ERRATA AND RESPONSE TO COMMENTS

ENVIRONMENTAL ASSESSMENT: MANAGEMENT AND REMOVAL OF FERAL ANIMALS IN UPPER ELEVATIONS OF NU'U, MAUI

INTRODUCTION

The *Management and Removal of Feral Animals in Upper Elevations of Nu'u, Maui Environmental Assessment* (EA) was released for public review on June 14, 2016. A formal 30-day comment period was extended by two weeks, and closed on July 29, 2016. The EA was circulated to local, state, and federal agencies, interested organizations, and individuals to allow review and comment on the report. Publication of the EA on the National Park Service Planning, Environment and Public Comment (PEPC) website (http://parkplanning.nps.gov/) marked the beginning of the public comment period during which written comments were accepted.

The edits and text corrections are considered to be minor clarifications of the content of the EA and it has been determined that the revisions do not require additional environmental analysis. Part 2 contains responses to public comments.

The errata, when combined with the EA, constitute the full and complete record of environmental impact analysis completed for the project.

PART I. CHANGES TO TEXT OF THE EA

~~Strikethrough~~ indicates deletion. Underline indicates insertion.

1. **Correction.** Correction to EA, page 11, Section 2.3 Alternative 2: Proposed Action, first paragraph. Delete "... ~~from approximately 2,115 acres (1,885 acres within the HNP) Nu'u parcel and 230 acres within the State Kahikinui Forest Reserve) of fenced habitat~~..." Add "... from approximately 1,885 acres of fenced habitat..." Add "The 230 acres of State land within the fenced area, which is part of a State hunting unit, is delineated topographically from the NPS lands by ridges and gulches. Because the area is under state jurisdiction, animal control by NPS will not occur in that area. Animals that enter NPS lands from the State hunting unit will be controlled. During control activities, NPS will use visual clues (topography and existing cattle fence), as well as GPS, to ensure control efforts occur only on NPS lands."
2. **Correction.** Correction to the EA, page 12, Section 2.3 Alternative 2: Proposed Action, second paragraph, last sentence. Delete "~~Staff will use audio (voice) and visual (human presence) scare tactics to drive animals out of the area prior to completion of the fence.~~" Add "Prior to completion of the fence, a small number of animals may move to areas outside of the exclosure due to the noise and the presence of humans. NPS will not actively herd animals out of the exclosure"

3. **Correction.** Correction to EA, page 16, Section 3.2.2 Project Area. Delete "~~All feral animal control will occur within this exclosure.~~" Add "All feral animal control will occur only within the NPS lands within this exclosure."

4. **Correction.** Correction to EA, page 33, Section 3.6.1 Recreational Resources: Environmental Consequences of Alternative 2: Proposed Action. Delete "~~The portion of State land where feral ungulates will be removed is very inaccessible so hunting rarely occurs there.~~" Add "Animal removal efforts will not occur within the portion of State land that lies within this exclosure."

PART II: NPS RESPONSE TO PUBLIC COMMENTS

Comment Period and Number of Comments Received

The public comment and review period for the EA occurred from June 14 through July 29, 2016. A total of 49 responses were received via email, U.S. Mail and PEPC. As stated in the public announcement, bulk comments in any format (hard copy or electronic) submitted on behalf of others were not considered. Communications not submitted officially via email, U.S. mail or PEPC were also not considered. Three (3) communications were received from County, State and Federal agencies indicating that they had reviewed the EA and had no comment.

Some of the communications expressed more than one issue or idea. Each communication was read and specific comments within each correspondence were identified. Each comment was categorized individually based on the overlying issue or idea.

During review, comments were also classified as substantive, out of scope, or bulk. Under the National Environmental Policy Act the NPS is responsible for responses only to substantive comments. A substantive comment is defined by NPS Director's Order 12 (DO-12, Section 4.6A) as one that does one or more of the following:

- question, with a reasonable basis, the accuracy of information in the environmental analysis;
- question, with a reasonable basis, the adequacy of the environmental analysis;
- present reasonable alternatives other than those presented in the environmental analysis;
- cause changes or revisions in the proposal.

