



Comments and Responses on the Draft Environmental Impact Statement

December 2007



Elk and Vegetation Management Plan
Rocky Mountain National Park • Colorado
Volume 2

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RESPONSES TO SUBSTANTIVE COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT

The Draft Elk and Vegetation Management Plan and Environmental Impact Statement (EIS) was released for public review in April 2006. The U.S. Environmental Protection Agency (EPA) published the Notice of Availability in the Federal Register on May 5, 2006 (71 FR 87). Its release initiated a formal 75-day comment period that ended on July 5, 2006. The comment period on the draft plan/EIS closed on July 5, 2006.

At the close of the comment period, the National Park Service began a content analysis of public and agency responses. The National Park Service received 2,675 responses to the draft plan/EIS, within which there were 3,146 comments. Comments were received by letter, through electronic mail, on comment forms collected at public meetings, as petitions, and by submission to the National Park Service planning website. Comment letters received included 2,615 from individuals, 3 from businesses, 14 from organizations, two from congressional representatives, seven from public agencies (including comments received from the U.S. Environmental Protection Agency and U.S. Fish and Wildlife Service), and one from a tribal government.

The most commonly addressed topics in the comments included Alternatives, Socioeconomics, and Purpose of and Need for the Plan. The most common issue that was raised (2,149 comments) by the public concerned those alternatives that were eliminated from further consideration in the plan/EIS. These comments were largely nonsubstantive in nature and generally supported or opposed an alternative. Of these comments, 1,085 were received in support of re-introduction of a self-sustaining wolf population into the park. This received the majority of comments due to a petition that contained approximately 1,000 signatures. Approximately 900 comments were received supporting allowing public hunting in the park, followed by 159 comments received asking that translocation of elk to other areas be considered. All of these were addressed in the draft plan/EIS in Chapter 2, "Alternatives Eliminated from Further Consideration" section and although the comments received on these were nonsubstantive in nature, the National Park Service has responded to these comments to further provide rationale for their dismissal.

Every comment was read and categorized in terms of its subject matter and content. A number was assigned to each comment, and a code was assigned to each different comment topic. After each document was coded, a series of steps were taken to determine whether the individual comment was substantive or nonsubstantive, according to the criteria set forth in the Council on Environmental Quality regulations (40 CFR 1500). Substantive comments are those that raise an issue regarding law or regulation, agency procedure or performance, compliance with stated objectives, validity of impact analyses, or other matters of practical or procedural importance. Nonsubstantive comments are those that offer opinions or provide information not directly related to issues or impact analyses. Nonsubstantive comments were acknowledged and considered, yet they did not need a response. Substantive comments were provided with a response. Altogether 142 comments were considered substantive. The purpose of reading, coding, and analyzing the contents of the comment letters was to assist the National Park Service in determining if the substantive issues raised by the public warranted further modifications and study of alternatives, issues, and impacts. With the information provided through the review process, the National Park Service and agencies provided further clarification to areas of the plan/EIS text, particularly the section in Chapter 2, "Alternatives Eliminated from Further Consideration" section.

INDEX OF COMMENT LETTERS BY CATEGORY OF AUTHOR

Business Comment Letters

Mountain Home Café — 0110
Tank's Capture and Quarantine — 0819
Yellow Wood Guiding — 0003

Organization Comment Letters

Alpine Anglers — 0854
Animal Welfare Institute — 0804
Audubon Society of Greater Denver — 1159
Colorado Bowhunting Association — 1414
Colorado Outfitters Association — 0814
Defenders of Wildlife — 0805
Estes Valley Improvement Association, Inc. — 0904
Humane Society of the United States — 0808
National Rifle Association — 0822
National Wildlife Federation — 0815
Safari Club International — 0818
Sinapu — 0806
Wilderness Workshop — 0821
Wolf Advocate — 0834

American Indian Comment Letters

Rosebud Sioux Tribe — 0288

Public Agency and Congressional Representative Comment Letters

Boulder County Parks and Open Space — 0816
Colorado Division of Wildlife — 0809
Colorado Farm Bureau — 0817
Congressman, Honorable Peter DeFazio — 1131
Congressman, Honorable Mark Udall — 0807
Larimer County Environmental Advisory Board — 0001
Larimer County Farm Bureau — 0005
Region 8, U.S. Environmental Protection Agency — 0823
U.S. Fish and Wildlife Service — 1415

ORGANIZATION OF COMMENTS AND RESPONSES

This volume contains a summary of the substantive comments received on the Draft Elk and Vegetation Management Plan/EIS and the National Park Service's and other agencies' responses to those comments. The substantive comments received are consolidated into particular topics and issues assigned by the planning team. Some comments were duplicative of others received and therefore only one representative comment is presented. In most cases the comments are verbatim as received in the correspondence and are represented as quotations. For some the comments have been paraphrased. An index is provided that identifies the documents received by tribes, businesses, organizations, public agencies, and congressional representatives.

The comment and response section is followed by reprinted copies of the different documents or comment letters received from those groups identified above. Due to the number of documents received from individuals, these letters have not been reprinted but are on file at Rocky Mountain National Park.

Within some responses to comments, readers are directed to a particular section, chapter, table, figure, or appendix to find more information about a particular subject. Those referrals pertain specifically to Volume 1 of this Final Environmental Impact Statement.

PURPOSE OF AND NEED FOR ACTION

TOPIC: PURPOSE OF AND NEED FOR ACTION

Issue: Need for Action Based on the Elk Population Size

Comment: Many comments questioned why action was needed, as it is perceived by members of the public that the elk population has decreased since 2002 and is within "suitable limits."

Response: The population size since 2002 based on winter estimates ranges between 1,700 and 2,200 elk. The concern of the commenter is that management actions would be taken although the population is currently within the natural range. The level of management action that would be taken to control the population size would be adjusted annually based on the current population level estimates. Based on adaptive management, management actions to control the population size would not be taken if the population size was within the range specified within the alternative. Since release of the draft plan/EIS, the National Park Service has reconsidered its preferred alternative based on concerns expressed by the public and further evaluation of the ability of the park service to implement an alternative given current staff resources and funding constraints. The final plan/EIS preferred alternative is the modified Alternative 3, which would achieve an overall elk population size of 1,600 to 2,100 elk with 600 to 800 elk in the park on the winter range. Based on annual monitoring of the population size, if the population is within this range and vegetation objectives were being met, no further population reductions would be taken. However redistribution actions would continue to occur to reduce high concentrations of elk.

Public Comment:
1186A

Commenter:

Affiliation:
Individual

Issue: Need for the Plan – Elk Effects on Vegetation

Comment: “No reasonable reduction in elk on the winter range will end the damage to aspen and willow stands. Elk damage to aspen and willow on the winter range in Rocky Mountain National Park was cited in the 1930s as justification for reductions (Stevens 1980). At that time, the population in the Park was estimated to be 1,100 elk. Maintaining the elk population at 500 to 700 animals between 1944 and 1967 did not end damage to willow and aspen (Stevens 1980). Elk depend on climax montane grasslands, meadows, and shrub complexes on the winter range in Rocky Mountain National Park. These stands are in stable, good condition (Stevens 1980, 1968-1992). It is not wise or responsible to manage elk on the basis of habitats that do not provide a significant proportion of their nutrition (Singer and Cates 1995).”

Response: Under the final plan/EIS preferred alternative, Alternative 3, the park subpopulation would be reduced to range between 600 and 800 animals, which ecosystem modeling estimates to be the level necessary to allow recovery of vegetation on the elk range in combination with fences to protect willow and aspen. The commenter is correct in that aspen and montane riparian willow do not make up a significant portion of the diet of elk, as was presented in the plan/EIS. However, as detailed in the plan/EIS, research conducted within the park showed that elk affect the ability of aspen to regenerate (W.L. Baker et al. 1997; Olmsted 1979, 1997) and the ability of riparian willow to reproduce and grow (Cooper et al. 2003) on the primary winter and summer ranges. In addition, Baker Et al. 1997 and winter range surveys during the reduction efforts referred to by the commenter indicated aspen were reproducing and willow conditions were improving. Recent research conducted in the park has also suggested that current elk consumption of herbaceous vegetation in montane riparian willow and upland shrub communities on the primary winter range of 55% and 60%, respectively, may result in herbaceous communities on the primary winter range that are not sustainable (Singer et al. 2002).

Public Comment:
820C

Commenter:

Affiliation:
Individual

Issue: Demonstrating Need for the Plan

Comment: “The Draft EIS provides ample evidence demonstrating the proposed slaughter of elk is not necessary or consistent with NPS statutory and regulatory mandates. This evidence demonstrates that the elk population has declined since 2002, that aspen may not be a natural component of [Rocky Mountain National Park], that [Rocky Mountain National Park] does not have adequate baseline vegetation monitoring data, and that there are an abundance of non-lethal strategies that [Rocky Mountain National Park] should attempt to address alleged elk herbivory impacts on particular species before it embarks on its proposed elk slaughter.”

Response: The number of elk wintering in the park and Estes Valley has declined since 2002, ranging between 1,700 and 2,200 elk. The management plan is based on an adaptive approach. As such, management actions to control the population size would not be taken if the population size were within the range specified within the alternative and vegetation objectives were being met. Since release of the draft plan/EIS, the National Park Service has reconsidered its preferred alternative based on concerns expressed by the public and further evaluation of the ability of the park service to implement an alternative given current staff resources and funding constraints. The final plan/EIS preferred alternative is the modified Alternative 3, which would achieve an elk population size of 1,600 to 2,100 elk gradually over the 20-year planning period. This alternative would involve lethal reduction of up to 200 elk per year. With this population level which is on the high end of the natural range, fences would need to be installed to protect willow and aspen on primary summer and winter ranges. The development of this alternative is based on empirical research (Singer et al. 2002) and predictions of ecosystem modeling (Coughenour 2002, Weisberg and Coughenour 2003). The plan/EIS recognizes that the time period for establishment of the aspen clones in the park is uncertain, however until further information can be gathered, the National Park Service will take a conservative approach to preserve the clones.

