

Animal Defense League of Arizona ▪ Animal Welfare Institute ▪
The Humane Society of the United States ▪
Mountain Lion Foundation ▪
Sierra Club – Grand Canyon Chapter ▪ Yuma Audubon

October 2, 2009

BY ELECTRONIC AND OVERNIGHT MAIL

Mr. Mitch Ellis, Complex Manager
Southwest Arizona National Wildlife Refuge Complex
U.S. Fish and Wildlife Service
9300 East 28th Street
Yuma, AZ 85365

Dear Mr. Ellis:

On behalf of the Animal Welfare Institute, Animal Defense League of Arizona, Sierra Club – Grand Canyon Chapter,¹ and The Humane Society of the United States, Mountain Lion Foundation, and Yuma Audubon (hereafter referred to by their individual acronyms or as “Conservation NGOs”), I submit the following comments on the Draft Environmental Assessment for Limiting Mountain Lion Predation on Desert Bighorn Sheep on the Kofa National Wildlife Refuge (hereafter the Draft EA). The Conservation NGOs collectively represent nearly fifteen million members nationwide including over 400,000 members who reside in Arizona.

The Conservation NGOs are strongly opposed to the proposed action which, if implemented, would permit the killing of any “offending” mountain lion; defined as any mountain lion that kills two or more bighorn sheep on the Kofa National Wildlife Refuge within a six-month period. Simply put, the proposed action is inconsistent with U.S. Fish and Wildlife Service (USFWS) statutory mandates and policies and is not required to satisfy Kofa Refuge purposes. In addition, the Draft EA is woefully inadequate failing to

¹ The Sierra Club is a non-profit, public interest environmental organization with over 700,000 members, 12,000 of which reside in Arizona, whose mission is to explore, enjoy and protect the wild places of the earth; to practice and promote the responsible use of the earth’s ecosystems and resources; and to educate and enlist humanity to protect and restore the quality of the natural and human environment. Sierra Club has a strong interest in public lands and wildlife in Arizona and has long advocated for protection and management that sustains their ecological integrity. Our members enjoy the KOFA National Wildlife Refuge and utilize them for hiking, backpacking, and wildlife viewing, among other activities. We also have a strong interest in the management of both bighorn sheep and mountain lions and have submitted comments consistently on those issues.

satisfy any of the specific requirements of the National Environmental Policy Act (NEPA).

Furthermore, the concept of distinguishing between “good” versus “bad” wildlife, as is the fundamental basis of this plan, represents an archaic policy that should have been abandoned decades ago. It reflects an era in wildlife management when this country’s predatory species were nearly exterminated out of fear, ignorance, and simple hatred because they threatened human safety, predated livestock, or competed with hunters for elk, deer, bighorn sheep and other “more desirable” species. As scientists began to understand predator-prey dynamics and the importance of healthy predator populations in any ecosystem, these outmoded concepts should have been long abandoned in favor of recognizing and embracing the role of these animals in ecosystem stability and health.

Unfortunately, even today there remains a strong bias against predators among certain segments of society, including with some hunters and hunting organizations and, sadly, within state wildlife agencies, including the Arizona Game and Fish Department (AGFD). It is, frankly, shocking that the U.S. Fish and Wildlife Service (USFWS) and the Kofa National Wildlife Refuge would be promoting a plan that enables this anti-predator mindset to continue since it, perhaps more than any other federal agency, should understand the importance of predators and should be using its influence to educate others, including the cooperators in this plan, as to why lions are not “bad” or “evil” animals and why they should be permitted to fulfill their natural, evolutionary role on the Kofa.

Moreover, the USFWS is not an agency devoted to the protection and management of a single species for the benefit, largely, of a paying membership. The USFWS is responsible for more than 150 million acres of wildlife habitat throughout the country and the cornucopia of wildlife species that inhabit those lands. The USFWS also enjoys no direct economic benefit as does the AGFD by holding on to anti-predator biases to promote artificial increases in more lucrative big game species. The role of the USFWS has been somewhat compromised in this process do to its efforts to accommodate the interests of the AGFD and the Arizona Desert Bighorn Sheep Society, rather than focusing on the greater public’s interest and the overall ecological consideration for the refuge. There is, of course, nothing wrong with agency and organizational cooperation, until and unless that cooperation, potentially influenced by clear conflicts of interests between Kofa and AGFD officials or by indirect “benefits” provided by private parties, contributes to management decisions that violate USFWS rules, policies, or that are squarely in conflict with the scientific evidence and/or common sense.

The bottom line here is that bighorn sheep are native to the Kofa, the current sheep population is one of the largest in Arizona and the United States (if not the world). Lions are native to the Kofa, they exist as resident and likely transient animals on and off the Kofa, and they occasionally kill bighorn sheep, mule deer, and other animals. In regard

to lions and bighorn sheep, we are not dealing with a non-native species, an introduced species, or an invasive species. The species evolved together on the Kofa and elsewhere in the west and that evolutionary relationship must be allowed to continue without hindrance, interruption, or intentional manipulation.

Not only should lions be fully protected on the Kofa but so should bighorn sheep. It is politically and biologically disingenuous for the AGFD to actively promote killing mountain lions, including lions wearing radio-collars ostensibly for research purposes, to protect bighorn sheep while continuing to permit sport-hunters to intentionally kill those same sheep. The fact that the number of bighorn sheep hunting permits for the Kofa has been reduced is irrelevant since allowing any killing while advocating for the effective extirpation of lions on the Kofa to protect and rebuild the bighorn population defies common sense.

The AGFD is clearly focused on increasing the size of this particular bighorn sheep herd so that it can resume sheep translocations to establish new herds and augment existing herds in Arizona and elsewhere, there is no statute, regulation, or policy that requires that this herd be managed to satisfy the translocation desires of the AGFD. The fact that this population served as a source herd for 569 translocated bighorn sheep in the past does not mean that the herd needs to or should continue to serve this purpose. Indeed, as the USFWS and AGFD concede, bighorn translocations from the Kofa in 2005 may have contributed to the low numbers of bighorn sheep seen in the Castle Dome Mountains in 2006 demonstrating that translocations can adversely impact sheep populations. *Investigative Report and Recommendations for the Kofa Bighorn Sheep Herd* (hereafter Investigative Report) at 18. It is likely that past translocations have had a significant cumulative impact on the population as well.

Indeed, there could be any number of explanations for the decline in the number of bighorn sheep on the Kofa; a decline which is not catastrophic and which appears to have stabilized. While predation may be a contributing factor, it is most certainly not the only factor. Drought, climate change and climate extremes, habitat fragmentation, forage abundance and productivity, interspecific competition with mule deer, human recreational use, disease, sport hunting of bighorn sheep, past bighorn sheep translocations, irruptive population dynamics, habitat suitability, lack of water, ecological impacts of artificial water developments, mule deer population dynamics, and invasive species are some of the other factors that may also be at play.

Though some of these factors were referenced in the Draft EA and Investigative Report, few have been subject to meaningful studies, few have been adequately addressed or mitigated, and, in one case, in regard to artificial water catchment construction on the Kofa, these efforts may have worsened rather than helped bighorn sheep. Admittedly, to meaningfully and substantively address all of these factors would take significant time and financial resources, yet deferring such efforts in favor of killing lions to solve a

perceived problem is will ultimately be ineffective since it will not address the myriad factors that are contributing to the current situation. Of course, another option to address current concerns with the bighorn sheep population is to do nothing and to allow natural ecological and evolutionary processes to function on the refuge.

There are, as detailed throughout the remainder of this comment letter, a number of deficiencies in the Draft EA. The failure of the USFWS to disclose relevant information about the factors identified above and to subject that information to meaningful analysis is a significant flaw. In addition, the USFWS and its cooperators have failed to elucidate a legitimate purpose and need for its action, failed to consider a reasonable range of alternatives, failed to adequately evaluate the environmental consequences of its proposed action, and failed to provide a legally sufficient cumulative impact analysis.

Not only is the scope of the Draft EA far too limited but an EA itself does not provide the level of objective and comprehensive review that this proposal requires. As such, an Environmental Impact Statement (EIS) is required. As an alternative to an EIS, the USFWS must, at a minimum, prepare a supplement to the Draft EA to attempt to plug some of the massive holes in its analysis and to update the public and its own decision-makers on new scientific evidence to be released in the very near future that is directly relevant to the management of lions and bighorn sheep on the Kofa. In either case, whether the USFWS elects to prepare an EIS or a supplement to the Draft EA, the public, by law, must be afforded another opportunity to review and comment on the document.

For these and other reasons articulated in this comment letter, the Conservation NGOs support Alternative A, the No-Action Alternative as the best alternative available to protect lions on the Kofa and to preserve the natural evolutionary and predator-prey dynamics between lions and bighorn sheep. Furthermore, we strongly urge the USFWS to prohibit the collaring of lions on the Kofa, by its own employees, contractors, or by AGFD personnel, until and unless there is a policy developed to prohibit any agency from using the signal from the collar to track the lion with the intention of killing the animal for any reason, unless the lion is determined to pose a direct and immediate threat to public safety.

If the USFWS, despite the evidence offered herein and by others who oppose the proposed action, continues to advocate a lethal control option for “offending” lions, it must, at a minimum, engage in a new or supplemental planning process to justify such a decision and to comply with federal law. Should it implement the proposed action without doing so, the Conservation NGOs and their allies will consider all options to halt implementation of the proposed action and to force the USFWS to comply with federal law.

The remainder of this comment letter will address general and specific deficiencies in the Draft EA. This analysis will reveal and discuss both legal and scientific deficiencies in

the Draft EA and the process followed to draft and solicit comments on the Draft EA. While some of the inadequacies will be more significant than others, the USFWS is obligated to consider each and every deficiency identified in this letter.