RESPONSE TO COMMENTS

Herding of animals off NPS land

There were five (5) comments expressing concern about herding animals into adjacent properties.

> **Representative comment:** "...Kaupo Ranch opposes this scare method tactic as this will make the problem of accelerated erosion due to goat browsing someone else's problem mainly Kaupo Ranch, Nu'u Mauka Ranch and Diamond B Ranch. Driving ungulates out will impact natural resources, landowners and Stakeholders of said area. Kaupo Ranch over the past 10 years has experiences substantial forage grazing losses due to the continuing increase in out goat and deer populations. We spend thousands of dollars upholding our Wildlife Control Permit in ammo and fuel not to mention the intense labor cost involved. We

understand that goats and deer will flee as the construction of the fence occur but to drive them out by means of scare tactics is just plain disrespectful to your neighbors, and especially those that have been trying their best to get control of ungulate overpopulation."

Response: Intentional herding, or driving, of animals into adjacent properties will not occur. Due to the extreme topography of the project area and the dispersed locations of the animals currently present, NPS managers believe that the number of feral ungulates that will move from NPS lands to adjacent lands as a result of project actions is negligible.

Collection of meat for human consumption

There were five (5) comments suggesting that the animal meat be made available as a food source to local families or food banks either by having NPS donate the meat, or by allowing public hunting and recovery of meat.

Representative comments: "I totally concur that the invasive ungulates in Nu'u need to be removed so that the dryland native ecosystem can be brought back to health. The animals should be killed by hunters or trapped and the meat given to local families. There is real hunger on Maui, in spite of appearances." "The gov't should offer a bounty on each deer, hog, and goat. When not too dangerous to recover, the carcasses should be collected and gutted and the meat offered for free to anyone who wants it for home consumption, barbecues, making jerky, or other purpose." "As a board, what can we do to ensure that the families and descendants of Nu'u and Kaupo be able to practice their cultural rights and assist with gathering the meat to put food on the table?"

Response: The NPS recognizes the potential food source that non-native ungulates can provide and the associated benefits of donating meat from those animals removed from the park. However, given the rough terrain of the project area, retrieval of carcasses during culling operations, in most cases, would be dangerous for the personnel involved. Additionally, the remote location would make it infeasible to retrieve meat and in a timely manner, avoiding spoilage and meeting State and Federal health guidelines. NPS will not be conducting animal removal efforts in the State designated hunting area, and the portion of State land within the exclosure remains accessible and open to hunting. Feral animals on NPS lands are not currently available for hunting and consequently, there will be no net reduction of hunting areas or feral ungulates available for hunting by local communities as a result of the preferred alternative.

Compliance with Hawaii Revised Statutes §263-10 (Hunting from aircraft; penalty)

There was one (1) comment expressing concern that NPS is not adhering to Hawaii Revised Statutes Chapter 263 Section 10, which makes intentionally killing or attempting to kill any birds or animals while hunting from aircraft a misdemeanor.

Representative comment: "Not to mention Hawaii Revised Statutes 263-10, which states shooting at animals from aircraft is illegal. A misdemeanor punishable by a year in jail and a 1,000 dollar fine. That could add up if the courts ever decide to finally honor the law."

Response: HRS §263-10 refers to hunting from aircraft. The preferred alternative does not propose hunting, which is recreational in nature, and therefore HRS §263-10 is not

applicable. Furthermore, the NPS is a federal agency and is not subject to state laws while working on federal lands.

Environmental impacts of animal removal

There were three (3) comments expressing concern that eradication of animals may result in drastic change in the microclimate of the Nu'u area, including making the area more susceptible to fire.

Representative comments: "In my personal experiences of fire in the Kahikinui area and the fires in the Maalaea area of Maui after ungulate removal, I believe that the potential of severe fire hazard in this area cannot be overlooked. The sheer numbers of wild land fires that have occurred in Kahikinui and Maalaea since the removal of ungulate grazing as compared to the lack of fires in these areas (and other leeward areas) with ungulate grazing is dramatic. It is my firm belief that the permanent removal of all ungulates from the Nu'u Management area will dramatically increase the potential fire hazard risk."