A large amount of baseline vegetation data have been collected on the primary winter range. Although data have not been collected on willow habitat types on the summer range, there have been observations by research scientists studying the park and park staff that similar effects are occurring on the summer range in the Kawuneeche Valley. As part of the management plan, monitoring and establishing baseline data on the condition of willow habitats on both the primary winter and summer elk range including the Kawuneeche Valley would be conducted prior to any management actions. See also response to comment 804L under “Issue – Scope of the Analysis” below.

The National Park Service and cooperating agencies considered a wide range of alternatives, including those that would involve no lethal removal of elk. However, during internal scoping and through the process of developing the alternatives, state and federal policies, logistical and economic challenges, and unacceptable levels of impacts resulted in the dismissal of alternatives that solely relied on non-lethal means such as translocation of elk to other areas, maximum manipulation of habitat using fences, re-introducing a self-sustaining wolf population, and maximum use of fertility control. Detailed discussion of why these alternatives were found to be unreasonable for elk and vegetation management is discussed in depth in the “Alternatives Eliminated from Further Consideration” section of the plan/EIS.

Based on annual monitoring of the population size, if the population is within this range and vegetation objectives were being met, no further population reductions would be taken and non-lethal methods such as fences and redistribution techniques would be employed to protect vegetation on the primary elk range. In addition, this alternative would pursue the use of other tools such as fertility control or wolves as adaptive management tools that would reduce or eliminate the need for lethal reduction of elk. See also response to comments on consistency with laws and policies in “Purpose of and Need for Action” section of this volume.

Public Comment:
804E, 804S

Commenter:
Animal Welfare Institute

Affiliation:
Organization

Comment: “[Rocky Mountain National Park] is not an intact natural system not just because it does not comprise a complete ecosystem but also because of a variety of anthropogenic impacts that affect the park each day. Whether it is the diversion of water for local cities or agriculture, pollution impacts from external sources, the lack of a complete assemblage of native ungulates (e.g. bison), anthropogenic barriers to natural elk immigration and emigration, and the very existence of roads, buildings, and other infrastructure within the park, the true restoration natural conditions would require far more than killing elk or reintroducing a token and intensively managed wolf population.”

Response: This is true. However, a full restoration of natural conditions within all of Rocky Mountain National Park is not the scope of this project. The scope of the analysis as defined in the DEIS is not the entire park but rather the primary winter and summer range that the Rocky Mountain National Park/Estes Valley elk population uses. In the “Purpose of and Need for Action” and “Alternatives” chapters, the National Park Service defined, based on the best available science and through modeling, the natural conditions that would have existed within this area of the park given current habitat. The ecosystem modeling predicted that the elk population, under natural conditions given the current habitat, would fluctuate between 1,200 and 2,100 animals and, with an intact predator base, they would be less sedentary. The modeling also showed that, with a smaller and less dense elk population, aspen and willow on the primary elk range would be more abundant with more structural complexity. All action alternatives, including the preferred alternative, would strive to achieve these desired conditions.

Public Comment:
804J

Commenter:
Animal Welfare Institute

Affiliation:
Organization

PURPOSE AND NEED FOR ACTION

Comment: “Chronic wasting disease is a legitimate concern for the future of elk in [Rocky Mountain National Park]. Even the National Park Service, however, concedes that it is unknown whether chronic wasting disease is a naturally occurring pathogen in wildlife populations. Draft EIS at 20. If it is naturally occurring, the NPS natural regulation mandate should allow the disease to persist regardless of its potential impact on elk or other species. Disease is known to be a natural factor that can exert control on wildlife populations. The National Park Service needs to make a determination as to whether chronic wasting disease is a naturally occurring pathogen and, if it determines it is naturally present in the elk population, it cannot use chronic wasting disease as justification for its elk slaughter plan.”

Response: Chronic wasting disease management is beyond the scope of this document as was elaborated in the “Purpose of and Need for Action” chapter, “Issues Considered but Not Evaluated Further” section of the plan/EIS. In 2002 the National Park Service made the decision to manage chronic wasting disease as a non-native disease based on the best available scientific evidence (Director’s Memo July 26, 2002). In 2006, this decision was formalized in the Management Policies for the National Park Service which clearly states that chronic wasting disease should be managed in the parks where it occurs as an exotic disease (Management Policies 2006 section 4.4.4). The plan recognizes the opportunity to further collect information on prevalence of the disease in the elk population within the framework of the action alternatives, but chronic wasting disease is not the justification for elk and vegetation management.

Public Comment:
804Q

Commenter:
Animal Welfare Institute

Affiliation:
Organization

Comment: “What is in dispute, however, is whether aspen is a naturally occurring species in [Rocky Mountain National Park]. ... The [National Park Service] could have - and should have - taken the opposite position that it would not seek to restore or recover aspen habitat until and unless it was demonstrated that aspen were native to the park.”

Response: Aspen are native to the park, however what is in question is the historical presence of aspen on the primary elk range. The commenter is correct in that there is uncertainty as to when aspen established in this area of the park, how its distribution may have fluctuated, and whether aspen were present in the grasslands of the elk range prior to elk extirpation by 1880. It is the management decision of the National Park Service to be conservative in its management approach to resource protection. Until more information can be obtained, the non-coniferous-associated aspen on the elk range would be protected under all action alternatives to prevent the permanent loss of the existing clones.

Public Comment:
804R

Commenter:
Animal Welfare Institute

Affiliation:
Organization

Issue: Defining Natural Conditions

Comment: “The EIS states the primary purpose of this plan is to "restore and/or maintain the elk population to what would be expected under natural conditions to the extent possible." (EIS pg. vii). However, the "natural", pre-European, conditions of both the elk and vegetation in the area now encompassed in [Rocky Mountain National Park] are virtually unknown The word "natural" is not applicable to any current or proposed action or aspect of elk ecology in [Rocky Mountain National Park]. Even the actual elk in question are human reintroductions. Therefore the aim of this plan should be an attempt to restore elk population numbers and environmental impacts to levels that are thought to reflect the historical condition in the park. Being that the

"natural" condition of the park is purely subjective a diverse-self-sustaining ecosystem is a more realistic goal."

Response: Although the National Park Service cannot establish with absolute certainty how many elk would be in the Estes Valley had no development occurred, such certainty is not necessary when determining how to manage the elk population given existing conditions. In the face of uncertainty, the National Environmental Policy Act (NEPA) requires federal agencies to obtain reliable scientific information on which to base the analysis in environmental impact statements. The draft EIS included such information, and the National Park Service reasonably may rely on it in making its decision on the elk and vegetation management plan. Modeling has predicted that historic elk population in the Estes Valley prior to European settlement fluctuated between 1,500 and 3,500 elk. Since that time, the habitat of the area has changed and has been lost due to development. The existing remnant habitat cannot support this number of elk. The National Park Service defined, based on the best available science and through modeling, the natural conditions the plan strives to achieve. These natural conditions are defined both in the "Purpose of and Need for Action" chapter and in the desired conditions contained in the "Alternatives" chapter of the EIS. The ecosystem modeling has predicted that the elk population, under natural conditions given the current habitat, would fluctuate between 1,200 and 2,100 animals and, with an intact predator base, they would be less sedentary. With such a smaller and less dense elk population, aspen and willow on the primary elk range would be more abundant with more structural complexity. All action alternatives, including the preferred alternative, aims at achieving these desired conditions.

Public Comment:

808C

Commenter:

Humane Society of the
United States

Affiliation:

Organization

820Q

Individual

Comment: The EIS states that "under natural conditions, the elk population size and distribution would be controlled by a number of factors, including predators such as wolves and grizzly bears and hunting by Native Americans." (EIS pg 7). While this is true, the current elk population of 1700 - 2200 is well within the range of the historic elk population for the area which is said to fluctuate between 1500-3500 (EIS pg 8+13). The park has also recorded major population fluctuations within the past decade. Obviously, something is currently regulating these populations in the absence of natural predators and hunting pressure. Data from Yellowstone National Park and Banff National Park in Canada reveal that climatic variation may have a major effect on elk populations.

Response: As stated in response to comment 808C above, the historic range of the elk population cannot be achieved because the habitat is not available to support such a high number of elk. The natural range of variation for the elk population as stated in the plan/EIS (1,200 to 2,100 elk) has been modeled based on the current conditions of habitat and weather. It should also be noted that it is not only the size of the population that has prevented the recovery of willow and aspen on the primary elk range. The elk population does not reflect behaviors that would be expected under natural conditions in the presence of predators and hunting. Without a stimulus to cause redistribution of the population and prevent large concentrations of elk, scientific research conducted in the park indicates that high densities of elk, particularly in areas of the core winter range, are having significant adverse effects on vegetation. The elk have also become less migratory. Elk that are remaining on the winter range in the summer have been shown to severely inhibit the growth of vegetation, as high levels of herbivory are taking place during the growing season. Under the modified Alternative 3, the final plan/EIS preferred alternative, the National Park Service through reduction of the population to the high end of the natural range, use of fences to protect willow and aspen, and redistribution actions would restore to the

PURPOSE AND NEED FOR ACTION

extent possible natural conditions.

Public Comment:
808D

Commenter:
Humane Society of the
United States

Affiliation:
Organization

Issue: Compliance with Laws, Policies, and Regulations

Comment: “In the past, wolves have played an important role in maintaining a balanced ecology. Today's ecological system is unbalanced, and we are seeing some of the side-effects of that imbalance. Aside from the burgeoning elk populations, mountain lions have become a growing threat along the Front Range as they lose their fear of dogs and realize that they have little competition at the top of the food chain; wolves are a natural control on the cougars, and as wolves re-introduced to [Rocky Mountain National Park] would necessarily roam outside the park, they would have a controlling influence on the cougar population. As a World Biosphere Preserve, [Rocky Mountain National Park] should be taking the lead in creating a complete and balanced ecological system, not in wasteful and largely indiscriminate shooting of elk.”