To ensure that the record for this Draft EA is complete, the Conservation NGOs have included a number of attachments to this letter. These attachments include scoping comments on the Draft EA to open the Kofa to hunting of mountain lions dated December 29, 2006 and comments on the Kofa mountain lion management plan and Draft EA dated June 23, 2008 which are hereby incorporated in their entirety along with other documents identified throughout this letter. In reviewing this document, the USFWS must also review and respond to the issues/concerns identified in all of the attachments.

1. The USFWS erred in failing to extend the comment deadline on the Draft EA and must commit to reopening the comment period upon completion of upcoming Kofa bighorn sheep counts and completion of thesis on Kofa lion ecology:

The Conservation NGOs and other interested parties submitted a letter, dated September 25, to the USFWS seeking a 30-day extension in the deadline for public comments on the Draft EA. The letter (Attached) provided a number of compelling reasons justifying the requested extension. In addition, the letter explained why the requested extension was entirely consistent with the Council on Environmental Quality's regulations implementing the National Environmental Policy Act which identifies public participation as essential to the NEPA process.

An addendum to the original request was submitted on September 30 (Attached). The addendum provided additional cause to extend the comment deadline based on the pending completion of Mr. Ashwin Naidu's master's thesis involving a study of lions and their ecology on the Kofa. That thesis, scheduled to be completed in November 2009, is directly relevant to the alleged purpose and need and environmental consequences of the proposed action and its alternatives described in the Draft EA. Because of this direct relevance, the USFWS was asked to preferably extend the comment deadline to ensure that the public had sufficient time to review the thesis when published before submitting comments on the Draft EA or to commit to reopen the comment period – as it legally must do – when the thesis becomes publicly available to ensure that all interested parties have an adequate opportunity to review the results of the study and to supplement their comments on the Draft EA.

In its response, dated September 30, the USFWS denied the requested 30-day extension in the comment deadline claiming that a 60-day comment period was sufficient and that pertinent research and information had been thoroughly cited to expedite review. It substantiated its argument by revealing that over 80 comment letters had already been

received in response to the Draft EA. None of the arguments relied on by the FWS to deny the requested extension, particularly its use of existing comment letters to demonstrate the adequacy of the 60-day comment period, are sufficiently compelling to justify the USFWS decision.

As a federal agency required to comply with NEPA, the USFWS has an obligation to ensure that the public has an adequate opportunity to participate in any NEPA process. Considering that such participation is “essential” to the NEPA process, 40 CFR 1500.1(b), and that federal agencies are required to “encourage and facilitate public involvement in decisions which affect the quality of the human environment,” 40 CFR 1500.2(d), the USFWS should not have hesitated to provide the requested and reasonable 30-day extension. Indeed, there was no compelling reason not to do so because the bighorn sheep population is, based on the most recently available population counts, stable to increasing and since granting the extension would have benefited the USFWS by providing its decision-makers with a more complete record upon which to base their decision.

Furthermore, considering the pending completion of Mr. Naidu’s thesis and the scheduled annual count of the Kofa bighorn population this month (October), extending the deadline would have provided the public with new data/evidence critical to both understand the need, or lack thereof, for the proposed action and for understanding the environmental consequences of the proposed action and its alternatives.

The only way for the USFWS to remedy this error and provide some indication that it is legitimately interested in public comment on the Draft EA is for it to immediately reopen the comment period at least until the Kofa bighorn sheep count data and Mr. Naidu’s thesis are publicly available and the public is given sufficient time to digest and incorporate this information into supplemental comments.² Considering that NEPA requires federal agencies to disclose environmental information before decisions are made and actions are taken and that NEPA analyses must be of high quality, the USFWS will inevitably have to reopen the comment period on the Draft EA when this new information becomes available. For the USFWS to consider such new information during the decision-making process, without providing the public an opportunity to consider that information is illegal. If the USFWS does not voluntarily commit to, at a minimum, reopen the comment period on the Draft EA when the bighorn sheep count data and Mr. Naidu’s thesis are made public, the Conservation NGOs and their allies will officially request a reopening of the comment period at that time.

² The Conservation NGOs expressly reserve the right to submit supplemental comments in light of the release of any new data or information relevant to the proposed action or its alternatives, upon acquisition of additional relevant USFWS and/or AGFD records related to this issue, or to provide additional analysis or input on the Draft EA or any related planning document.

2. The USFWS has failed to identify a legitimate purpose and need for the proposed action:

A. The Kofa National Wildlife Refuge was not established primarily to benefit desert bighorn sheep.

The USFWS and AGFD have consistently claimed in a number of publications that the primary purpose for establishing the Kofa Game Range which became the Kofa National Wildlife Refuge was to benefit bighorn sheep. In the Draft EA, the Minimum Requirements Analysis (MRA), the Investigative Report, and *The Kofa National Wildlife Refuge & Wilderness and New Water Mountains Wilderness Interagency Management Plan and Environmental Assessment* (hereafter Kofa & New Water Wilderness Plan and EA), the USFWS repeatedly makes the case that “the conservation of desert bighorn sheep was the driving factor in the establishment of the Refuge,” Draft EA at 1³, and uses that argument to justify the proposed action. That argument is false. There is no evidence in the Executive Order that established the Kofa Game Range in 1939 or subsequent Public Land Orders relevant to the Kofa that bighorn sheep conservation was the primary purpose for establishing the refuge. Consequently, though the USFWS and AGFD may wish that bighorn sheep on the Kofa were legally entitled to greater protection than other wildlife, they are not.

The USFWS has offered no single piece of evidence in the Draft EA or other related documents that its interpretation of the orders establishing the Kofa is correct. Indeed, the USFWS states that the “legal purpose” of the refuge as being “for the conservation and development of natural wildlife resources, and for the protection of public grazing lands and natural forage resources.” Draft EA at 1. This language is drawn from Executive Order 8039 (4 Federal Register 438) which not only fails to identify bighorn sheep as having any role in the establishment of the Kofa but, if anything, documents that next to wildlife conservation, domestic livestock grazing was intended to be the second most important purpose of the Kofa. In 1975, EO 8039 was amended to transfer jurisdiction of the Kofa Game Range to the Bureau of Land Management (Public Land Order 5492, 40 Federal Register 14054). Nothing in this Public Land Order indicates that bighorn sheep conservation was a primary factor in establishing the Kofa or in its management. Similarly, a second amendment to EO 8039, published in 1978, which changed the name of the Kofa Game Range to the Kofa National Wildlife Refuge and

³ See also, Draft EA at 7 (“Desert bighorn sheep are the key species of importance on the Refuge...”); Minimum Requirements Analysis or MRA at 4 and 5 (“the conservation of desert bighorn sheep was the driving force behind the establishment of the Refuge”); MRA at 5 (“the presence of a thriving bighorn sheep population is an important indication that the Refuge is fulfilling its purpose”); Kofa and New Water Wilderness Plan and EA at 2 (“The Kofa Game Range was established in 1939 by Executive Order 8039 specifically for the recovery of bighorn sheep populations”); Kofa and New Water Wilderness Plan and EA at 19 (“the chief stimulus behind the establishment of the Kofa was the concern for dwindling populations of the desert bighorn sheep ...”). None of these statements or claims have any legal merit.

transferred management authority for the Kofa from the BLM to the USFWS also includes no evidence suggesting that refuge management is dedicated to desert bighorn sheep.

Unless the USFWS can provide evidence of a legal duty to manage the Kofa for the primary benefit of bighorn sheep, it must stop repeating this claim and concede that the Kofa was established for the benefit and conservation of all wildlife. Since the Kofa was originally established through an Executive Order, there is no legislative history that can provide any further evidence as to the primary factor which caused President Franklin Roosevelt to set aside the Kofa Game Range. Since the USFWS has provided no evidence to demonstrate that the Kofa was established primarily to benefit bighorn sheep, the USFWS must also stop using this claim to justify the proposed action; killing of “offending” lions.

As explained in other sections of this comment letter, the USFWS repeatedly relies on the claim that the Kofa was established primarily for the conservation of desert bighorn sheep to justify the proposed action. For example, the USFWS claims that “the proposed action needs to be taken in order to meet the requirements of the National Wildlife Refuge System Improvement Act and Executive Order 8039.” Yet, there is nothing in EO 8039 that requires the killing of “offending” lions to satisfy any refuge management mandate. Since such a justification cannot be legally substantiated, the USFWS can no longer rely on this claim to proceed with the proposed action.

In its assessment of the consequences of the no-action alternative, the USFWS claims that the “Kofa Refuge was established as a habitat for the restoration and conservation of desert bighorn sheep and (as a result of the no-action alternative) this emphasis would end.” Draft EA at 30. Since the Kofa Refuge was not, in fact, established for the reasons alleged by the USFWS, the no action alternative would not result in this outcome. An emphasis that doesn’t exist can’t end when no-action is taken.

Similarly, the USFWS claims that “the continued presence of the herd (bighorn sheep) is essential to meeting the purposes of the Refuge.”⁴ Draft EA at 35. While the continued presence of bighorn sheep is consistent with the purpose of the refuge, there is no requirement that the bighorn sheep population be managed to exceed 400, 600, or 800 animals to satisfy refuge purposes, especially when those numbers are sought merely to permit the removal and translocation of bighorn sheep from the refuge. Similarly, there is no language in EO 8039 or the subsequent public land orders that specify that bighorn

⁴ See also, Minimum Requirements Decision Guide Worksheets (also referred to as Minimum Requirements Analysis or MRA) attached as Appendix C to the Draft EA (“maintaining a viable bighorn sheep population is critical to fulfilling the Refuge’s purpose and maintaining an important wilderness value”); MRA at 4 (“the conservation of desert bighorn sheep was the driving force behind the establishment of the Refuge”); MRA at 10 (“the Refuge is known since its inception for its conservation of desert bighorn sheep and its habitat”). None of these claims have any legal merit.

sheep on the Kofa must be managed to satisfy the bighorn sheep translocation desires of the AGFD. The stated intention of the USFWS (and AGFD) to manage for a population objective of more than 800 sheep to facilitate sheep translocations is what the agencies desire to achieve, not what they legally must achieve. Thus, for example, the fact that the no-action alternative may not allow the USFWS to meet its “desired” goals of 800+ bighorn sheep and a resumption of bighorn translocations is irrelevant since neither of these goals are mandated by law.