"Eradication of the deer, pig and goats will continue to result in a massive flora and fauna imbalance too rapid for us to keep up with. Without the help of the feral ungulates we will lose hold of what little biodiversity we'll have left. We need to implement a smarter more effective system even if it means more effort."

Response: The potential for increased fire risk in the absence of non-native ungulates and recovery of native vegetation is addressed in the EA, Section 3.3.5. Wildland fires in the Nu'u region are unlikely to occur due to natural causes and most fires are caused by humans. As stated in Section 3.3.5 Wildland Fire, "under the Proposed Action, the risk of wildland fire could increase as vegetation recovers, providing fuel for fire during dry months. Wildland fire could result in habitat changes that may be beneficial, adverse, or both depending on its location, intensity, and duration. Wildland fire can kill both native and non-native vegetation. It can clear areas and allow for the regeneration of native and non-native plant species...If a fire were to occur, adverse impacts would likely be short-term due to suppression and the capacity of HNP to provide for restoration efforts if necessary." Based on the analysis in the EA, the NPS found that the adverse impacts of retaining non-native ungulates would be greater than the risk of fire in the absence of non-native ungulates. Additionally, because the NPS recognizes the potential for increased fire risk, the park has fire management measures in place to address them, as described in Section 3.3.5.

As stated in section 3.7, "Cumulative adverse impacts would include an increase in non-native plant species. The Park will be working on a plan to control these non-native plant species."

Humane treatment of animals

There were six (6) comments that included a statement indicating opposition to NPS plans for lethal removal of feral animals due to methods (i.e. aerial control, traps and snares) the commenters consider inhumane.

Representative comments: "We oppose the violence and mean-spiritedness of shooting bullets into animals, and the suffering that results when injured animals escape and die slow, agonizing deaths. Further, it is unacceptably cruel to cause orphaned animals to die from

dehydration and starvation following the deaths of their mothers." "Animals suffer immensely when trapped or snared and have been known to chew off their own limbs in an attempt to escape. Further, animals often suffer for days or weeks before ultimately dying from dehydration, blood loss, infection, shock or attacks by other animals. Any snares that are used must only be padded leg-hold and checked daily. We strongly object to all other snares including neck snares."

Response: As stated in Section 1.2, page 2 of the EA, "The purpose of the Proposed Action (Section 2.3) is to support ecosystem recovery and long-term resource protection..." HNP has a long established feral animal removal and management program. In 2012 the USFWS Service reviewed this program as part of the consultation for the *Biological Opinion for the Operation and Management of Haleakalā National Park*. USFWS deemed that HNP was using "state-of-art techniques for fencing and feral animal control."

As stated in the EA, page 13, "In rare instances, trapping or snaring may be used in remote areas where a handful of individual animals remain and are difficult to capture using other methods." While efforts will be made to avoid the use of traps and snares, these tools will only be used as a last resort if there are remnant animals that cannot feasibly be removed using other methods. Leaving a few animals does not achieve the goal of protecting and restoring native resources, and would result in a larger number of animals killed in the future, after the remaining animals reproduce.

HNP staff continually reviews new methods and technology related to animal eradication. It is a high priority for NPS to continually seek out the most humane ways to safely control feral animals. Every effort will be made to dispatch animals quickly and with minimal suffering.

Establishment of a feral animal sanctuary on government-owned land

There were 22 comments asking that land be set aside, potentially by the State or Federal government, for relocation of feral animals to live out their natural lives.

Representative comments: "Land should be designated by the State or Federal government, to provide a safe sanctuary for the relocation of feral goats, deer, and pigs who are deemed to be 'invasive'. The animals would be treated humanely, neutered, and allowed to live out their lives in a safe environment."

"I oppose the killing of these animals and request that the Haleakala National Park designate a section of land where "invasive" animals could be safely relocated from environmentally sensitive areas."