Response: The biosphere reserve concept designates areas to preserve genetic integrity and biological diversity and provide a seed source of genetic diversity for the reserve and surrounding areas. The National Park Service believes that the elk and vegetation management plan is consistent with this concept or philosophy. Through restoration of vegetation on the primary elk range in the park, habitat for a variety of other species is being protected and thereby preserving genetic integrity and the biodiversity these habitats support. The alternatives presented in the draft plan/EIS were developed using a population model that allowed the National Park Service to determine how many elk could be removed from the population over specific timeframes without risk of extirpation of the population. In addition, using an adaptive management approach based on annual monitoring of the elk population size and demographics by both the National Park Service and the Colorado Division of Wildlife would further ensure that the elk population is managed within the natural range of variation. The National Park Service did consider re-introduction of a self-sustaining wolf population during development of the plan/EIS. Please see responses to comments regarding use of a self-sustaining wolf population, in the “Alternatives: Alternatives Eliminated from Further Consideration” section of this volume for rationale as to why this was not considered a reasonable alternative at this time.

Public Comment:
436D

Commenter:

Affiliation:
Individual

Comment: The [National Park Service] failed to cooperate with other federal and state agencies in developing an alternative that is consistent with the Organic Act. Although the DEIS, Chap. 1 page 13, illustrates that the [National Park Service], acting as the lead agency, signed a Memorandum of Understanding with several agencies regarding cooperative planning, for reasons explained above, the preferred alternative fails to comply with the National Environmental Policy Act in regard to such cooperative agency status. The Plan does not take into account "natural and social sciences...in planning..." as required by Section 101. This claim is based on the fact that if a "systematic" and "interdisciplinary approach" were used, the restoration of a self-regulating wolf population would have been fully considered, and perhaps chosen as the preferred alternative.

Response: The National Park Service and cooperating agencies have met and continue to meet the terms of the Memorandum of Agreement by cooperating in the development of plan and the environmental impact statement

(see Appendix A of the plan/EIS for a full description of the agreement made between the agencies). The National Park Service plans to continue to cooperate in the management and monitoring of the elk population during implementation of this plan as well as continuing their cooperation and collaboration with the Colorado Division of Wildlife and the U. S. Forest Service in the regional management of wildlife including elk as members of the Rocky Mountain Council for Cooperative Wildlife Management. That said, only the National Park Service will be bound by its decisions in the upcoming Record of Decision. The National Park Service has sole authority for the management of elk while they are within Rocky Mountain National Park and will continue to cooperate and make recommendations on the management of elk outside park boundaries. NPS policies and laws provide authority for the park to cooperate with other federal and state agencies on management issues of mutual concern. The plan/EIS does comply with the National Environmental Policy Act and NPS policies with regards to cooperation with other agencies. National Environmental Policy Act requires agencies to work together in development of an environmental document. The Council on Environmental Quality's Forty Questions (Q22a), states that "Section 1506.2 strongly urges state and local agencies and the relevant federal agencies to cooperate fully with each other. This should cover joint research and studies, planning activities, public hearings, environmental assessments and the preparation of joint EISs under National Environmental Policy Act..." The agencies in accordance with National Environmental Policy Act and per the Memorandum of Agreement have cooperated fully through the planning process in examining and determining the purpose and need for the plan, developing the alternatives, participating in public workshops and meetings, and in preparing the environmental impact statement.

The plan/EIS does take into account natural and social sciences as presented in the issues and concerns raised by the public and agencies during scoping, as presented in the "Purpose of and Need for Action" chapter. The plan/EIS provides a comprehensive examination of impacts of alternatives on natural and social resources as presented in the "Environmental Consequences" chapter. The plan/EIS also provides an evaluation of the environmentally preferred alternative which provides an evaluation of the alternatives according to the six criteria presented in section 101 of National Environmental Policy Act. There is, however, no requirement that the National Park Service must choose the environmentally preferred alternative as the preferred alternative.

The National Park Service did consider an alternative that would establish a self-sustaining wolf population as a means of managing elk and restoring vegetation on the primary elk range. Over a two-year period, the National Park Service and cooperating agencies met and collaborated in the development of the alternatives, which included discussion and evaluation of a self-sustaining wolf population to manage elk and vegetation. The National Park Service held a formal workshop in March 2005 with a panel of experts from multiple agencies to discuss the use of wolves as a means of managing the elk population. Based on this meeting and numerous other meetings with technical experts, the National Park Service and the experts agreed that at this time, without support from neighboring federal, state, and local agencies, the reintroduction of a self-sustaining wolf population would not be feasible. In addition, the National Park Service considered the concerns by neighbors of perceived and real threats; the degree of expected conflict with livestock and domestic pets; the limited suitable habitat available for wolves outside the park; and the intensive management that would likely be required to respond to external issues. As a result of these deliberations, this alternative was eliminated from further consideration. Please refer also to responses to comments for further discussion of the National Park Service's consideration of re-introducing a self-sustaining wolf population into the park in the "Alternatives Eliminated from Further Consideration, Issue: Self-sustaining Wolf Population" section of this volume.

Public Comment:
806F

Commenter:
Sinapu

Affiliation:
Organization

PURPOSE AND NEED FOR ACTION

Comment: “The [National Park Service] plan fails to mitigate other adverse impacts as proposed by the Draft Plan. First, the Draft Plan insufficiently attempts to mitigate ethical concerns implicated by the proposed lethal control methods (under Alternative 2), which could potentially be very high in [Rocky Mountain National Park] because lethal control is inconsistent with the concept of wilderness. Second, the Draft Plan fails to mitigate the adverse impacts that fencing would have. The fencing will be aesthetically unpleasing to park visitors and could interfere with movement and activities of wildlife other than elk. The restoration of a self-regulating wolf population would avoid these adverse impacts while upholding the conservation mandate of the [National] Park Service and furthering the recovery of at-least one endangered species (the gray Wolf).”

Response: Lethal control of elk in the circumstances described in the draft environmental impact statement is supported by the minimum requirement analysis presented in Appendix G of the final plan/EIS and consistent with wilderness. The final plan/EIS preferred alternative, the modified Alternative 3, is consistent with the Wilderness Act, as actions taken to manage the elk population would promote the recovery and protection of vegetation within wilderness areas on the primary elk range. Director’s Order 41 sets forth guidance for natural resource management within wilderness areas as it states, “Management intervention should only be undertaken to the extent necessary to correct past mistakes, the impacts of human use, and the influences originating outside of wilderness boundaries” (NPS 1999a). To assess the impacts on wilderness value and character, in compliance with the Wilderness Act and NPS policies, the National Park Service has prepared a Wilderness Requirement Analysis for implementation of the preferred alternative. This analysis determines at a programmatic level the appropriate and necessary actions that would be conducted in wilderness areas on the elk range and defines the equipment that would be needed for the action that minimize adverse impacts on wilderness resources and character.

The plan/EIS fully evaluated the impacts of fences on wilderness values and character, visitor experience, and other wildlife. The fence design as stated in the “Alternatives” Chapter, “Elements Common to All Action Alternatives” section, would allow the greatest access to fenced areas by other species of wildlife but would prevent use of the area by large animals such as elk and moose.

According to the NPS Management Policies (2006), the conservation mandate of the National Park Service “applies all the time with respect to all park resources and values, even when there is no risk that any park resources or values may be impaired. NPS managers must always seek ways to avoid, or to minimize to the greatest extent practicable, adverse impacts on park resources and values. However, the laws do give the Service the management discretion to allow impacts to park resources and values when necessary and appropriate to fulfill the purposes of a park, so long as the impact does not constitute impairment of the affected resources and values” (1.4.3). The Management Policies go on to define “park resources” as, among other things, the wildlife and ecological and biological processes that created and continue to act upon the park to the extent present in the park” (1.4.6). Because gray wolves are not present in the park, the conservation mandate of the park at this time would not require the restoration of a self-regulating wolf population. Please see responses to comments regarding use of a self-sustaining wolf population, in the “Alternatives: Alternatives Eliminated from Further Consideration” section of this volume.

Public Comment:
806E

Commenter:
Sinapu

Affiliation:
Organization

Comment: “Remarkably, though the Leopold Report from the late 1960s compelled the [National Park Service] to rediscover its natural regulation mandate, the elk slaughter plan under consideration by the [Rocky Mountain National Park] is entirely antithetical to this mandate. The [National Park Service] claim that its natural regulation mandate justifies the intentional manipulation of park wildlife and the park ecosystem to

achieve a desired condition for the park is entirely inconsistent with the proper interpretation of the natural regulation mandate.”

Response: The Leopold Report recommended allowing wildlife populations within national parks to “self-regulate” when possible, but recognized that hunting outside park boundaries and some management lethal reductions within park boundaries occasionally may be necessary. The report goes further in stating that “it must be recognized that predation alone can seldom be relied upon to control ungulate numbers, particularly the larger species such as bison, moose, elk, and deer; additional artificial controls frequently are called for.” The National Park Service has no natural regulation mandate directing management of wildlife in the National Park system, although individual parks may find it appropriate to manage wildlife by not taking management actions. . NPS Management Policies (2006) recognize that due to human disruption of natural processes, more manipulative management of wildlife in units of the National Park system may be necessary. As such, section 4.4.2 of the Management Policies allows for the manipulative management of wildlife when “a population occurs in an unnaturally high or low concentration as a result of human influences (such as loss of seasonal habitat, the extirpation of predators, the creation of highly productive habitat through agriculture or urban landscapes) and it is not possible to mitigate the effects of the human influences.”

