rodents and mongooses around native species.

3) Will helicopters be used to apply rat poison in conservation and wilderness areas in an effort to eradicate rodents and mongooses?

(A) The PEIS is not a plan to undertake any specific action, and will not advocate for any particular tool. As such, the PEIS will include an analysis of the available research on the full range of different tools, including aerial application of rodenticide, hand application of rodenticide, bait stations, a range of mechanical traps, and other methods. All these control methods, including the use of helicopters to apply rodenticides, have been used locally and across the globe. Aerial application has been used primarily in situations where trapping, bait stations, or even hand application of baits is not feasible. The PEIS does not provide authorization or environmental compliance requirements for site-specific control projects. Any future project that uses the PEIS as a reference would still need to follow environmental compliance and public input standards before implementing the use of aerial rodenticide in a particular area.

4) What other tools besides rodenticides might be considered? What about natural predators like cats? What about bait to sterilize rats and mongoose?

- (A) The PEIS proposes to broaden the toolbox for rodent and mongoose control in Hawaii using Integrated Pest Management to help resource managers make the most informed decisions about which specific tools are most appropriate to use in future control actions. The tools described in the PEIS Preparation Notice and Notice of Intent (NOI), include live traps, single-kill traps, multi-kill traps, and rodenticides (toxic baits for rodents or mongooses). In most systems, rodents are not controlled by predators; instead the availability of food resources is generally what determines rodent population levels. In Hawaii, cats and mongoose are widespread and abundant and fail to control rodents at any meaningful level. Chemosterilants and fertility control agents have been considered as management tools in the development of the PEIS; however, these technologies are not yet sufficiently developed for wide spread use. Furthermore, any future project using a tool not described by the PEIS (e.g. feral cat control, sterilization baits, etc.) would need to develop its own analysis of available research on their proposed tool as part of the environmental compliance process.
- 5) Is compassionate treatment considered in the PEIS?
 - (A) Yes, the humaneness of a tool is a factor when determining which tool(s) to deploy and it is incorporated into Integrated Pest Management decision making. In efforts where animals must be killed it is recognized there is potential for animals to suffer, and every consideration is made to minimize that suffering. It is important to also recognize that

because many native Hawaiian animals are naïve to threats from these introduced predators; they are continually suffering from predation due to rodents and mongooses. Thus, it is the goal of the PEIS to protect native species, while simultaneously ensuring the highest levels of humaneness when controlling rodents and mongooses.

6) What about impacts to marine resources like fish kills or watershed pollution?

(A) The PEIS proposes to provide a broader toolbox for rodent and mongoose control in Hawaiian conservation areas than is currently available. As part of the analysis the PEIS will describe available research on a variety of tools. This will include a description of chemical products used to remove rats from Mokapu and the 2009 attempt to remove rats from Lehua. Neither of these aerial rodenticide applications caused fish kills. Thorough laboratory studies conducted on fish and water samples around Lehua after the rodenticide use showed no presence of the rodenticide in the seawater or in dead fish. However, the lab results did discover the presence of a naturally occurring toxic algae which likely led to a mortality event unrelated to the rodenticide application.

7) Are the effects of any of the tools on public and environmental health addressed in the PEIS?

(A) The PEIS is intended to be a resource to help resource managers evaluate options, identify issues, and then propose the best and safest rodent or mongoose control project. One component of the PEIS resource will be to describe available research on the impact of these tools to public health, water, and the health of wildlife, including methods for mitigating potential impacts and instances where certain tools would not be appropriate. No project will be approved by this PEIS, site-specific projects will have to follow normal environmental compliance and public input standards before using any given control technique in any particular area.

8) *How does the PEIS address any potential impacts to animals other than mongoose and rodents?*

(A) The PEIS proposes to broaden the toolbox for control and eradication of rodents and mongoose, but it will not authorize any specific action. The PEIS will describe available research on a variety of tools for controlling rodents and mongoose. The tools described in the PEIS Prep Notice and NOI include live traps, kill traps, multi-kill traps, and rodenticides. The document will include a thorough analysis and full consideration of any potential impacts to other species that may be harmed either directly or indirectly from using these tools. The public will have multiple opportunities to comment and weigh in on any specific actions prior to them being implemented.

- 9) How do I comment or participate?
 - (A) The agencies involved strongly encourage public participation, and there will be multiple opportunities to provide comments. The public comment period for the draft PEIS is open until April 7, 2016. All comments must be in writing and can be submitted in one of the following ways:

by U.S. Mail:
Public Comments Processing
Attn: FWS-R1-ES-2015-0026
Division of Policy and Directives Management
U.S. Fish and Wildlife Service; MS: BPHC
5275 Leesburg Pike; Falls Church, VA 22041-3803
Electronically:
http://www.regulations.gov. Follow the instructions for submitting comments on
Docket No. FWS-R1-ES-2015-0026. Or, visit
www.removeratsrestorehawaii.org and click on "Get Involved" for a link to
submit comments online.

Once comments are received and a draft PEIS is available for review, the public will have an opportunity to review and comment on the draft.

- 10) Where is this taking place?
 - (A) This PEIS focuses on those areas in Hawaii where native species are being negatively impacted by rats and mongooses. Its purpose is to broaden the methods potentially available to resource managers for the control and eradication of rodents and mongooses, with the goal of protecting and restoring native species and ecosystems. This PEIS will not authorize any specific actions so there is not a specific geographic area addressed in this PEIS.