Consequently, if conservation of bighorn sheep to achieve a population objective that even the USFWS concedes is “very high” and “not natural” is not a refuge purpose, the killing of “offending” lions to facilitate sheep conservation is not permissible under USFWS refuge management policies. Nor is the fact that lions may kill and consume bighorn sheep justification to lethally remove lions since there is no evidence, as the USFWS concedes, that the bighorn sheep population will be extirpated even if lion predation continues. Draft EA at 30.

B. The USFWS has predetermined that mountain lions must be removed from the Kofa in order to benefit desert bighorn sheep:

The stated purpose of the proposed action is “to provide the Service additional options for the management of the Kofa desert bighorn sheep population by allowing the Service to limit predation by mountain lions.”⁵ Draft EA at 1. This purpose is based on a determination made by the USFWS “that limiting mountain lion . . . predation on desert bighorn sheep could benefit desert bighorn sheep populations under certain circumstances.” Draft EA at 1. The basis for this determination was the April 2007 Investigative Report and Recommendations for the Kofa Bighorn Sheep Herd (hereafter Investigative Report) prepared by the USFWS and AGFD to identify various factors (albeit not all factors) that were affecting the Kofa bighorn sheep population and providing strategies to address/mitigate each factor or threat.

This document was published by the USFWS and AGFD but was never subject to public review or comment. In effect, the USFWS and AGFD decided that mountain lions were adversely impacting the Kofa bighorn population without soliciting any input or data from the public or providing the public with an opportunity to review and analyze the evidence relied on by the USFWS/AGFD to make this determination and/or to provide comment on other factors that could be contributing to the status of the refuge bighorn population. This is not to suggest that the USFWS cannot prepare and release reports without providing opportunity for public review. However, if it intends to rely on a report as the basis for a future action, such as the lethal removal of lions, with highly controversial impacts to the human environment, it can’t make such determinations

⁵ See also, Draft EA at 8 (“The purpose of this EA is to provide the regulatory compliance and public participation required for evaluating the mountain lion management approach proposed in the Investigative Report, since it has not been addressed in previous Refuge decision documents.”)

without soliciting input from the public including scientists, special interest groups, and others that may have a unique interest in the issue or evidence that could support or reject, in this case, the impact of lions on bighorn sheep.

Furthermore, the USFWS claims that lion predation on bighorn sheep is additive to other sources of mortality which is sufficient to prevent the USFWS from attaining bighorn sheep population objectives. DEA at 1.2. The issue of lion predation as additive to other forms of sheep mortality will be addressed elsewhere in this comment letter. What is of relevance here is the origins of the alleged bighorn sheep population objectives.

These objectives were allegedly established in the Kofa and New Water Wilderness Plan and EA. Yet, there is no specific objective in that plan that specifies that the bighorn population goal is 800 animals or that provides a scientific justification for that number other than the fact that the population had been maintained at approximately that size for a number of years.⁶ The stated “current objective” for bighorn sheep management is to “maintain an optimal desert bighorn sheep population while providing for maximum viable species diversity” with a transplant goal to “reestablish bighorn sheep throughout all suitable historic habitat.” Draft EA at 3. More specifically, the USFWS indicates that the “optimal desert bighorn sheep population objective is 800 animals” and that its intention is to “manage the bighorn sheep population to support state and regional transplant programs.” Id.

The USFWS will attempt to claim that the Draft EA serves the purpose of soliciting public comments on whether lions should be subject to lethal removal to protect bighorn sheep since Alternative A, the no-action alternative, if selected, would not permit the lethal removal of lions on the Kofa. This argument is without merit since, as explained in more detail below, the USFWS has predetermined the outcome of this decision-making process meaning that its inclusion of the no-action alternative was relatively meaningless.

C. The USFWS repeatedly includes claims regarding the Kofa bighorn sheep population that reflect its bias against lions and that are intended to influence public perception of the status of the bighorn sheep population:

Throughout the Draft EA the USFWS repeatedly claims that either the Kofa bighorn sheep population is “in significant decline” (Draft EA at 1.2) or that it “continues to

⁶ An examination of bighorn population survey results contained in the Kofa and New Water Wilderness Plan and EA reveals that that a correction factor of greater than 3 was applied to bighorn sheep counts from 1987 through 1991 with a different correction factor applied after 1992. There is, however, no explanation in this document as to how these correction factors were calculated and/or specifically how bighorn sheep survey methodologies changed over time.

decline.” Draft EA at 31.⁷ These claims are used to justify the need for the proposed action yet, based on the USFWS’s own data, these claims are false. Assuming that the bighorn population counts conducted in recent years are accurate (recognizing that the method of counting sheep has been modified over time), there has been a decline in the number of bighorn sheep on the Kofa. The sheep population is not, however, continuing to decline. The population has increased in size from a low of 390 animals in 2006 to 460 in 2007 and 436 last year. While the 2009 count has yet to be conducted and though this may be a minor point, the USFWS should not be suggesting that the bighorn population is continuing to decline when its own data demonstrate that this simply is not true. Again, assuming the count data is correct, the USFWS can claim that sheep population numbers are lower than they were in 2003 but that recent data suggests the population is stabilizing.

D. The purpose and need for the proposed action is inconsistent with USFWS laws and policies:

Considering the “wildlife first” mandate of the USFWS, the fact that the majority of the Kofa is designated wilderness, and since the purpose of the Kofa refuge is not driven by the conservation needs of the bighorn sheep, USFWS efforts to justify the proposed action in light of its requirements pursuant to the National Wildlife Refuge System Improvement Act of 1997 and related policies is akin to trying to forcing a square peg through a round hole. As discussed herein, the proposed action cannot be squared with USFWS statutory requirements or its own policies regarding refuge and wilderness management.⁸

The USFWS recognizes the dilemma posed by its decision to give preference to its management of the Kofa bighorn population at the expense of the refuge’s lion population. Draft EA at 3. It is to justify this decision that the USFWS selectively picks from its various policies to craft an argument to ostensibly demonstrate that its actions are somehow consistent with its own refuge and wilderness management standards. For instance, it claims that individual refuges are authorized to compromise elements of their own biological integrity, diversity, and environmental health in order to support those components at a larger landscape scale. Draft EA at 3 and 4. This argument is used to satisfy the USFWS decision to manage the Kofa bighorn population to achieve transplantation objectives as this theoretically provides benefits at a broader landscape scale.

⁷ See also, Draft EA at 30 (“if mountain lion predation is allowed to continue unchecked, the bighorn sheep herd could continue to decline”); Draft EA at 39 (... since desert bighorn sheep number may be expected to continue to decline.).

⁸ The Conservation NGOs reserve the right to provide supplemental comments related to the applicability of FWS laws and policies to the proposed action pending acquisition and review of all relevant Department of the Interior and USFWS handbooks, Director Orders, policies, etc...

It goes on to claim it has the discretion at the refuge scale to “establish goals and objectives to maintain (wildlife) densities higher than those that would naturally occur in order to support conservation at multiple scales.” Draft EA at 4 (emphasis added). In other words, the USFWS concedes that its objective of managing the bighorn population on the Kofa for a population size of 800 animals is higher than what would exist naturally. This is inconsistent with USFWS policies. These policies compel the USFWS to “manage populations for natural densities and levels of variation,” but that “on some refuges, including those with purposes ties to particular species, we can establish goals and objectives to maintain densities higher than those that would naturally occur in order to support conservation at multiple scales.” MRA at 7. This policy is not applicable to the Kofa since the purposes of the Kofa are not tied to a particular species contrary to the repeated claims by the USFWS and AGFD.

The NWRSA cannot be used to justify the proposed action. That Act provided a renewed mandate for the management of National Wildlife Refuges to promote the conservation of wildlife, to identify priority uses, to reemphasize the compatibility determination process, and standard conservation planning throughout the system. While individual refuges are directed to both meet the refuge purposes while also satisfying the broader mission of the National Wildlife Refuge system, to the extent there is a conflict the refuge purposes are given precedence. See NWRSA at Section 5(D). This provision is relevant to the Kofa since the purposes of the Kofa do not provide any special protections to the bighorn sheep while they also don’t permit the possible extirpation of a native species. Consequently, while managing for a large bighorn sheep population to facilitate translocations may satisfy broader system goals, killing lions to accomplish this goal is not permissible.

While there are a number of USFWS policies applicable to the proposed action, its wilderness stewardship policy is of particular relevance. FWS Policy 610 FW 2.16 (B) identifies predator/prey fluctuations as natural ecological and evolutionary processes that qualify as a major ecosystem process. These processes or the wilderness ecosystem’s response to such natural events will not be interfered with unless necessary to accomplish refuge purposes or to correct situations where such processes become unnatural. Examples of unnatural conditions include “disrupted predator/prey relationships.” FWS Policy 610 FW 2.20 explicitly allows actions to alter natural predator/prey relationships “only when compelling evidence exists that the proposed action will correct or alleviate identified impacts on native fish, wildlife, plants, or their habitats and would be in compliance with section 2.16.”

The Draft EA provides no compelling evidence that the predator/prey relationship between mountain lions and bighorn sheep on the Kofa requires correction or that there is a need to alleviate existing impacts on native wildlife. Furthermore, even if this evidence existed, the existing lion/bighorn sheep relationship on the Kofa is not unnatural and there is no refuge purpose that justifies interfering with that relationship. If the USFWS

intends to permit the killing of lions on the Kofa to ostensibly benefit the bighorn sheep population, each of these criteria (i.e., that the predator/prey relationship requires correction, that existing impacts need to be alleviated, that the existing relationship is unnatural, and that refuge purpose justifies interference) must be met. They have not been met in this case and, based on the existing evidence, can't be met which means that the proposed action is squarely in violation of USFWS Policy.