Public Comment:

804A

Commenter:

Animal Welfare Institute

Affiliation:

Organization

Comment: “Under this line of [court] cases, the proposed plan is unlawful under the Organic Act because lethal control methods and artificial fencing (when compared to the restoration of a primary natural ecological process such as wolf predation) do not promote the [National Park Service] duty of preservation, nor were these types of uses in the park considered by Congress when the Organic Act was enacted. . . . Therefore, based on the express mandate of preservation embodied in the Organic Act, [National] Park Service policies and existing case law, the preferred alternative the [National] Park Service selected is not a reasonable interpretation of the Organic Act and is thus arbitrary and capricious, falling outside the [National] Park Service’s statutory authority.”

Response: We believe the proposed management actions fully comply with the mandates of the Organic Act. As stated in the response above to comment 804A, NPS Management Policies (2006) recognize the ability of the National Park Service to take manipulative management actions when a population of wildlife occurs in an unnaturally high level as a result of human influences. These management policies are based on and fully consistent with the Constitution, public laws, treaties, proclamations, executive orders, regulations, and directives of the Secretary of the Interior and the Assistant Secretary for Fish and Wildlife and Parks.

Public Comment:

806B

Commenter:

Sinapu

Affiliation:

Organization

Comment: “The [National Park Service] cannot engage in a massive elk slaughter operation - primarily to be conducted under the cover of darkness, using both standard firearms and firearms equipped with silencers, mainly in the fall but potentially year round -- when there is absolutely no evidence to suggest that the current elk population is at an excessively high number or causing long-term and permanent damage to park ecology without violating the NPS Organic Act, its implementing regulations, and NPS policies. Indeed, considering the existing population is within natural variability (as determined through a modeling exercise) and that both

PURPOSE AND NEED FOR ACTION

subpopulations are at or below carrying capacity due to food limitations or other reasons, there is simply no factual basis for any further evaluation of the proposed elk slaughter plan.”

Response: As stated in the plan/EIS, the park subpopulation has been estimated to be at the food-limited carrying capacity and the town subpopulation is estimated to be at or below the carrying capacity. However, a population at or within the carrying capacity of the habitat does not necessarily indicate a balance in the elk-to-habitat relationship or that it is within the range of natural variation. Human-induced changes to the environment have had a large influence on habitat conditions even though ecological carrying capacity may be adequate to support the elk population. Ecosystem modeling has shown that with wolves present, the elk population would be 15% to 40% below the carrying capacity.

The elk population size is not the only factor resulting in degradation of the vegetation on the primary elk range. Elk densities in the localized area of the primary winter range are considered to be extremely high (Monello et al. 2005, Singer et al. 2002). This concentrated use of habitat particularly on the core winter range is inhibiting the growth of willow and aspen. This has been further discussed in response to comment 804L in the “Purpose and Need, Issue: Scope of the Analysis” section of this volume. These high densities, a lack of native predators and hunting prohibitions in the park and in the town of Estes Park can have a large effect on vegetation conditions although the carrying capacity is adequate to support the population. The National Park Service does believe that sufficient evidence regarding the effects that high levels of elk herbivory on vegetation on the primary elk range has been provided in the plan/EIS to justify the need for action, as has been presented in response to comments 820M in the “Elk Population, Issue: Elk Densities and Elk Movements” and 804V in the “Hydrology, Issue: Management Actions Effects on Hydrology” sections of this volume. It should be further clarified that the entire park ecology as referenced by the commenter is not being affected by the Rocky Mountain National Park/Estes Valley elk population. The elk and vegetation management actions would be implemented within park boundaries only on the primary elk range as presented in the “Purpose of and Need for Action” chapter and as indicated on Figure 1.1 in the plan/EIS.

The population size since 2002 based on winter estimates ranges between 1,700 and 2,200 elk. The concern of the commenter is that management actions would be taken although the population is currently within the natural range. The level of management action that would be taken to control the population size would be adjusted annually based on the current population level estimates. Based on adaptive management, management actions to control the population size would not be taken if the population size was within the range specified within the alternative and vegetation objectives were being met. Since release of the draft plan/EIS, the National Park Service has reconsidered its preferred alternative based on concerns expressed by the public and further evaluation of the ability of the National Park Service to implement an alternative given current staff resources and funding constraints. The final plan/EIS preferred alternative is the modified Alternative 3, which would achieve an elk population size of 1,600 to 2,100 elk with 600 to 800 in the park subpopulation. Based on annual monitoring of the population size, if the population is within this range and vegetation management objectives are being met, no further population reductions would be taken. However redistribution actions would continue to occur to reduce high concentrations of elk.

Public Comment:
804N

Commenter:
Animal Welfare Institute

Affiliation:
Organization

Comment: “...the Organic Act to explicitly allow for the "destruction of such animals and of such plant life as may be detrimental to the use of any Parks..." 16 U.S.C. 3. This statute exists because it was the intent of Congress in promulgating the Organic Act to ensure that the destruction of wildlife within national parks, unless explicitly allowed for in a park's enabling legislation, would only occur when the animal or animals were demonstrated to be detrimental to the use of any park. Such a determination requires absolute and irrefutable

proof of a significant adverse impact to the park, park wildlife, or other park resources that is detrimental to the park's use.”

Response: Please refer to the response to 0806 B. In addition, numerous scientific studies used to support the analysis in the environmental impact statement establish that the concentration of elk within the park is adversely affecting the vegetation structure of the areas occupied by the elk. The Service believes these studies establish the detriment to the park required by 16 U.S.C. § 3.

Public Comment:
804B

Commenter:
Animal Welfare Institute

Affiliation:
Organization

Comment: “...promoting the park as potentially high-quality bird habitat if only there weren’t so many elk is troubling hyperbole. Rocky Mountain never was and never can be a premier bird habitat, in my estimation. Other parks and many wildlife refuges are better suited for birds although these units are devoid of scenic grandeur, elk, bighorn sheep and mountain glory.”

Response: As stated in the National Park Service Organic Act, it is the purpose of the National Park Service “... to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.” This act applies to all wildlife, including birds.

The plan/EIS provides ample scientific evidence demonstrating that elk are having adverse effects on aspen and montane riparian willow habitat on the core winter range, resulting in an inability of aspen to regenerate and montane riparian willow to reproduce and grow. With the high level of elk herbivory, montane riparian willow is being converted to grasslands. Riparian habitats in particular support the highest level of songbird diversity of any western habitat type, while being one of the rarest (Leukering and Carter 1999). Bird species richness is also known to be significantly higher in aspen than in conifer habitats (Turchi et al. 1994). If this habitat is lost, those species that depend upon it will also be impacted. Protecting vegetation that provides habitat for wildlife, including birds, on the primary elk range is therefore in line with fulfilling the park’s mission and meeting objectives of this plan/EIS.

Public Comment:
355D

Commenter:

Affiliation:
Individual

Comment: Concern was expressed by a number of commenters that actions by the National Park Service such as removing animals at night and using bait are in violation of Colorado regulations regarding hunting of wildlife.

Response: Management of wildlife within the boundaries of the park is under the jurisdiction of the National Park Service and actions taken to manage the elk population within the park by the National Park Service do not involve nor should they be construed as hunting. Outside of the park, wildlife management, including hunting and wildlife-damage cases, is under the authority of the Colorado Division of Wildlife. This authority extends onto the Arapaho and Roosevelt National Forests. The U.S.Forest Service has the authority to manage wildlife habitat on the national forest, but, generally, the management of the wildlife itself is the responsibility of the Colorado Division of Wildlife. The National Park Service cooperates with the state regarding wildlife

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management as directed in NPS Management Policies 8.2.2.6 and will continue to do so in the future.

It is important for readers to understand the differences between public hunting and culling activities undertaken by the National Park Service and their authorized agents. Although public hunting and culling are both used as conservation tools in ungulate management, there are differences between hunting and culling that must be clarified. Hunting is a recreational activity administered by state wildlife agencies through licenses and it involves fair chase and the taking of meat by the individual hunter. Culling, on the other hand, is a tool used to reduce populations that have exceeded their carrying capacity. It is a very controlled and structured activity, not a recreational activity like hunting, to minimize and/or prevent impacts on other members of the public and other resources. Because of the controlled nature of the activity, the proven skill of those authorized to take action, and the ability to be flexible in timing, location, and choice of management tools, culling actions are more efficient and potentially safer than hunting. Another important distinction is that carcasses and/or meat resulting from culling actions can be donated through an organized program to eligible recipients. More details and explanation of the differences between hunting and culling activities are provided in Appendix H of the plan/EIS.

Public Comment:
839G, 1167A

Commenter:

Affiliation:
Individual

Issue: Objectives in Taking Action

Comment: “Objectives and in some cases actions are not clearly defined. Alternatives are vague on the amount and timing of fencing, and on what constitutes a natural level of concentration of elk on winter ranges, "recovery" of willow, "recovery" of aspen or "recovery" of beaver. The Draft EIS states that reduction of elk herbivory on herbaceous vegetation is an objective (page viii), however, negative impacts of elk foraging on herbs is not documented in the Draft EIS, the need for reduction of elk foraging is not established, and the amount of reduction desired is not defined.”

Response: The EIS does not detail the amount of fencing needed and the timing of such installation because it would be done adaptively. The need to fence areas of aspen and willow under the preferred alternative would be based on an evaluation of the response of aspen and willow on the primary elk range to management actions. As such, the final plan/EIS presents a worst case scenario of up to 600 acres of aspen and willow under the modified Alternative 3, the preferred alternative, which could be fenced to allow for a full evaluation of the effects that fences would have on park resources. Under all action alternatives, monitoring of vegetation communities would provide the information necessary to determine how many acres of willow or aspen on the primary elk range need to be protected. Similarly, monitoring data would provide the information necessary to determine when fences can be removed once communities are restored.