Response: The NPS has the responsibility for administering the national parks, and receives its overall authority from the Act of Congress, approved August 25, 1916, by which the NPS was established in the Department of Interior. It is the purpose of the NPS to protect and preserve natural and historic resources. NPS considers non-native species to be those "that do not naturally occur in the ecosystem and were introduced by humans, accidentally or incidentally, into the environment from elsewhere." Because non-native ungulates are contributing to the degradation of native ecosystems and cultural resources in the park, they must be removed when prudent and feasible. There are well-established, scientific links

between non-native ungulates and adverse impacts to native ecosystems in Hawai'i and elsewhere.

Establishment of a feral animal sanctuary or zoological park is outside the scope of the project, is not within the legislated purpose for Haleakala National Park and does not satisfy the purpose and need for the project as stated in the EA. In addition, moving feral animals from one location to another within NPS boundaries would negatively impact the cultural and natural resources in the new location.

Fertility control of non-native ungulates

There were two (2) comments that included a statement indicating contraceptives should be the chosen method for population control.

Representative Comment: "Please set aside land for the "rehoming" of these animals where they can be given contraceptives and live out their normal lives and where they can be prevented from degrading the beloved mountain ecosystem."

Response: As stated in Section 2.1 of the EA: "The non-lethal methods of relocating animals to an alternate site and fertility control would require capture, sedation, and transportation. Because of the large number of feral ungulates and the rugged terrain of the project area, capture, relocation, and transportation of every animal would be infeasible. In addition, the terrain and requirement for aerial relocation would result in significant safety risks to staff. "

Even if 100% fertility control were possible, the presence and actions of infertile feral animals would cause habitat damage and degradation. The National Park Service's mission is to conserve natural and cultural resources on the lands it manages. Intentionally maintaining feral ungulates on NPS lands is incompatible with this mission.

Relocation of dogs and cats

There were two (2) comments requesting that dogs and cats found in the Nu'u area be taken to shelters rather than be targeted as part of the feral animal removal efforts. This project does not include management of cats and any actions relating to cats are outside the scope of the EA.

Representative comment: "For the feral cats and dogs, take them to shelters for them instead (naturally spay and neuter them first)."

Response: Capturing feral dogs would be extremely dangerous for NPS staff, not only due to terrain but due to the tendency of feral dogs to form packs and be aggressive. Live trapping and relocation of feral dogs across the Nu'u area would be infeasible and does not meet the purpose and need for proposed action.

Use of lead free ammunition

There was one (1) comment that included a statement indicating only lead free ammunition should be used during lethal control of feral animals.

Representative Comment: "There is no mention in the EA of the Caliber/Gauge or specific ammo loads or if such ammunition will be lead free. Lead poisoning causes great harm to native and migratory raptors and the environment. Only lead free ammunition should be used (as USDA- Wildlife Services regulations also require)."

Response: NPS promotes use of environmentally friendly ammunition when feasible. Consistent with NPS policies, environmentally friendly ammunition will be used for this project.

Use of a "humane observer"

There was one (1) comment requesting NPS retain a "humane observer" during some of the lethal control of feral animal efforts.

Representative Comment: "We request that NPS recruit / retain a Humane Observer for the intense lethal control portion of the implementation plan. These observers should have access to monitor radio communications from ground to helicopter and be able to observe and time some of the lethal controls from ground sharpshooters and aerial gunners."

Response: Safety of all persons present in the area during lethal control efforts of feral animals is a high priority. Control efforts will require the use of firearms from helicopters. During lethal control efforts, feral animals are likely to move unpredictably. During that time only essential NPS personnel will be allowed on the land and only in designated areas at a distance from management actions. As stated in the EA, "Lethal control using firearms will be done in compliance with the American Veterinary Medical Association guidelines for field euthanasia and in accordance with the DOI ACETA (Aerial Capture, Eradication and Tagging of Animals) Handbook (AVMA 2013, US DOI 1997)."