3. The USFWS has failed to adequately describe the affected environment and failed to disclose all relevant information:

Regulations implementing NEPA require that “environmental information is available to public officials and citizens before decisions are made and before actions are taken.” 40 CFR 1500.1(b). That information “must be of high quality” and be subject to “accurate scientific analysis.” *Id.* Since the fundamental purpose of NEPA is to help decision-makers and the public understand the environmental consequences of agency action, it follows that the information contained in a NEPA document has to be of sufficient quality and detail to ensure that all relevant impacts can be understood and evaluated in the context of the proposed action and its alternatives. The Draft EA is woefully deficient in its description of the affected environment and the USFWS has failed to disclose an immense amount of information and data that is directly relevant to understanding the direct, indirect, and cumulative impacts of the proposed action and its alternatives.

A. Habitat conditions: The USFWS concedes that the Kofa bighorn sheep population is limited by a number of factors “including adequate habitat conditions,” Draft EA at 3, and that bighorn sheep “could persist at high numbers without active lion management in years with plentiful rainfall and excellent vegetative conditions.” Draft EA at 29. Yet, with the exception of disclosing information about the type of vegetation found on the Kofa (i.e., creosote, white bursage, ocotillo, ironwood, jojoba, honey mesquite, desert lavender, catclaw, foothills paloverde, blue paloverde, and saquaro cacti) (See Draft EA at 18) and a description of the water sources (largely artificial) available and/or maintained on the Kofa, there is no further description of the Kofa’s habitat conditions.

For example, the USFWS does not disclose the preferred forage species for desert bighorn sheep, the abundance and annual production of those species, or any forage production trend data. It fails to provide any information on the phenology or nutritional value of important bighorn sheep forage species or to disclose how climate (i.e., drought) affects the health, vigor, and production of such species. There are no maps in the Draft EA identifying specific bighorn sheep population locations and/or comparing bighorn sheep range to the preferred forage species range and availability. It also has failed to describe each bighorn sheep population area in regard to its physical topography, slope, amount of bighorn sheep escape habitat, location of permanent or ephemeral water

sources in relationship to occupied habitats, or the existence of terrain features that may facilitate ambush attacks on sheep by predators. Nor is there any substantive discussion of the artificial water developments or the failure of bighorn sheep to utilize the two most recently constructed developments.

Considering that habitat conditions are identified as a limiting factor for bighorn sheep, the USFWS must have compiled this data. It must have programs in place to monitor the abundance, composition, production, and vigor of preferred bighorn sheep forage species and threats to those species as a consequences, for example, of overgrazing by bighorn sheep or other ungulates or due to spread of invasive, non-palatable species. Presumably, because of ongoing efforts to count and monitor the bighorn sheep population or populations on the Kofa, it should know where the populations exist and should have collected detailed descriptions of those habitats. These are precisely the type of data that were required to be disclosed in the Draft EA so that the public and the USFWS decision-makers could fully understand the alleged need for and implications of the proposed action.

If these data are not available, the USFWS has an obligation under NEPA to disclose that and to either obtain the data or to explain why it cannot be obtained. The USFWS provided no such explanation in the Draft EA.

B. Climate data: It is understood that desert ecosystems, such as the Kofa, are harsh environments that are subject to extreme heat in the summer, relatively little rainfall, and that droughts are common and part of the evolutionary history of the region. The USFWS concedes that the refuge receives “relatively low rainfall” with average precipitation of less than 4 inches resulting from two “rainy” seasons, Draft EA at 18, but that in “years with plentiful rainfall and excellent vegetative conditions,” the bighorn sheep population could persist at high numbers without active lion management.⁹ Draft EA at 29. Despite acknowledging the importance of rainfall to bighorn sheep, the USFWS has disclosed no climate data in the Draft EA.

Nowhere in the document does the USFWS disclose any data on precipitation amounts, temporal or spatial patterns, how rainfall influences forage production, and/or how forage production (as influenced by precipitation) affects wildlife survival and production. In addition, no effort is made to disclose historical precipitation data to compare and

⁹ While the USFWS asserts in the Draft EA that plentiful rainfall and excellent vegetation conditions would allow the Kofa bighorn population to exist at high levels without lethal lion removal, in the MRA the USFWS acknowledges that “recent rainfall patterns on the Refuge have been favorable ... and have resulted in vegetation and habitat conditions beneficial for most wildlife, including bighorn sheep,” but that “the removal of ‘offending mountain lions’ during this period may provide an exceptional opportunity to bolster desert bighorn sheep numbers on the Refuge.” MRA at 11. These two statements are contradictory and the latter reflects a troubling position of the USFWS whereby lions would still be killed even if the bighorn sheep population was recovering as a result of improved habitat conditions.

contrast that to bighorn sheep, mule deer, or other wildlife species population estimates. Considering the importance of climate and, in particular, precipitation data to forage production and subsequently to wildlife, including bighorn sheep survival, production, and vigor, disclosure and discussion of such climate data was mandatory.

It is not as if this data is difficult to find. A Google search for Arizona precipitation data found the National Weather Service website (<http://www.wrh.noaa.gov/psr>) which provides access to nearly 60 years of precipitation and temperature data for the Kofa Mine site. It should not be the responsibility of the public to find this data. The USFWS has a legal obligation to disclose such information which, in this case, it has failed to meet.

C. Bighorn sheep: In the Draft EA the USFWS discloses information about historical and present-day bighorn sheep population counts and count methodologies, references an ongoing U.S. Geological Survey-New Mexico Cooperative Research Unit (USGS-NMCRU) and other studies of bighorn on the Kofa, and provides general information about past bighorn sheep translocations, yet a significant amount of important information/data about the bighorn sheep population has not been disclosed.

For example, in regard to bighorn sheep population counts, the USFWS does not disclose all relevant information about past counts or the methodologies used. Such information includes, but is not limited to, information about the specific counting methodologies used before 1980, between 1981 and 1987, from 1987 to 1991, and from 1992 to the present including survey hours, total transect lengths, experience of observers, survey altitude and speed, survey conditions (temperature/weather), and whether transects were flown without interruption or if when bighorn were seen the aircraft diverted course to allow for collection of additional count or group composition data. These are all factors that may influence the value, credibility, reliability and comparability (or lack thereof) of the counts. The USFWS indicates that current population estimates are the product of using the “Kofa Group Size Estimator” developed by Hervert et al. (1998) but the Draft EA contains no summary of this tool or how it is applied to collect bighorn sheep count data. For example, how does this tool address the problem of double-counting or under-counting?

In regard to bighorn research efforts, past and present, while the USFWS provides some basic information about the ongoing USGS-NMCRU study of bighorn ewes, it completely fails to disclose all of the data, preliminary or otherwise, that it already has collected. For example, the USGS-NMCRU has been studying bighorn sheep habitat use and lamb production on the Kofa, yet no further information about the preliminary results of this study are disclosed.

The USGS-NMCRU study involved the collaring of 30 bighorn ewes in November 2007 and ten additional ewes in November 2008 as part of a four-year study to document the

health and causes of mortality of Kofa bighorn. Draft EA at 24 and 25. Of these forty collared ewes, thirty of whom have been collared for nearly two years, thirty three were still alive as of May 2009, the date on the Draft EA. While the USFWS contends that six of the seven dead bighorn were killed by lions – which can not be verified because of the lack of disclosure of the details of these alleged mortalities – the fact that 33 of the 40 collared sheep remained alive in May of 2009 despite the alleged significant impact of lions on the bighorn population would suggest that whatever level of predation lions are responsible for is entirely sustainable.

Furthermore, as indicated in the Draft EA, each of these 40 collared bighorn ewes was tested for disease and their body condition was measured. Draft EA at 7. Yet, none of these data are disclosed in the Draft EA even though the USFWS concedes that the physical condition of bighorn sheep can, independent of any other limiting factor, affect the survival of individual sheep and populations. Draft EA at 10. Astoundingly, though thirty of these sheep were originally captured, sampled, and collared nearly two years ago, the USFWS claims that the analysis of their blood samples is still pending. Draft EA at 25. Considering that disease can be a potentially significant limiting factor in bighorn sheep both by causing direct mortality and by increasing the susceptibility of afflicted animals to other forms of mortality, it is simply unbelievable that the researchers and the USFWS have yet to analysis the blood test results to assess disease exposure. Whatever disease data the USFWS may have, it should have been disclosed in the Draft EA.

Prior to that study, between 1993 and 1996, 50 bighorn sheep were collared on the Kofa for monitoring purposes. The USFWS reports that 17 of these collared sheep died, that none showed signs of predation, and that there deaths were attributed to either drowning or unknown cause, likely disease or malnutrition. Draft EA at 22. The details of these mortality reports should have been disclosed in the Draft EA as they are directly relevant to potential other factors that may be affecting the bighorn population. Indeed, considering that the Kofa bighorn sheep population declined from an estimated 887 in 1994 to 600 in 1997, Draft EA at 8, the role of disease, malnutrition due to declining habitat conditions, and drowning were clearly more significant than predation at that time and there is no evidence to suggest that the impact of these factors on the sheep population have declined or been reduced since then. Indeed, the USFWS admits that “lion predation was not likely the cause of the (bighorn population) decline,” Draft EA at 29, citing to “USFWS unpubl. data.” Whether such data is published in a peer reviewed journal or not, if such USFWS data is available that would demonstrate that lions are not the primary cause of the bighorn sheep decline, it must be disclosed.