Objectives are clearly defined in the plan/EIS. The objectives presented in the “Purpose of and Need for Action” chapter of the plan/EIS were developed based on an understanding of the park’s enabling legislation and the laws and policies that direct management of wildlife in the park. From these specific statements of the goals of the plan, the National Park Service developed further detailed identification of the desired conditions for elk and vegetation that the plan must strive to accomplish over the 20-year planning horizon. The desired conditions were provided in the plan/EIS in the “Alternatives” chapter, “Elements Common to All Action Alternatives” section. The thresholds for vegetation that indicate whether management actions are progressing toward meeting the desired future condition are what is believed by the National Park Service to be reflective of natural conditions. Thresholds for elk densities were established based on what level would be necessary to allow vegetation to recover to meet vegetation management objectives. The recovery of beaver was not identified as an objective of the plan, and therefore no threshold or desired future condition has been established for that resource.

The plan/EIS provided an evaluation of elk herbivory on herbaceous vegetation within the primary elk range. In the “Affected Environment” chapter, “Vegetation” section, the consumption rates of elk on herbaceous vegetation has been presented. In riparian willow, offtake of herbaceous vegetation has been reported to be 55%, and in upland shrub communities it is about 60% (Singer et al. 2002). Based on data collected from comparable systems, this type of vegetation can withstand offtake rates of 40% but not 60%. Therefore, as stated in the plan/EIS, the consumption rates in the park are considered to be extremely high and may alter herbaceous communities. The impacts of elk herbivory on herbaceous vegetation were fully disclosed in the plan/EIS and are supported by the best available science and professional judgment of NPS staff and scientific experts. In addition, the level of reduction of the elk population that would be achieved under each action alternative was disclosed in the plan/EIS, Executive Summary, “Alternatives” chapter, and in Table 2.2: Summary of Alternative Elements. The National Park Service has acknowledged in the plan/EIS that elk herbivory on herbaceous vegetation is a concern; however, it does not represent the overall need for the plan. The need for the plan was developed based on Rocky Mountain National Park staff and cooperating agencies concerns regarding overabundant and highly concentrated elk on park resources and is supported by decades of scientific research. The National Park Service believes that the justification for the need for the plan has been fully and adequately presented in the “Purpose of and Need for Action” chapter of the plan/EIS.

Public Comment:
8200

Commenter:

Affiliation:
Individual

Issue: Scope of the Analysis

Comment: “Even if the [National Park Service] did nothing, the Draft EIS contains no evidence that such a scenario would lead to permanent and long-term damage to the elk, other wildlife, or the majority of the vegetative communities in the park. Indeed, the only impact of such a scenario would be localized affects on specific vegetative species on core elk winter range in the park. Not only is such an impact entirely natural but could ultimately aid [Rocky Mountain National Park] by causing the continued decline in the elk population due to density dependent food limitations.”

Response: The scope of the analysis as defined in the plan/EIS is not the entire park but rather the primary winter and summer range that the Rocky Mountain National Park/Estes Valley elk population uses. As provided in the plan/EIS, there is ample scientific evidence demonstrating that elk are having adverse effects on aspen and montane riparian willow habitat on the core winter range, resulting in an inability of aspen to regenerate and montane riparian willow to reproduce and grow. With the high level of elk herbivory, montane riparian willow is being converted to grasslands. Riparian habitats in particular support the highest level of songbird diversity of any western habitat type, while being one of the rarest (Leukering and Carter 1999). Bird species richness is also known to be significantly higher in aspen than in conifer habitats (Turchi et al. 1994). If this habitat is lost, those species that depend upon it will also be impacted.

There are data that show elk are having a similar effect on aspen on the primary summer range in the Kawuneeche Valley. Studies conducted in the park have shown that elk browsing stunts the growth or kills all young aspen trees on the core elk winter range and in some parts of the Kawuneeche Valley (W.L. Baker et al. 1997; Olmsted 1979, 1997). Although data have not been collected on willow habitat types on the summer range, there have been observations by park staff and research scientists studying in the park that similar effects are occurring on the primary summer range in the Kawuneeche Valley. As part of the management plan, monitoring and establishing baseline data would be conducted prior to any management actions.

The decline in aspen and montane riparian willow on the elk range is not limiting the elk population size. Conversely, the conversion of willow to grassland that is occurring as a result of elk herbivory is creating more forage. As riparian willow and aspen habitats decline as a result of over grazing by elk on the primary elk range

PURPOSE AND NEED FOR ACTION

they are replaced by grasslands which make up a large portion of the elk's diet. Therefore, the recommendation of the commenter to allow the vegetative condition to further degrade to limit the elk population size would be incorrect.

Public Comment:
804L

Commenter:
Animal Welfare Institute

Affiliation:
Organization

Issue: Planning Period

Comment: “The goal of each of the alternatives stated in the Draft Elk and Vegetation management Plan/EIS is simply to reduce the elk population within the Rocky Mountain National Park with the assumption that population-curbing alone will benefit the vegetation in the long run. This is not an accurate assumption. Only Alternative Five offers the long-term success that the National Park Service seeks. As explained above in "Yellowstone Example", reduction of the elk population must be accompanied by constant elk migration. Both Alternative Two and Alternative Five cease human intervention after twenty years, but Alternative Five's effectiveness will continue for as long as wolves are present in the park. Even if, in utilization of Alternative Two, park officials were to do the shooting in a way that encourages constant migration, that migration will stop at the end of the twenty-year period, and the original problem will present itself once again. As long as wolves are in the park, the elk will be in a continuous state of migration, which will keep the park's vegetation healthy in all areas, well after the twenty-year period.”

Response: Each action alternative involves actions to not only reduce the size of the elk population but to also redistribute and disperse elk to reduce concentrations, which are in some areas of the core winter range the highest ever recorded in North America. The National Park Service recognizes that conditions may change over 20 years or that new technologies or management tools such as wolves may become available for managing elk and vegetation. The National Park Service recognizes that management activities will need to continue beyond the 20-year period of this plan/EIS. During implementation of the plan over the next 20 years, the park will re-evaluate the conditions of the resources on the elk range, and if changes in management actions are needed outside of what is addressed in the plan/EIS, they would be assessed through another National Environmental Policy Act process at that time.

Public Comment:
834C

Commenter:
Wolf Advocate

Affiliation:
Organization

TOPIC: NEPA ISSUES

Issue: Purpose of the Plan is Narrowly Defined

Comment: “The purpose described in the draft EIS predetermines the outcome of the analysis: The draft EIS describes the purpose of the proposed action in terms of varying degrees of lethal control of the Park's elk. The singularly-focused means to achieve the protection of the forage and fauna of the area are listed in ways that are antithetical to the language and spirit of the National Environmental Policy Act, which seeks the consideration of the broadest range of alternatives that can reasonably be implemented. Not surprisingly, under the narrow confines of the statement of purpose which is predicated on the killing of elk, the range of alternatives is severely limited and completely biased toward the lethal control of elk. The word "natural" is not applicable to any current or proposed action or aspect of elk ecology in [Rocky Mountain National Park]. Even

the actual elk in question are human reintroductions. Therefore, the aim of this plan should be an attempt to restore elk population numbers and environmental impacts to levels that are thought to reflect the historical condition in the park. Being that the "natural" condition of the park is purely subjective a diverse, self-sustaining ecosystem is a more realistic goal.”

Response: The “Purpose and Need” chapter of the plan established that the elk population is outside the natural range of variation and is having a detrimental effect on vegetation that provides habitat to a myriad of wildlife species. As such, the purpose of the plan as stated in the plan/EIS is to guide management actions within the park to reduce the impacts of elk on vegetation and restore to the extent possible the elk population to within the natural range of variation and affected plant communities. This statement of purpose does not constrain management actions to only those involving lethal removal of elk. However, during internal scoping and through the process of developing the alternatives, state and federal policies, logistical and economic challenges, and unacceptable levels of impacts resulted in the dismissal of alternatives that solely relied on non-lethal means such as translocation of elk to other areas, maximum manipulation of habitat using fences, and maximum use of fertility control. Detailed discussion of why these alternatives were found to be unreasonable for elk and vegetation management is in the “Alternatives Eliminated from Further Consideration” section of the plan/EIS.

In the “Purpose of and Need for Action” and “Alternatives” chapters, the National Park Service defined, based on the best available science and through modeling, the natural conditions that would have existed within the park given current availability of habitat. The ecosystem modeling predicted that the elk population, under natural conditions given the current availability of habitat, would fluctuate between 1,200 and 2,100 animals and, with an intact predator base, the elk would be less sedentary. The modeling also showed that, with a smaller and less dense elk population, aspen and willow on the primary elk range would be more abundant with more structural complexity. All action alternatives, including the preferred alternative, would strive to achieve these desired conditions.

Public Comment:
808B

Commenter:
Animal Welfare Institute

Affiliation:
Organization

Issue: Actions are Precedent Setting for the Park Service

Comment: “...the Draft EIS provides no analysis of how this effort, if successful, will affect wildlife management throughout the national park system.”

Response: The Rocky Mountain National Park elk and vegetation management plan does include a number of actions that may be considered to be precedent setting including experimental use of wolves and the use of trained herding dogs to direct the movement of elk. Consistency with servicewide policies and precedence have been considered in the development of the plan/EIS. . See response to comments in “Purpose and Need for Action, Issue: Laws, Policies, and Regulations” in this volume.

Public Comment:
804G

Commenter:
Animal Welfare Institute

Affiliation:
Organization

ALTERNATIVES

TOPIC: ELEMENTS COMMON TO ALL ACTION ALTERNATIVES

Issue: Use of Adaptive Management

Comment: “Why are there no options included involving trying something for a year or two, re-evaluating at that time, and going from there?”

Response: Using an adaptive management approach allows modification of management actions within the framework of each alternative based on future research and monitoring information. Annually, the National Park Service will evaluate monitoring results and determine what actions will be employed to most effectively manage the elk population and restore vegetation. For a full description of the adaptive management process, please see the “Adaptive Management” and “Monitoring and Data Collection” sections of the “Alternatives” chapter in the plan/EIS.