Use of visitor fees

There was one (1) comment that included a statement indicating the commenter disapproved of the use of visitor fees for lethal control of feral animals.

Representative Comment: "We the citizens of the United States of America and visitors from abroad, demand that Haleakala National Park immediately halt the use of visitor fees to fund the killing of animals."

Response: The Federal Lands Recreation Enhancement Act (FLREA, United States Code Title 16, Chapter 87) allows for use of visitor fees for projects that benefit visitors. Fees are being used parkwide for many purposes which benefit the visitor experience. FLREA funds are being used to restore native dryland forest in the Nu'u area, which will result in increased visitor enjoyment of the Park.

Economic impact

Representative Comment: "The non-lethal removal of feral ungulates from the area does have the potential of causing negative economic impacts on neighboring livestock producers. Given that the forage consumption of a goat is equal to 15% to 20% of that of a cow, and the forage consumption of axis deer is estimated at 25% to 30% of a cow, moving a large number of these animals onto neighboring properties would cause the loss of available forage to livestock producers. Given that the current egress and ingress of these animals to and from neighboring properties is unknown at this time, an exact economic projection is impossible. However, it can be reasonably deduced that any feral ungulates that were permanently forced to forage outside of the Nu'u Management area would have an economic impact on neighboring livestock producers. The only mitigating factor to this would be if the neighboring livestock producers were currently engaged in a hunting-for-

profit program. However, given this potential economic impact on neighboring livestock producers, it is my belief that lethal removal is the most logical option."

Response: As stated in Section 1.6.2, page 10, "No long-term impact on the local economy would occur as a result of the Proposed Action. This issue was considered and eliminated from further analysis in the EA." NPS will not conduct active herding of animals onto adjacent properties (see Part I: Changes to the text of the EA). Although a few animals may move outside of the exclosure area prior to completion as a result of human presence, ingress or egress will not be encouraged. Impacts to neighboring grazing areas are expected to be negligible.

Cultural Impact

There were two (2) comments that included a statement regarding the cultural practice of gathering meat for providing food.

Representative Comment: "As a board, what can we do to ensure that the families and descendants of Nu'u and Kaupo be able to practice their cultural rights and assist with gathering the meat to put food on the table?"

Response: NPS will not be conducting animal removal efforts within designated hunting areas. The State designated hunting area will remain accessible and open to hunting by the general public, including Native Hawaiians. Hunting is not currently permitted within Haleakalā National Park. Therefore, the proposed action does not represent a change availability of hunting areas on Maui or any impacts to cultural practices related to hunting.

Use of contractors to conduct work

There was one (1) comment that included a statement indicating the business owner had experience removing feral animals in the Nu'u area would like to be considered for assisting in the effort.

Representative Comment: "We support efforts to remove feral animals from within the ungulate control fence and propose that KIA Hawaii works in partnership with NPS to ensure those animals can be utilized to the extent possible."

Response: Persons conducting the proposed actions, whether NPS employees or contractors, will be chosen in compliance with law and NPS policies, procedures and guidelines.

OUT OF SCOPE

Comments that are outside the range of actions, alternatives, and impacts to be considered in the EA are considered out of scope. The following comments received are outside the project scope.

Fencing

There were three comments referencing the feral animal control fence. As stated on page 1 of the EA, details and construction of the fence has been analyzed with previous compliance through a categorical exclusion (date of approval: 11/23/2015) and related concerns are discussed in a *Biological Opinion and Informal Consultation for the Operation and Management of*

Haleakala National Park issued by USFWS (2012a). Details and construction of fence are outside the scope of this EA.

Using volunteers for weed removal

There was one (1) comment that requested volunteers be considered to assist with weed removal efforts in the project area. This EA is for the management and removal of feral animals. Weed removal using volunteers is outside the scope of this EA.

Relocation of cats

There were two (2) comments requesting that dogs and cats found in the Nu'u area be taken to shelters rather than be targeted as part of the feral animal removal efforts. This project does not include management of cats and any actions relating to cats are outside the scope of the EA.