The USFWS includes information in the Draft EA about bighorn sheep mortalities attributable to lions. It claims that in each case, lions have been identified as responsible for the kills based on an examination of the kill sites though it also concedes that lions do scavenge the carcasses of bighorn sheep killed by other causes. Draft EA at 22. What is

not disclosed is specific information about each alleged bighorn sheep killed by a lion such as the location of the kill; the specific characteristics of each kill site which indicates that lions were responsible for the actual kill versus just scavenging a carcass; a physical description of the kill site in regard to its topography, vicinity to permanent/ephemeral water sources, and availability of ambush cover to facilitate lion predation; or estimated time of death (i.e., how long the carcass had been exposed to the environment prior to inspection by USFWS/AGFD biologists). The USFWS has provided no GPS coordinates or even a Kofa map depicting the documented kill sites in relation to occupied bighorn sheep habitat, permanent/artificial/ephemeral water sources, or known lion range. Such information is crucial to understand the alleged impact of lions on the bighorn sheep population.

Finally, the USFWS warns that “allowing the (bighorn) herd to decline to very small numbers reduces genetic diversity and the vigor of the herd.” Draft EA at 29. This is generally true with any wildlife population though it begs the question of what is the current level of genetic diversity in the bighorn population and how does it compare to other populations? Moreover, what is the minimum viable population that must be maintained on the refuge to preserve, over the long-term, an acceptable level of heterozygosity and allelic diversity? If such genetic data are available or if such genetic studies have been completed, they too must be disclosed.

The failure of the USFWS to disclose this and other critical information would suggest that it would prefer that the public simply defer to its “expertise” and explanations verses seeking disclosure of all relevant evidence.

D. Mountain lions: The Draft EA also fails to disclose all relevant and important information about lions on the Kofa. It suggests, for example, that lions historically were considered to be transient on the refuge largely based on a lack of verified lion records prior to 1944 and then again between 1944 and 2001. Draft EA at 21 and 22. What is not disclosed or discussed is what efforts were made during those times to observe lions or to find evidence that they, indeed, were present on the refuge. Given the remote character of the Kofa, the relatively low number of humans occupying the region, and the secretive nature of lions, it is quite possible that lions have been resident on the refuge for decades yet no one has engaged in extensive enough efforts over the past decades to verify that fact.

If, indeed, lions were transient on the refuge until recently, the USFWS fails to disclose or discuss what may have caused the lion population in the region, given the harsh environmental conditions, to grow and for lions to become resident on the refuge. Potential factors involved include a growth in the regions lion population and expansion of their range, an increase in lions based on an increase in prey availability (i.e., mule deer primarily), and/or the direct and indirect impacts of increased water availability (through the modification and maintenance of existing water sources or the construction

of artificial sources) which likely, as was the goal, temporarily increased ungulate populations leading inevitably to an increase in predators.

In regard to lion predation on bighorn sheep, the USFWS, not surprisingly, provided evidence of several such incidents and then extrapolated estimated individual lion kill rates to purposefully paint a grim picture of the potential adverse impact of lions on the sheep population. Draft EA at 9 and 10. It also claimed that such impacts were likely underestimates since it didn't consider the additive impacts of predation by uncollared lions or the impacts of collared and uncollared lions on bighorn lambs. *Id.* While there is no dispute that lions can and do kill bighorn sheep, there is critical information that the USFWS failed to disclose. This includes documented lion home ranges in relationship to occupied bighorn sheep habitat. Considering that up to four Kofa lions have been collared in the past, such range data must be available and should have been disclosed.

In regard to the collared lions, the data disclosed by the USFWS was incomplete and confusing. For KM01, a lion collared in April 2007 and killed by the AGFD in June 2007, the USFWS alleges that he killed five bighorn sheep in three months based on an examination of data from his collar. Draft EA at 23. The USFWS provided no information about where those kills occurred, the physical conditions at the kill site (i.e., slope, availability of ambush habitat, distance to bighorn escape habitat), when the site was investigated in relation to when the sheep was killed, or whether the kill site was actually inspected. Indeed, the USFWS explicitly states that the bighorn sheep predation attributed to this lion was determined based on data from the lion's collar. This would suggest that there was evidence of a cluster of GPS locations within the data which could be evidence of a kill site. If the actual kill site was not investigated, how can the USFWS claim that a bighorn sheep was killed (versus a mule deer or another prey species) and/or that an animal was killed at all versus scavenged. While it is possible that each of the kill sites was investigated, the description provided in the Draft EA indicates that the kill statistics were solely obtained by evaluating the data from the collar. The same questions pertain to KM03 who allegedly killed six bighorn sheep in five months based, again, on data obtained from his collar. Draft EA at 23.

The Draft EA reports that the USFWS and USGS are collaborating on mountain lion diet and genetics research through the Arizona Cooperative Research Unit. Draft EA at 7. While this study is ongoing, the USFWS reports that based on lion scat analysis, lions are consuming mule deer, bighorn sheep, coyotes, badgers, Draft EA at 9, gray fox, and domestic sheep. Draft EA at 23. What is not disclosed, however, is the proportion of these species in lion scat. The USFWS does concede that data from collared lions and preliminary scat analysis indicates that "mule deer are an important, if not the majority, species in mountain lion diets on the refuge," Draft EA at 20, and the mule deer are the primary prey of Kofa lions. Draft EA at 29. If such preliminary data is available, as apparently is the case for a number of the ongoing bighorn sheep/mule deer/lion studies on the Kofa, it should have been disclosed in the Draft EA.

This tidbit of information still does not disclose the proportion of each species estimated to be killed by lions preventing the public from assessing the predator-prey dynamic between lions and bighorn sheep. This is not to suggest that lions are not killing bighorn sheep, but that proportionately the number of bighorn sheep being killed may pale in comparison to the number of other species being killed. This evidence, if for example mule deer are the preferred lion prey on the refuge, could and should lead to potential changes in mule deer management, including a reduction in or elimination of the issuance of mule deer tags to allow mule deer hunting on the refuge to augment deer population to potentially reduce predation pressures on bighorn sheep. While there are likely other factors that affect the mule deer population, this reflects potential alternatives to the killing of lions that may indirectly aid the bighorn sheep population that would and should have been considered had the USFWS engaged in a comprehensive review of all limiting factors in a single document instead of engaging in the current piecemeal analysis.

The Draft EA also reports that mountain lion density is a product of prey availability and social tolerance for other lions. Draft EA at 20. While Kofa lions are reported to consume bighorn sheep, mule deer, badgers, coyotes, gray fox, and domestic sheep the USFWS does not disclose the full list of lion prey, provide density estimates for each species, or provide maps of the known range of each species in comparison to known occupied lion habitat. Again, to understand predator-prey dynamics, this information must be disclosed.

E. Mule deer: The Draft EA includes some basic information about the Kofa mule deer population including population count estimates from 2005 to 2008, the number of mule deer killed by hunters annually, and the hunting season dates. The USFWS also reports that “the mule deer population historically demonstrates high variability from year to year, which is thought to be tied largely to rainfall and habitat conditions.” Draft EA at 20. What is not disclosed and what is a critical piece of information, is the range of Kofa mule deer in comparison to the refuge sheep population. Do they share similar ranges? If so, what is the habitat overlap between the species and where does such overlap occur? Such data is critical as it addresses the issue of interspecific competition. While it is expected that bighorn sheep occupy steeper slopes than mule deer, to the extent the species share similar range, the number of mule deer may be directly affecting the number of bighorn sheep. This is not to suggest that this relationship is unnatural but only to identify interspecific competition with mule deer over habitat and forage as another potential limiting factor for the Kofa bighorn population.

Interesting, when comparing Figure 3 containing mule deer population estimates (Draft EA at 19) with Figure 2 containing bighorn sheep population estimates (Draft EA at 8), both population declined as a result of the severe drought in 1997 and the bighorn

population experience another decline between 2003 and 2006 at the same time that the mule deer population reached a peak in 2004. This evidence provides additional support for the likelihood that drought and interspecific competition between mule deer and bighorn sheep pose a greater threat to the sheep than lions.

F. Permanent/ephemeral/artificial water sources: Artificial water sources in the arid, otherwise waterless area are controversial among people concerned with Wilderness values because the addition of water to areas it is not normally present introduces new species that would not otherwise be there and modifies behavior of the animals that are already there.

In particular, there is some evidence to suggest that certain predators can expand their range if there is water available to them and/or if water causes prey species to unnaturally concentrate near water sources. This is not only application to bighorn sheep, mule deer, and mountain lions as other species may also be impacted by water developments. For example, water tanks can bring ravens, which feed on young desert tortoises. Desert tortoise are present in the Kofa Wilderness Area.

Hunters also favor water tanks, because bighorn sheep become habituated to the tanks making them easier to find and hunt. AGFD sells maps of constructed waters to those interested in staking them out for hunting. None of these issues were disclosed or evaluated in the Draft EA.

Moreover, though the USFWS disclosed information about the number of maintained and non-maintained water sources, including natural, artificial, permanent and ephemeral sources, it fails to disclose the specific location of each water development/source, fails to describe or graphically illustrate the location of each water development/source in relation to bighorn sheep and mule deer populations, and to describe the physical characteristics of each water source (i.e., slope, distance to bighorn escape terrain, availability of cover to facilitate ambush attacks by lions). This basic information must be disclosed to facilitate public understanding of the potential impacts of these water developments/sources on bighorn sheep, mule deer, and lions. Furthermore, the USFWS should have provided information about which water developments/source are routinely used by bighorn sheep and provide some analysis as to why other developments, including the two developments constructed most recently, have not be used by bighorn sheep.

G. Public use/recreational activities: The Draft EA indicates that the Kofa hosts an estimated 50,000-60,000 visitors each year, including 2,000 hunter visits per year. Draft EA at 26. Many visitors are retired and most visit the refuge in the fall, winter, and spring. Id. Most visitor use the refuge of hunting, wildlife observation, hiking, climbing, and to explore the refuge using four-wheel drive vehicles. Id. Though vehicle use has allegedly been restricted to roads since 1976, Draft EA at 27, remarkably the public is

permitted to drive vehicles up to 100 feet off of designated roads. Draft EA at 26. With up to 300 miles of road open to public use on the Kofa, Draft EA at 27, and considering that vehicles can operate on a corridor approximately 200 feet wide from the road center, the amount of habitat impacted by these policies is staggering.