Based on annual monitoring of the population size, if the population is within the natural range of variability as specified in the alternative and vegetation management objectives are being met, no further population reductions would be taken. The location, frequency, and duration of tools such as fences, herding, and aversive conditioning would be modified or adapted as necessary to protect aspen and riparian willow habitat based on response of vegetation to management activities. In addition, the modified Alternative 3, the preferred alternative in the final plan/EIS, would pursue the use of additional tools such as fertility control or wolves as adaptive management tools that would reduce or eliminate the need for lethal reduction of elk.

Public Comment:
190E

Commenter:

Affiliation:
Individual

Issue: Chronic Wasting Disease Testing

Comment: “I am writing to point out the absurdity of testing elk for disease AFTER they are killed! It makes more sense to have the hired shooters use tranquilizers in their silenced guns, [and] then once elk are down, test them for the disease. Those that are infected can be euthanized and incinerated, while those that are NOT infected can be relocated.”

Response: It should be noted that the purpose of reducing the elk population is not to control chronic wasting disease but rather to reduce impacts that elk are having on vegetation and to restore to the extent possible the natural range of variability in the elk population and affected plant communities. Testing elk that are subject to lethal reduction actions is of value to the National Park Service and state wildlife managers as it will provide important information on the prevalence of the disease in elk. No test currently exists for chronic wasting disease in live elk that provides immediate results in the field. If a field test becomes available that provides immediate results to determine chronic wasting disease, within the framework of the alternative, elk subject to population reduction activities would be immediately tested, and those testing positive for the disease would be preferentially removed to reach the target elk population number. The National Park Service would conduct a research study within the framework of the alternative testing procedures of using a live test for chronic wasting disease in elk. The final plan/EIS text has been revised to include a description of this study in the “Alternatives” chapter, “Opportunistic Research Activities” section. The evaluation of impacts of this research study has been included in the “Environmental Consequences” chapter. Although this particular test does not provide immediate “in the field” results, the knowledge and information gained from this study could well

contribute to the advancement of testing for chronic wasting disease with the goal of, eventually leading to a test that provides immediate field results.

With regards to translocating elk from the park, current National Park Service and state policies prohibit exportation of elk from areas in which animals are known to be infected with chronic wasting disease to areas in which animals are not known to be infected. Although translocation has been used in the past by the park prior to the known occurrence of chronic wasting disease in the area, and other NPS units to address elk overpopulation, this incidence of chronic wasting disease in the elk population makes trapping and transporting a potential hazard to wildlife and to public health and safety. Therefore, this alternative was dismissed from further consideration. See also response to comments in the “Alternatives Eliminated from Further Consideration” section of the “Alternatives” chapter.

Public Comment:
38A

Commenter:

Affiliation:
Individual

Issue: Herding Elk Outside of the Park

Comment: One commenter suggested herding or pushing elk out of the park during hunting season into game management unit 20 and other adjacent areas so that hunters could access them.”

Response: Under the final plan/EIS preferred alternative, the modified Alternative 3, redistribution actions would be done to encourage movement out of the park on the west side to areas where they could be hunted. The Colorado Division of Wildlife recommended not encouraging this movement out of the park on the east side due to safety concerns with elk moving through the town of Estes Park and across private properties.

Public Comment:
274A

Commenter:

Affiliation:
Individual

Issue: Annual Population Reduction Target

Comment: A few commenters questioned why the exact number of elk to be removed was not provided in the plan/EIS.

Response: The actual number of elk over a 20-year period that would be removed cannot be determined. As the elk population fluctuates due to variables such as immigration or emigration, birth and mortality rates, environmental conditions, and hunter harvest, the number of elk lethally removed or controlled would vary from year to year. The numbers of elk to be lethally removed or controlled under each action alternative is therefore presented as a range to take into account uncertainty and interaction of these variables as park staff determine the number of elk to be managed each year. Using this range allowed the National Park Service to evaluate and present to the reader a “worst case scenario” in terms of the potential impacts on resources from elk and vegetation management actions within the park.

Public Comment:
1169A

Commenter:

Affiliation:
Individual

Issue: Mimicking Wolf Predation

Comment: “Alternative 2 calls for the killing of elk at random, which will not strengthen the herds overall as wolf predation would. Wolves make elk prove their strength and health before killing them, which would remove much of the sick and weak elk from the park's population.”

Response: To the extent possible, management actions would be conducted to mimic the wolf predation. The National Park Service would use predator-resembling aversive conditioning to redistribute elk to reflect a more natural state and to modify the human-habituated behaviors they exhibit. Lethal reduction actions with unsuppressed weapons, herding, and aversive conditioning techniques would be used and monitored to determine their effectiveness in changing elk distributions and behaviors.

Public Comment:
83B

Commenter:
Wolf Advocate

Affiliation:
Organization

Issue: Use of Fences to Protect Vegetation

Comment: “Temporary fencing proposed under the [draft plan/EIS] preferred alternative (Alternative 2 page 59) has been tried in Rocky Mountain and it failed. Aspen stands were fenced in 1963 and fences were removed after tree crowns had grown beyond reach of elk. Elk girdled and killed the trees within a short period. The conclusion drawn was that survival of aspen was actually decreased by temporary fencing. The survival of trees exposed to grazing was enhanced by the scarring that occurred in response to browsing. To protect aspen from elk damage by fencing the fences would have to be permanent.”

Response: Ecosystem modeling to more intensively examine the effects of elk density on aspen regeneration indicated that aspen were able to regenerate and produce new cohorts in the presence of lower elk densities (less than 26 elk/mile²), depending on the amount of time elk spend feeding in aspen stands (Weisberg and Coughenour 2003). In 1963, the elk population in the park ranged from 800 to 1,000 elk. Under the modified Alternative 3, the preferred alternative in the final plan/EIS, the park subpopulation would be reduced to a range of 600 to 800 elk, and high elk concentrations would be reduced. Using an adaptive management approach, the National Park Service would evaluate the effectiveness of reduced elk numbers, redistribution methods to reduce densities, herding, and fences to determine the locations and amount of fences needed to achieve vegetation management objectives. Monitoring of vegetation communities would provide information necessary to determine how many acres of willow or aspen habitat on the primary elk range need to be protected. Monitoring data would also provide the information necessary to determine when fences can be removed once communities are restored.

The expected amount of fencing that would be needed to protect aspen and willow on the primary elk range under each action alternative has been revised in the “Alternatives” chapter in the final plan/EIS. The following description of how these estimates were derived has been added to the “Methods for Arriving at Alternatives” section of that chapter. To estimate the expected fencing requirements needed to meet the aspen and willow restoration objectives, the total acreage of these vegetation types was considered in relation to use of various redistribution techniques that the action alternatives would employ to achieve local elk densities that allow establishment and growth of new plants. The amount of fence proposed in the action alternatives to protect vegetation is based on current park vegetation maps and GIS analysis, park specific scientific research (e.g. Cooper et al. 2003 and Peinetti 2002), vegetation and hydrologic site-specific conditions, and best professional judgement where data on vegetation condition is not available. The amount of fencing needed to restore riparian willow habitat includes areas determined to be suitable willow habitat as defined by Cooper et al. 2003. These areas currently fall within the “meadow” habitat type, but are places where willow would be expected to occur

because current water tables are adequate. For aspen, the current vegetation map of the park was used to select categories that include *Populus tremuloides*, but have no or only a limited conifer component.

The action alternatives present the best estimate for expected amount of fencing at this time. However based on monitoring and on ground surveys to confirm acreages (ground-truthing) the amount of fencing needed may be adjusted in the future to achieve vegetation management objectives.

Public Comment:
820D

Commenter:

Affiliation:
Individual

Comment: “There are simpler, less expensive and more humane ways to exclude elk from aspen and willow stands other than shooting them. Simply fencing would suffice without shooting elk. The [National] Park Service has not provided this alternative to the park.”

Response: The National Park Service and cooperating agencies considered an alternative that would fence all of the aspen and willow on the elk range with no elk population reduction actions. See “Alternatives” chapter, “Alternatives Eliminated from Further Consideration, Maximum Habitat Manipulation” section in the plan/EIS. This alternative, however, was considered to be infeasible as it would not meet the management objectives regarding the elk population and it would likely displace elk to areas outside the park, creating or exacerbating problems in these areas; there were doubts as to whether the National Park Service could logistically, based on resources and funding, fence that large of an area; and there would be a high degree of adverse impact on visitor use and experience.

Public Comment:
82E

Commenter:

Affiliation:
Individual

Issue: Donation of Meat

Comment: “A pre-cull reservation of carcasses could be accomplished with a mass mailing to all elk license holders in areas 20, 29, and 19. This would send carcasses to where they would be most appreciated and hunters are already aware of [chronic wasting disease] and would be most likely to test their donated carcasses. All should pay their own processing as they would have to anyway. I hope you can utilize volunteers to distribute the carcasses. This would lighten the burden on your already light and overworked staff. Perhaps most of this could be handled by CDOW volunteers.”

Response: To the extent possible the National Park Service would donate carcasses and/or meat from elk in which chronic wasting disease is not detected and that were not killed using sedative agents or euthanasia drugs through an organized program to eligible recipients, including members of tribes, based on informed consent and pursuant to applicable public health guidelines.

Public Comment:
1160G

Commenter:

Affiliation:
Individual

Comment: Many commenters had concerns over the distribution of carcasses. Predominantly people were

ALTERNATIVES

upset as it was a common perception among the public that commented that meat would not be donated. Others wrote in to suggest that the meat from carcasses should be donated to the public and primarily to those people in need.