What the USFWS fails to disclose in the Draft EA, however, is how these visitors use the refuge, where they tend to go, what proportion use the refuge explicitly to observe bighorn sheep, where they tend to go to observe the sheep, and what impact such activities has had on the affected sheep populations. The USFWS concedes that the opportunity to observe bighorn sheep is one of the factors that is of particular interest to refuge visitors suggesting that some level of harassment is occurring during those months with large numbers of visitors.

The USFWS, indeed, concedes that human disturbance is a potential limiting factor for bighorn sheep. Citing to Krausman and Hervert (1983) and Papouchis (2001), the USFWS concedes that the “closer and more frequent the human disturbance to bighorn sheep, the further they moved away from the source of the disturbance.” Draft EA at 17. This, in turn, may result in bighorns moving into areas more conducive to predators or with less desirable habitat conditions. *Id.* In addition, in its Minimum Requirements Analysis (MRA) the USFWS cites to Tucson’s Pusch Ridge where hikers and their pets had dramatic effects on bighorn sheep. Draft EA, Appendix C at 3.

The USFWS discloses minimal information about bighorn sheep hunting on the Kofa explaining that desert bighorn sheep tags are quite limited, that they are only issued for 10 to 15 percent of the Class 3 and Class 4 rams, and that only 6 tags were issued by the AGFD for the December 2009 hunt. Draft EA at 7, 25. It claims that the effort required by hunters to “locate trophy rams has become more difficult than in the past,” *Id.*, suggesting that hunter convenience and success is, in part, driving the proposed action. The success or convenience of bighorn sheep hunters must not be a criteria used by the USFWS to assess the attributes of each Alternative and to selected the preferred action.

Moreover, as discussed in greater detail below, the USFWS failed to disclose or discuss if or how the bighorn sheep hunt has affected the size, genetics, or survival of the refuge bighorn population. Recent studies have documented that bighorn sheep trophy hunts can result in a form of artificial selection that leads to an erosion in the size, genetic diversity, and overall health of the population. This could be yet another factor affecting the Kofa bighorn population that has gone unnoticed or, perhaps, ignored by the USFWS and AGFD.

The USFWS has also failed to disclose the annual hunter kill of Kofa bighorn sheep and/or characteristics of each ram taken. While the numbers may be smaller in recent years than in the past, a mortality is a mortality and can contribute to the overall status of the population, particularly a population subject to other limiting factors. As previously

explained, from a political and public relations perspective, the continued hunting of Kofa bighorn sheep, even at reduced numbers, is inappropriate while the agency authorizing the hunt, the AGFD, is advocating for the lethal control of “offending” lions.

4. The USFWS has failed to consider a reasonable range of alternatives:

NEPA regulations require federal agencies to “identify and assess the reasonable alternatives to proposed actions that will avoid or minimize adverse effects of these actions on the quality of the human environment.” 40 CFR 1500.2. The agency is also required to “rigorously explore and objectively evaluate all reasonable alternatives,” *id.* at 1502.14(a), which must include the “alternative of no action,” *id.* at 1502.14(d), and “reasonable alternatives not within the jurisdiction of the lead agency.” *Id.* at 1502.14(c).

The Draft EA includes three alternatives: the no-action alternative (Alternative A), the proposed action permitting the lethal removal or capture and translocation¹⁰ of “offending” lions (Alternative B), and an alternative permitting the indiscriminate removal of lions (Alternative C).¹¹ In reality, the Draft EA only contains two alternatives since Alternative C is not permissible under USFWS wildlife and wilderness management policies.

Specifically USFWS Policy 610 FW 2.20 permits predator control on wilderness lands but only to “correct or alleviate identified impacts on native fish, wildlife, plants, or their habitats” and only “on the individual animal(s) causing the problem ...” Draft EA at 35. This Policy was previously discussed in regard to the proposed action and it was demonstrated that the proposed action is in direct conflict with this standard. However, in regard to Alternative C, this Policy and its specific requirement that only “the individual animal(s) causing the problem” be subject to removal, invalidates this alternative from consideration. The USFWS essentially concedes that this is true when it admits in the MRA that Alternative 3 (the indiscriminate removal of lions from the refuge) “may not meet Service policy under 610 FW 2.20.” MRA at 14.

Furthermore, because Alternative C permits the indiscriminate removal of lions from the refuge in violation of USFWS Policy it never should have even been considered as a

¹⁰ The inclusion of a capture and translocation option within the proposed action is disingenuous and is clearly intended only to try to soften the impact of this alternative in the minds of those citizens who may erroneously believe that offending lions would be translocated instead of killed. As the USFWS concedes, the possibility that any “offending” lion would be translocated instead of killed is remote given the potential complications and ineffectiveness of such translocations, and the lack of potential destination sites. Since the USFWS has elected to include translocations as a potential management tool, it can’t, as it has, claim that the impacts of translocations are beyond the scope of the Draft EA. As long as the USFWS elects to include lion translocations as a management option, it must evaluate the environmental impacts of that tool in the context of the present planning process.

¹¹ The Conservation NGOs support the decision by the USFWS to reject a sport hunting alternative from serious consideration in the Draft EA.

“reasonable alternative.” Alternative C, as well as the proposed action, could also result in the extirpation of lions from the Kofa, Draft EA at 37, which is also impermissible under USFWS Policies.

5. The USFWS has failed to adequately, objectively, and comprehensively evaluate the direct, indirect, and cumulative impacts of the proposed action and its alternatives:

NEPA regulations indicate that the environmental consequences of a NEPA documents “forms the scientific and analytic basis for the comparisons” of the proposed action and its reasonable alternatives. 40 CFR 1502.16. This section of a NEPA documents must “include the environmental impacts of the alternatives including the proposed action, any adverse environmental effects which cannot be avoided should the proposal be implemented, the relationship with short-term uses of man’s environment and the maintenance and enhances of long-term productivity, and any irreversible or irretrievable commitments of resources which would be involved in the proposal should it be implemented.” Id. Furthermore, the analysis of environmental consequences “shall include” discussions of the direct and indirect effects of the action and their significance, any possible conflicts between the proposed action and any Federal, regional, State, and local land use plans or policies, the environmental impacts of alternatives, and other specific factors. Id. at 1502.16(a-h)¹².

The USFWS has failed to comply with these requirements. Indeed, most of the criteria identified above as required to be evaluated in the environmental consequences section of a NEPA document (i.e., unavoidable adverse impacts, relationship between short-term use and long-term productivity, irreversible and irretrievable commitments of resources, conflicts between the action and other land use plans and policies) were not addressed in the Draft EA. Moreover, as explained in more detail below, the USFWS analysis of direct, indirect, and cumulative impacts of the proposed action and its alternatives was woefully inadequate and, in some cases, entirely absent.

As an initial matter, the USFWS disclosed in the Draft EA that “because the activities will occur in wilderness, a Minimum Requirement Analysis (MRA) was completed to evaluate the alternatives.” Draft EA at 28. As explained by the USFWS, an MRA (Attached to the Draft EA as Appendix C), “is a decision-making process, documented in writing, which we use to determine if proposed refuge management activities conducted in wilderness are necessary to administer the area as wilderness and to accomplish the purposes of the refuge including Wilderness Act purposes.” Id. (emphasis added).

¹² The fact that 40 CFR 1502 et seq. pertains to Environmental Impact Statements is irrelevant. An Environmental Assessment can be used to determine if an EIS is required. Therefore, the same components that must be addressed in an EIS also must be addressed in an EA though the level of review and analysis in an EA is less than that required in an EIS.

The MRA itself is a worksheet of sorts that requires the agency to answer a series of questions and to provide substantive data to substantiate their answers. The answers to many of these questions require an affirmative determination as to whether the proposed action is to be implemented or not. Moreover, the MRA itself specifies that “the need to manage predation was also recommended in the report (referring to the Investigative Report)” but that “additional analyses, such as this “minimum requirements analysis” were needed prior to implementing that particular action” MRA at 6. The USFWS also indicates that “the Refuge must meet the population objectives for sheep in order to carry out these conservation actions,” MRA at 6 (emphasis added), and that “this includes limited mountain lion predation on bighorn sheep.” Finally, as part of Step 1 of the MRA process the USFWS concluded that the action “is necessary” thereby allowing it to address Step 2 of the analysis.

In this case, by completing and signing the MRA, the USFWS has effectively predetermined the outcome of this NEPA planning and environmental review process.¹³ It has already decided, through the MRA process, that it will implement the proposed action making a mockery of the entire NEPA process and violating the “look before you leap” basic mandate of NEPA. This is particularly true in regard to the Kofa since the majority of the refuge is designated wilderness and since, presumably, the bighorn sheep population occupy habitat within the designated wilderness area. This is not to suggest that the USFWS was prohibited from compiling the MRA, however, it should have completed the document as a draft, sought public comment on it at the same time as the Draft EA, and not finalized and signed off on the document before doing so.

This legal error cannot now be reversed without the USFWS terminating this planning process, rescinding the MRA, and if it chooses to go forward to develop a Kofa lion management plan, beginning with a clean slate.

Beyond this significant legal error, the environmental consequences section of the Draft EA is deficient for a number of other reasons.