Response: To the extent possible the National Park Service would donate carcasses and/or meat from elk in which chronic wasting disease is not detected and that were not killed using sedative agents or euthanasia drugs through an organized program to eligible recipients, including members of tribes, based on informed consent and pursuant to applicable public health guidelines. Currently, the NPS Public Health Program directs that all meat gathered from areas with chronic wasting disease be processed and packaged in a meat-processing plant approved and licensed by the state or the U.S. Department of Agriculture (USDA). In addition, current guidelines do not permit donations to food pantries, soup kitchens, or any entity that intends to redistribute the product due to the need to gain informed consent from individuals who may consume the meat. The required guidelines for meat donation may change in the future and the National Park Service would adjust the disposition of carcasses accordingly. The distribution of carcasses and/or meat has been revised in the final plan/EIS and a description of the process is provided in the “Alternatives” chapter, “Elements Common to All Action Alternatives: Distribution of Carcasses” section of the final plan/EIS.

Public Comment:
69B

Commenter:

Affiliation:
Individual

Comment: “While hunting is not allowed in the parks, [Rocky Mountain National Park] might well adopt an alternative that has proved successful in management of fisheries that must be destroyed to remove undesired fish or that are going to be destroyed by draining reservoirs. The [Colorado Division of Wildlife] normally makes salvage of this resource available to those with a valid license. In the case of the [Rocky Mountain National Park] elk, if sharpshooters take elk in reasonably accessible areas you could have citizens on call who would gladly retrieve the carcass. I assume you would want to involve [Colorado Division of Wildlife] in this; they might issue special extra licenses by drawing. This would help remove the distaste that wasting the valuable resource brings to those that enjoy hunting without [Rocky Mountain National Park] having to allow public hunting.”

Response: To the extent possible the National Park Service would donate carcasses and/or meat from elk in which chronic wasting disease is not detected and that were not killed using sedative agents or euthanasia drugs through an organized program to eligible recipients, including members of tribes, based on informed consent and pursuant to applicable public health guidelines. See other responses to donating meat above.

Public Comment:
324A

Commenter:

Affiliation:
Individual

Issue: Carcass Removal

Comment: “For those carcasses that are not removed, the idea of leaving headless corpses around the park in numbers that “...reflect a natural state to the greatest extent possible” is flawed (EIS pg 54). Once again, the use of the concept of “natural” is to be interpreted loosely. There is no indication of how many carcasses will be removed and how many will be left in the field. We believe that seeing the carcasses that are left behind will compromise the experience of the visitors to the park.”

Response: Under the action alternatives, some calf carcasses would be left in the field, as chronic wasting

disease has not been detected in calves, to reflect natural conditions. The majority of carcasses, however, would be removed, tested for chronic wasting disease, and carcasses and/or meat would be donated as described in the “Alternatives” chapter, “Elements Common to All Action Alternatives: Distribution of Carcasses” section of the plan/EIS. Some adult carcasses could be left in the field only if very difficult logistical constraints inhibited their removal. In these instances, the areas where the carcasses would be left would be inaccessible due to the distance from high-use or developed areas and due to difficult terrain, and there would be a low likelihood of visitors entering the area and encountering a carcass. In addition, actions would be taken by the management teams to place carcasses so they are not highly visible or easily encountered. Leaving some carcasses in the field would also benefit a variety of wildlife species that feed on carrion.

Since release of the draft plan/EIS, the National Park Service has reconsidered its preferred alternative based on concerns expressed by the public and further evaluation of the ability of the National Park Service to implement alternatives given current staff resources and funding constraints. The final plan/EIS preferred alternative, the modified Alternative 3, would achieve an elk population size of 1,600 to 2,100 elk gradually over the 20-year planning period with 600 to 800 in the park subpopulation. This alternative would involve lethal reduction of up to 200 elk per year. It is expected that the majority of carcasses that result from small-scale lethal reduction activities conducted throughout the year would be removed, tested for chronic wasting disease, and carcasses and/or meat would be donated through an organized program to eligible recipients. Under the preferred alternative, there would be negligible adverse impacts on visitors as a result of carcasses left in the field.

Public Comment:

808H

Commenter:

Humane Society of the
United States

Affiliation:

Organization

Comment: “There are doubts about the decision to increase the amount of carcass remains left in the park and the ecological effects of an increase in carcasses. What animals would be feeding on these extra carcasses? Would the "easy" food increase their litter sizes? Would you have a larger winterkill because the easy food would be gone after the first couple of years? Would you be throwing off the whole food chain or web? What about tourists? Would finding a decaying elk be "cool" or "disgusting"? Would you have problems with tourists trying to remove bones because they will be more accessible or available? The list of questions is variably endless.”

Response: Please see response 808 H above. Under any alternative, to the extent possible, the majority of carcasses would be removed; however, some may be left in the environment. Even under Alternative 2, in which a large reduction effort in the first four years of the plan would result in a larger number of carcasses, there would not be an increase in available forage for other species to result in population level effects or changes in the ecosystem. The preferred alternative in the final plan/EIS, the modified Alternative 3, would achieve an elk population size of 1,600 to 2,100 elk gradually over the 20-year planning period with 600 to 800 in the park subpopulation. This alternative would involve lethal reduction of up to 200 elk per year. It is expected that the majority of carcasses that result from small-scale lethal reduction activities conducted throughout the year would be removed. Some calf carcasses could be left in the environment to reflect natural conditions. The benefit to other predators and scavengers that would forage on carcasses would be negligible to minor.

Public Comment:

839E

Commenter:

Affiliation:

Individual

Issue: Reintroduction of Beaver

Comment: “Your plans for bringing back the beaver are inadequate. I think you should immediately begin bringing in beavers to those areas not so heavily populated with elk so that repopulating will be easier once the elk herd is reduced.”

Response: These areas would be outside the affected area and therefore would not facilitate the restoration of willows in the area of concern on the primary elk range as proposed in the plan/EIS. Beaver currently exist in the area of concern however at depressed numbers. It is expected that the beavers would recover naturally with recovery of vegetation on the primary elk range as elk numbers and densities are reduced.

Public Comment:
923A

Commenter:

Affiliation:
Individual

Issue: Cost of Management Actions

Comment: “We would like to know how the price of processing the carcasses was determined.”

Response: The costs presented in the draft plan/EIS were based on the cost of chemical digestion or placing carcasses in landfills. The FEIS bases costs only on chemical digestion since carcasses testing positive for chronic wasting disease could not be disposed of in landfills. Processing costs were not evaluated in the estimate of alternative costs because donation of processed meat would be contingent on funding from outside sources or partners to help defer the high costs of processing and packaging. In response to public concern about meat donation and the indication of interested partners, it is expected that the National Park Service would be able to donate carcasses and/or meat from elk in which chronic wasting disease is not detected and that were not killed using sedative agents or euthanasia drugs through an organized program to eligible recipients, including members of tribes, based on informed consent and pursuant to applicable public health guidelines. It is therefore expected that carcass disposal costs would be minimal. The derivation of alternative costs is presented in “Appendix B, Estimated Costs of the Alternatives” in the plan/EIS.

Public Comment:
1170C

Commenter:

Affiliation:
Individual

Comment: Many commenters were concerned over the cost of implementation of the alternatives particularly the life-cycle costs of implementing Alternative 2 in the draft plan/EIS. Many suggested the use of hunters to control the population would be much more cost effective.

Response: The National Park Service’s preferred approach in the draft plan/EIS was the use of contractors to carry out a defined program to reduce the elk population. Costs were estimated based on contracting all management actions without accounting for use of existing park staff and equipment. The Class C estimates in the draft plan/EIS were intended as rough estimates to demonstrate the relative differences between the alternatives. The costs presented were developed using industry standards to the extent available.

It also appears that many public commenters assumed that total reported costs were only for lethal reduction. The costs displayed in the draft plan/EIS were also an estimate of and a presentation to the public of the greatest potential cost of the plan including fencing, monitoring, and education. These costs were presented as both a 20-year total and a yearly cost. In response to public concern, the National Park Service re-evaluated costs to incorporate maximum use of existing staff and it was assumed that ample existing equipment was available

rather than the need to purchase new equipment specifically for the program. The re-evaluation of costs also included the cost of installing fences in a phased approach, using the expected number of acres fenced rather than a maximum number, and using the estimated median number of elk that could potentially be culled rather than the maximum number.

Although costs were not a primary consideration in determining the range of alternatives to be evaluated, it should be noted that a public hunt, whether it be a lottery or agency-guided hunt, could not be done without costs to the National Park Service. A public hunting alternative would include cost for visitor management and for increased personnel to establish and manage closures while hunting was occurring; public relations including working with and/or managing the media would need to be funded to inform visitors of hunting activities in the park, associated closures, and additional safety precautions when using the park during the hunting period; additional public relations and enforcement staff and funding would be needed to address public protests by those opposed to hunting in national parks; dedicated staff time would be necessary to direct, manage, and oversee the hunts; and additional staff time would be necessary for coordination of hunting activities with other park actions and activities.

While some costs may be reduced through a managed public hunt, traditional hunts have been shown to be less efficient in meeting ungulate reduction project goals when compared to lethal reduction by agency staff. Therefore, it is questionable whether overall program costs could be substantially reduced and still meet the objectives of the plan..

Public Comment:

822B

21B, 165A

Commenter:

National Rifle Association

Affiliation:

Organization

Individual

TOPIC: ALTERNATIVES EVALUATED IN DRAFT PLAN/EIS

Issue: Alternatives 1 – Continue Current Management

Comment: “The [National] Park Service should return to its 1968 objectives in managing the Park and attempt to allow natural processes to occur without human interference. Control ceased in 1969 in order to test the hypothesis that the elk population would self regulate at the carrying capacity of the environment with the aid of hunting seasons outside the park. That hypothesis has proved to be true. The elk have self-regulated in response to their food supply within the Park and stabilized in number. ...The town elk also demonstrated density dependent population regulation. The [National] Park Service management experiment succeeded and current management should be continued.”

Response: Under natural conditions with wolves and American Indian hunting, the subpopulation that winters in the park would be below carrying capacity, elk densities would be less, and herbivory levels on vegetation would be lower. See also response to ROMO-804 N in “Purpose of and Need for Action” section of this volume.