First, the USFWS decision that “climate” and “vegetation” would not be affected by the various alternatives and therefore require no additional analysis is wrong. Draft EA at 28. As previously explained, climate and, in particular, precipitation is directly applicable to bighorn sheep habitat conditions, forage productivity and abundance, bighorn sheep health and vigor, and ultimately their susceptibility to predation and other mortality factors. Similarly, the status of the vegetation on the refuge, including bighorn forage species and invasive species that might threaten the viability of preferred bighorn forage, is critical to the survival and health of bighorn sheep, mule deer, and other

¹³ Additional evidence that the outcome of this process has been predetermined is based on the similarity between the proposed action and the predator management strategy articulated in the *Kofa Mountains Complex Predation Management Plan* which the AGFD has been implementing on public lands surrounding the refuge. Draft EA at 2.

wildlife. While the actual physical impact of the proposed action and alternatives would not necessarily adversely impact climate, the impact of climate and the need to disclose and discuss climate data is of direct relevance and consequence to the bighorn sheep and, therefore, should not have been eliminated from analysis.

The same applies to the issue of vegetation though in that case, there are potential impacts of the proposed action and its alternatives on vegetation since the removal of ongoing lethal removal of “offending” lions could result in a spike in ungulate survival and productivity increasing ungulate density and, consequently, the impact of ungulates on the refuge vegetation.

The USFWS erred in eliminating certain issues from its analysis altogether. As the USFWS itself concedes, there are an abundance of factors that are likely contributing to the decline in the Kofa bighorn sheep population. Mountain lion predation is certainly not the only factor nor is it the most significant factor. Climate (i.e., drought), human use and recreational activities, interspecific competition between mule deer and bighorn sheep, habitat conditions, disease, physical condition of bighorn sheep, health and production of forage species, presence of invasive species, permanent and artificial water sources are just some of the other factors potentially contributing to the current situation which may also be a function of the current carrying capacity of the Kofa for bighorn sheep.

The Investigative Report identified many, but not all of these factors, and included specific strategies to address or mitigate any potential threats. As previously indicated, however, the Investigative Report was not subject to public review and comment nor did the USFWS ever subject it to NEPA review. Considering that the Investigative Report called for specific actions, like removing lions and constructing new water development, to be implemented, there is credible reason to argue that the USFWS failed to comply with NEPA by failing to evaluate the impacts of all of the actions contained in the Investigative Report in an Environmental Assessment or Environmental Impact Statement.

Instead, the USFWS categorically excluded many of these actions from NEPA review. This was impermissible since many of the actions exceeded the criteria for the use of categorical exclusions and since specific extraordinary circumstances, including the fact that the actions were controversial and were to take place in wilderness areas (see 43 CFR 46.215), apply in this case and should have prohibited the exclusion of these actions from substantive review pursuant to NEPA. Indeed, the USFWS, the affected wildlife, and the public would have benefited had a comprehensive evaluation of all of these factors in a single document been prepared and subject to public review versus the action-specific approach pursued by the USFWS. In doing so, the USFWS has clearly violated NEPA by failing to prepare such a comprehensive review resulting in the illegal

segmentation of the full suite of actions to avoid considering all of the impacts in a single environmental document.

In the Draft EA, the USFWS intentionally eliminates certain issues from further analysis. This includes the impacts from water developments. The USFWS reports that there are “23 critical sites” (including 2 springs, 15 modified tinajas, 5 man-made catchments, and 1 windmill) for bighorn sheep. Draft EA at 11. In addition, there are another 58 water sources (11 windmills, 11 springs, 26 tinajas or man-made catchments, and 10 dams) throughout the refuge. In total, there are 81 water sources, some natural, most artificial, most ephemeral, but some permanent on the refuge. While the USFWS claims in the Draft EA that “the extent to which these water developments may have influenced wildlife populations over the past 70 years is not known,” Draft EA at 11, in its MRA admits that artificial water developments may adversely impact wildlife. MRA at 9.

While it is completely illogical to claim that artificial water developments or the enhancement of natural water sources do not impact wildlife since the very intent of such construction activities is, in fact, to affect wildlife populations, a primary concern in this case is that such developments can act as predator traps. Such traps exist when predators take advantage of ungulate use of water sources to facilitate their ability to ambush and kill such prey.

Beyond the direct impact of facilitating predation, artificial waters can alter prey distribution and movement patterns, expand prey range into lower quality habitat, or provide predators with an opportunity to consume what would otherwise be a secondary prey species thereby developing a “taste for,” in this case, bighorn sheep. Even the USFWS concedes that during “droughts or hot periods,” the availability of water from artificial, natural, permanent or ephemeral sources, allows desert bighorn sheep to consume plants that have a lower moisture capacity. Draft EA at 24. While that may be true, what is the nutritional value of these alternative, lower moisture plants, how does it compare to the nutritional value of preferred forage species, how digestible are these alternative species, and how would consumption of such species over the long-term affect bighorn sheep health and productivity? Had the USFWS prepared a legally sufficient Draft EA or, preferably, an Environmental Impact Statement on the proposed action or on the broader suite of actions relevant to the management of bighorn, lions, and other species on and uses of the refuge, it would have considered such issues.

The USFWS dismiss the predator trap hypothesis by claiming that only 12% of ungulate kills occurred within 100 meters of a water source, 20% within 800 meters, and 28% within 1600 meters. Draft EA at 12. This data would suggest that 72 percent of ungulate kills occurred more than a mile from a water source. The problem here is that, again, the USFWS failed to disclose all relevant data regarding the documented bighorn kill sites and their location in regard to the vicinity of water. The missing, yet important data, would include, but would not be limited to, identification of the specific water source or

sources in the vicinity of each kill site, whether that water source or sources was/were natural or artificial, when the kill occurred, whether water was present at one or more of the sources at the time of the kill, a physical description of the kill sites (i.e., slope, amount of ambush cover, distance to bighorn sheep escape terrain), and what species was killed (i.e., bighorn sheep, mule deer).

It must be noted that the USFWS statistics cited above regarding the distance from water sources to kill sites was for ungulates and not, specifically, bighorn sheep. Consequently, without the disclosure of additional data it is impossible for the public to differentiate between mule deer and bighorn sheep kills near water sources. Similarly, while the USFWS readily concluded that evidence of collared lion kills of bighorn sheep were underestimates due to predation by uncollared lions, it did not consider uncollared lions in regard to the impact of water developments on ungulates. These lion kills near water development statistics, therefore, must also be considered underestimates. The analysis of the impact of water developments on predator-prey dynamics and the disclosure of all relevant data is critical to ensure adequate public understanding of the impacts of these developments on wildlife versus accepting, without question, USFWS assurances that refuge water developments are not acting as predator traps.

In regard to the no action alternative, the USFWS overstates the consequences for the Kofa bighorn sheep population by assuming that all other variables that may be limiting the bighorn population will not change. This is not necessarily the case. The USFWS, for example, indicates that with plentiful rainfall and excellent vegetation conditions, the bighorn sheep population could persist in high number even without active lion management. Draft EA at 29. Thus, if the Kofa was subject to plentiful, and well-timed, rainfall the bighorn population may increase as forage/habitat conditions improve even without any lethal lion control as has occurred recently.

Even if the bighorn sheep population stabilized at its current size or declined, this is not inconsistent with USFWS statutory mandates or policies since these mandates do not require that the bighorn population be managed for a particular size or for a particular purpose.

Similarly, if the sheep population declined to the point where hunting were no longer permissible, Draft EA at 29, as should be the case now, or where transplants must be suspended indefinitely, Draft EA at 30, this too would not violate USFWS legal mandates or policies.

The NWR SIA identifies hunting as a priority refuge use but it doesn't state that all species on a refuge must be hunted to satisfy this requirement. Indeed, if hunting is not compatible with refuge purposes or if a particular hunt (e.g., bighorn sheep) is not compatible, the USFWS must prohibit or terminate the hunt by law. Indeed, though the USFWS had previously determined that the Kofa bighorn sheep hunt was compatible

with refuge purposes, considering the decline in bighorn sheep numbers and given the proposal to lethally remove “offending” lions to restore the populations, the bighorn hunt may not longer be compatible with refuge purposes. At a minimum, USFWS should consider a temporary suspension of the hunt.

Moreover, neither the NWRSA, USFWS policies, nor Kofa refuge purposes require that the Kofa bighorn population be managed to sustain sheep translocations. Thus the suspension of the translocation program, whether short term or permanent, is inconsequential if meeting the legal mandates for the management of the refuge or for achieving broader refuge system objectives. The add-on impact of a reduction in funding provided by all sources, including private parties, for bighorn sheep management is largely conjectural and is certainly no basis for rejecting the no-action alternative. It is possible, for example, that alternative funding sources to aid the USFWS in conducting refuge project may develop if lions are protected and natural processes and dynamics are allowed to function on the Kofa.

Finally the cumulative impact analysis associated with the no-action alternatives is entirely inadequate. NEPA regulations define a “cumulative impact” as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions.” 40 CFR 1508.7.

The Draft EA fails to provide this level of analysis as it only identifies past lion removals, the addition of a powerline and replacement of powerline structures, maintenance and replacement of gas pipelines, maintenance of refuge roads, potential increase in mining activities, and the construction of solar and wind farms outside of the refuge are identified. Draft EA at 30 and 31. There are a number of other impacts that are missing from this analysis including climate (precipitation), visitor use and recreation, artificial water developments, climate change, and whatever actions under state or private control occurring on or adjacent to the refuge. Furthermore the purpose of the cumulative impact analysis is not solely to identify the litany of impacts that have to be considered in the analysis, but it is to actually conduct the analysis. At present, the cumulative impact analysis in this section of the Draft EA is just a list without any effort to analyze the actual cumulative impact of these various factors.

In regard to the proposed action, the USFWS has failed to properly evaluate the full range of impacts inherent to the capture, collaring, and lethal removal of “offending” lions on the Kofa.¹⁴

¹⁴ These same deficiencies would be applicable to Alternative C if it were selected as the preferred alternative. This is unlikely, however, since Alternative C is inconsistent with USFWS Policy regarding predator management in designated wilderness.

The proposed action would permit the ongoing capture of Kofa lions – for collaring or lethal removal – through the use of box traps, neck or foot snares, or with the aid of hounds. Draft EA at 13. Though the USFWS repeatedly claims that it will “carry out the lethal removal, or translocation, in the most efficient and humane way available to them,” Draft EA at 14, it fails to evaluate the “humaneness” or lack thereof of each capture tool or procedure.

The USFWS claims that non-target animals captured in box-traps could be released. That is true though it doesn’t consider the possibility that non-target animals could sustain injuries, including damage to their teeth, claws, feet, and physical condition, as a result of being confined in a box trap.

Furthermore, the USFWS claims that pan tension devices on traps and break-away snares could be used to capture lions, Draft EA at 15, and that these devices would minimize the potential for the capture of non-target species. What the USFWS does not discuss or evaluate is the likelihood that non-target species could be trapped, fails to identify which species may be susceptible to capture, what impact non-target captures may have on those species and individuals, and how the USFWS will handle the capture of non-target species both when the animal can be released unharmed and when the animal is injured and requires treatment or euthanasia. The USFWS states, in its MRA, that up to 18 trap sites may be active at any one time on the refuge yet it fails to disclose how frequently traps would be checked. In regards to the target species, lions, the USFWS concedes that captured lions could be injured to such a degree that they must be euthanized. Draft EA at 14.

The proposed action also contains a caveat that could preclude the active management of lions (i.e., lethal removal) when the bighorn sheep population is estimated to number between 600 and 800 animals depending on a suite of factors. See Draft EA at 14. The Conservation NGOs are not supportive of this specific proposal since they strongly and unalterably oppose any lethal control of Kofa lions but this options is of concern due to the failure of the USFWS to provide measurable criteria to define each factor.

For example, while the bighorn sheep population trend is identified as one of the factors, the USFWS does not disclose what level of population increase or decrease over time would trigger passive or active lion management? In regard to bighorn lamb survival and recruitment, what specific survival and recruitment rate or level would have to be attained to trigger passive lion management?

If no collared lions are preying on bighorn sheep, why would the estimate of the number of lions on the Kofa be identified as a factor to consider? Does this not suggest that the overall hidden objective of the USFWS is to actually control the size of the lion population versus only proposing to remove so-called “offending” lions?

For the habitat conditions criteria, another factor identified in the Draft EA, what are the criteria for “current” and “forecasted” habitat conditions that would have to be met in order for the USFWS to engage in passive lion management?

Finally, the USFWS proposal to redefine what constitutes an “offending” lion when the bighorn sheep population is between 600 and 800 animals to only those lions that kill four or more bighorn sheep annually, Draft EA at 14, conflicts with a similar statement in the MRA in which it redefines an “offending” lion as a lion that kills four or more bighorn sheep over six months. MRA at 8.

The reason these questions are important and must be addressed is so that, if the USFWS selects the proposed action, it is not given a blank check of sorts to define what criteria would trigger passive lion management. It must specify the criteria now both for the benefit of the public and to ensure that the USFWS cannot “change the rules” in the future. It can still adjust these criteria as part of any adaptive management strategy but it must establish the basic criteria first and provide the public with an opportunity to review, evaluate, and provide comment supporting or rejecting the criteria.

The USFWS also claims that the proposed action “is not expected to extirpate lions from the Refuge.” Draft EA at 32. This statement is unsettling. In effect, the USFWS is admitting that the proposed action could, indeed, cause the extirpation of lions from the Kofa. The fact that such extirpation “is not expected” is not reassuring. If the proposed action is implemented and does result in the extirpation of lions from the Kofa, this would violate USFWS statutes and policies. This is a likely outcome of this proposal since it, as written, **contains no mechanism to prevent the lethal removal of every lion on the Kofa, now or in the future**, if the lion is collared and is defined as an “offending” lion. The failure of the USFWS to provide some mechanism to absolutely ensure the continued presence of lions, preferably a viable population of lions, on the Kofa is troubling though consistent with the interests of the AGFD and certain private parties that have become a funding source for the USFWS.

The USFWS cumulative impact analysis of the proposed action (Alternative B) is even more deficient than its analysis of the cumulative impacts of Alternative A. In Alternative B, the cumulative impacts analysis are limited to the impacts of killing refuge lions on the statewide lion populations. Draft EA at 36. That’s it. It mentions potential impacts associated with lion translocations but claims that such impacts are outside the scope of the Draft EA. Id. There’s no identification or analysis of other factors that would have cumulative impacts such as climate (precipitation), visitor use and recreation, water developments, powerline construction and reconstruction, gas pipeline maintenance and replacement, forage/habitat conditions, off-road vehicle use, road maintenance, etc... The USFWS has blatantly failed to evaluate the cumulative impacts of the proposed action.

In regard to Alternative C, since this Alternative violates USFWS policy it can't be selected and, therefore, there is no reason to provide comments on this section of the Draft EA.

6. The Draft EA fails to provide an adequate level of impact analysis, and EIS is required:

The management of mountain lions on the Kofa is highly controversial. The Draft EA has been under development by the USFWS, Bureau of Land Management, U.S. Department of Agriculture – Wildlife Services, and the AGFD since at least April 2008 (though it was determined to be required a year earlier in 2007) when the USFWS initially solicited scoping comments from the public.

This planning process was preceded by a separate analysis that resulted in the publication of the Investigative Report in April 2007. In addition, there was a proposal to hunt mountain lions on the Kofa and various instances of collared mountain lions being killed by the AGFD, ostensibly to aid the bighorn sheep population. Needless-to-say, all of these actions have been and continue to be of significant controversy.

The high level of public controversy attending the potential impacts of killing all of the mountain lions on the Kofa is one of several reasons why this action requires the preparation of an EIS. See 40 C.F.R. §1508.27(b)(4). Agencies must prepare an EIS whenever a federal action is “controversial,” that is, when there is a “substantial dispute [about] the size, nature, or effect of the major Federal action.” (Blue Mountains Biodiversity Project v. Blackwood, 161 F.3d 1208, 1212 (9th Cir. 1998).

Additional criteria that mandate the preparation of an EIS are also applicable in this case. These criteria, contained in the NEPA regulations, include whether the impacts may be both beneficial and adverse, the unique characteristics of the geographic area (e.g., designated wilderness), effects that are uncertain or involve unique or unknown risks, the likelihood that the action will establish a precedent for future actions with significant effects, whether the action is related to other actions within individually insignificant but cumulatively significant impacts, and whether the action threatens a violation of Federal, State or local law or requirements for the protection of the environment. 40 CFR § 1508.27(b)(1-10).

Additional Comments:

- 1. The AGFD cannot legally be involved in this planning process as a cooperating agency:**

NEPA implementing regulations define a “cooperating agency” as “any Federal agency other than the lead agency which has jurisdiction by law or special expertise with respect to any environmental impact involved in a proposal (or a reasonable alternative) for legislation or other major Federal action significant affecting the quality of the human environment.” 40 CFR §1508.5. The AGFD, of course, is not a federal agency yet it is identified in the Draft EA as a cooperating agency in this decision-making process. Draft EA at 2.

Though this designation is seemingly impermissible, since the AGFD is a cooperating agency it has certain responsibilities as such including complying with 40 CFR §1506.1. This regulation limits action that can be taken during a NEPA process. Specifically, it forbids an agency, lead or cooperating, from taking an action that would result in “adverse environmental impact(s)” or “limit the choice of reasonable alternatives.” *Id.* at §1506.1(a)(1) and (a)(2). Actions with significant environmental impacts can be taken while a NEPA process is underway but only if the action “is justified independently of the program,” “is itself accompanied by an adequate environmental impact statement,” and as long as the action “will not prejudice the ultimate decision on the program.” *Id.* at §1506.1 (c)(1-3).

The AGFD’s lethal removal of collared lion KM04 in early September 2009, well before the NEPA process had concluded was a violation of NEPA by limiting the choice of reasonable alternatives and prejudicing the ultimate decision on the program. On October 1, 2009 the AGFD was advised of this violation by several conservation organizations (See attached). If the USFWS played any role in the decision to remove lion KM04 then it too violated NEPA.

2. The USFWS should, at a minimum, terminate the current action and reevaluate this issue in the context of the future Comprehensive Conservation Plan for the Kofa:

The USFWS has yet to prepare a Comprehensive Conservation Plan (CCC) for the Kofa as required by the National Wildlife Refuge System Improvement Act of 1997. The Kofa CCC planning process is set to begin no later than 2012. The USFWS concedes that this lion management issue may ultimately be revisited during that planning process. Draft EA at 4.

Considering that a CCC is intended to provide a long-term plan for the overall management of a National Wildlife Refuge, the USFWS should abandon the current planning process, expedite initiation of its Kofa CCC process, and address lion, bighorn sheep, and other management issues holistically and comprehensively through that process.

Conclusion:

As the foregoing evidence demonstrates, there are an unlimited number of inadequacies and deficiencies inherent to the Draft EA and the proposal to kill “offending” lions. That action is not permissible under existing USFWS statutes or policies and, even if it were, the Draft EA does not satisfy the requirements of NEPA.

To address these deficiencies, the USFWS must, preferably, prepare an EIS to properly and comprehensively evaluate the full range of impacts associated with the proposed action and all reasonable alternatives. Alternatively, and at a minimum, the USFWS must consider preparing a supplemental EA to fill some of the significant gaps in its current analysis. Or, should it so choose, the USFWS could defer any decision on this proposal pending completion of the Kofa CCC which must comprehensively evaluate all of the factors that impact the Kofa bighorn sheep, mule deer, mountain lion, other wildlife, refuge habitats, and the entire ecosystem in a single document.

Thank you in advance for considering these comments.

Sincerely,

A handwritten signature in black ink, appearing to read "D.J. Schubert". The signature is fluid and cursive, with a large initial "D" and "S".

D.J. Schubert
Wildlife Biologist
Animal Welfare Institute

On behalf of:

Animal Defense League of Arizona
Animal Welfare Institute
The Humane Society of the United States
Mountain Lion Foundation
Sierra Club – Grand Canyon Chapter
Yuma Audubon