Public Comment:

820R

Commenter:

Affiliation:

Individual

ALTERNATIVES

Comment: “Alternative 1, the No Action alternative along with its other benefits would maintain elk populations at carrying capacity which would enhance the probability of natural restoration of a missing predator, the gray wolf, in the Park. The Draft EIS statement that naturally recolonizing wolves would benefit from a smaller fitter elk population is patently false.”

Response: It is unclear where in the plan/EIS this commenter is referring to. The plan/EIS does not claim that naturally recolonizing wolves would benefit from a smaller, fitter elk population.

Public Comment:
820S

Commenter:

Affiliation:
Individual

Issue: Alternative 2 - Rapid Reduction

Comment: We support the National Park Service's preferred alternative [in the draft plan/EIS] to reduce the elk population in this area of Colorado. However, we are concerned the preferred alternative is designed to "hide" the dramatic impacts of reducing the elk population from the public. How can the [National Park Service] hope to avoid future human-caused wildlife conflicts if it refuses to "daylight" its management action to the public? [National Wildlife Federation] NWF is adamant in supporting maximum human safety during elk reduction actions, but we do not believe the public interest is served by only conducting elk reductions at night and by using silencers to reduce noise from high caliber weapons. Park visitors and neighbors need to understand the consequences of human actions outside of the Park and that those consequences result in the destruction of native wildlife. Perhaps, if the public does experience restricted access and the noise of high power weapons, it will be more thoughtful and responsible in its future decisions. We do not advocate a cavalier or insensitive approach to the reduction, but rather consider it a "teachable" moment for the public and the impact of their decisions on wildlife and their habitats.

Response: The National Park Service through its interpretation and outreach program does educate the public on the impacts that elk are having on the habitat within the park and the reasons why this is occurring including the alterations in habitat in areas outside of the park due to development. Under all action alternatives, the National Park Service would implement methods to further educate the public on why the elk population is outside its natural range, which could include the effects that human activity outside the park has had on elk and the ecosystem. In accordance with the National Park Service laws and policies, the park must consider the impact of management actions on the visitor experience and the safety of the public because part of the NPS mission is to provide enjoyment of the parks by the public. Since release of the draft plan/EIS, the National Park Service has reconsidered its preferred alternative based on concerns expressed by the public and further evaluation of the ability of the park service to implement an alternative given current staff resources and funding constraints. The final plan/EIS preferred alternative, the modified Alternative 3, would achieve an elk population size of 1,600 to 2,100 elk gradually over the 20-year planning period with 600 to 800 in the park subpopulation. This alternative would involve lethal reduction of up to 200 elk per year. Management activities could be conducted at any time of the day using multiple methods that would minimize impacts on visitors and would be mitigated to eliminate risks to visitor safety as described in the “Elements Common to All Action Alternatives” section in the “Alternatives” chapter.

Public Comment:
815A

Commenter:
National Wildlife Federation

Affiliation:
Organization

Comment: “One of the main reasons people come to Rocky Mountain National Park is to see the elk herds in summer and fall. If the elk are to be killed, I don't believe you need to take as many as 50% of the herd in the first year or two. Why not reduce the herd size by the expected growth rate plus 10%. This would take a few more years but we would never endanger the size of our herd by a mass slaughter. If we reduce the herd size too quickly and then had a disease strike such as [chronic wasting disease], we could lose the entire herd. This would be unacceptable.”

Response: Alternative 2 in the plan/EIS would not result in a reduction in 50% of the population within a year. Rather the population would be reduced to within the lower end of the natural range of variability, 1,200 to 1,700 elk within the first four years of the plan and maintained at that level over the next 16 years. Since release of the draft plan/EIS, the National Park Service has reconsidered its preferred alternative based on concerns expressed by the public and further evaluation of the ability of the National Park Service to implement an alternative given current staff resources and funding constraints. The final plan/EIS preferred alternative is the modified Alternative 3, which would achieve an elk population size of 1,600 to 2,100 elk gradually over the 20-year planning period with 600 to 800 in the park subpopulation. Based on annual monitoring of the population size, if the population is within this range and vegetation objectives are being met, no further population reductions would be taken.

The population modeling used to estimate the number of elk to be removed annually from the population takes into account stochastic events and other factors such as hunting and mortality due to disease that affect the population size. Based on monitoring data of elk population size and demographics, determination of the number of elk to be removed each year under the preferred alternative would use an adaptive management approach. Determining the level of management actions for a particular year would involve analyzing the results on the population of the previous year's management actions in combination with population changes that may have occurred as a result of stochastic events such as a severe winter in areas adjacent to the park. The National Park Service would continue to collaborate with the Colorado Division of Wildlife to monitor the population and to determine annual management activities in terms of the locations, numbers, and timing of elk removal.

Public Comment:
501C

Commenter:

Affiliation:
Individual

Comment: The preferred alternative [in the draft plan/EIS] is overkill. The preferred alternative (Alternative 2) proposes to kill 200 to 700 elk annually out of a population that they estimate may be as low as 1,700 elk. This rate of reduction could drive the elk population below the target population level within a single year.

Response: Since release of the draft plan/EIS, the National Park Service has reconsidered its preferred alternative based on concerns expressed by the public and further evaluation of the ability of the park service to implement an alternative given current staff resources and funding constraints. The final plan/EIS preferred alternative is the modified Alternative 3, which would achieve an elk population size of 1,600 to 2,100 elk gradually over the 20-year planning period with 600 to 800 in the park subpopulation. This alternative would involve lethal reduction of up to 200 elk per year. As stated in the “Alternatives” chapter, “Alternative Development” section of the plan/EIS, the numbers of elk to be lethally removed each year under each alternative is presented as a range to take into account uncertainty and interaction of variables such as immigration or emigration, birth rates and mortality, hunting, and environmental conditions. The plan is based on an adaptive management approach, and if the elk population size is determined based on monitoring and the use of population modeling to be within the range specified in the alternative (1,600 to 2,100 elk with 600 to 800

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in the park subpopulation under the preferred alternative) and if vegetation objectives were being met, then no further elk reduction actions would be taken. The preferred alternative presented in the final plan/EIS does not propose reducing the population below the lower level of natural range of variation.

Public Comment:
820F

Commenter:

Affiliation:
Individual

Issue: Alternative 4 - Fertility Control with Lethal Reduction

Comment: “My own research to date yields strong doubts about fertility-control agents for deer management in the wild. I know of no agent approved for use that carries no public health risk, should elk stray outside the park and come to table as a consequence of hunting, nor can I imagine how park elk could be reasonably contained within park boundaries.”

Response: As described in the “Alternatives” of the plan/EIS, under Alternative 4, animals treated with fertility control agents or immobilization agents may require a mark for identification to notify those that may consume the meat. Treated elk would need to receive a readily recognizable long-term mark that warns individuals not to consume the meat if the elk was killed before the required withdrawal period had passed for a regulatory approved fertility control agent or immobilization drug, or if the fertility control agent was not regulatory-approved or approved by a prescribing veterinarian for extra-label use. The withdrawal period for a drug is the number of days that must elapse between drug administration and removal so that meat from a treated animal is fit for human consumption. For Food and Drug Administration (FDA) licensed drugs used according to label directions, the withdrawal period of an agent is identified on the label. For extra-label drug use, the period is determined by the prescribing veterinarian based on the best available scientific information. If Leuprolide, a single-year agent, were used to treat elk, a veterinarian would be responsible for establishing the withdrawal period for the drug or determining that there is no withdrawal time. The treated animals would then require marking to prevent human consumption of the meat until the established period has passed.

Public Comment:
856E

Commenter:

Affiliation:
Individual

Issue: Alternative 5 – Highly Managed Wolf Population

Comment: The idea of sterilizing only the male wolves to prevent initial reproduction while leaving the females is ill-advised. The study cited to justify this action clearly states that both members of a pair must be sterilized in order for wolves to maintain normal social and territorial behaviors. Leaving females intact will only lead to hybridization with coyotes or dogs. While wolf-coyote hybridization did not commonly occur in this region historically, hybridization between wolves and other canids is more likely to occur in small or inbred populations. Such hybridizations could easily occur, only to result in the destruction of the hapless hybrid pups.

Response: The study by Spence et al. 1999 did involve sterilized wolf pairs. However, a report by Mech et al. (1996) showed that pairs maintained a social bond and dug a den even when the female was not pregnant. The observations by that study suggest that den digging is not a function of pregnancy but rather is likely because females exhibit "pseudopregnancy." Vasectomy does not impact hormones, so males would be expected to maintain normal behavior. Mech et al 1996b, Haight and Mech 1997, and Spence et al. 1999 all indicate that male wolves that are vasectomized would continue to hold mates and territories. Based on this research, the National Park Service believes that sterilized males would continue to exhibit normal behaviors.

Because vasectomies do not impact male hormones, male wolves would act like intact males, so male wolves

would continue to defend their female. Copulation between vasectomized males and intact female wolves would occur. Females would go into pseudopregnancy after estrous (Wild 2006). Given the limited timeframe for a dog or coyote to enter the territory and breed the female wolf, and that the male wolf would continue to defend the female, the likelihood of hybridization is very minimal, although there is still a remote possibility. If hybridization did occur, the National Park Service would take action to remove the hybrid offspring from the park either through lethal means or relocation to an appropriate facility.

Public Comment:
808I

Commenter:
Humane Society of the
United States

Affiliation:
Organization

Comment: “The density, size, and behavior of the elk herd is well presented. Introduction of wolves for predation can be given yet more intense scrutiny. In light of the Yellowstone experience, there may be details to be learned about establishing one or more packs in higher-mountain areas, with planning to restrict the packs from overly-broad extension in five to fifteen-year time frame. The lack of extensive cattle-raising in proximity to the park is a point in favor of the encouraging of one or a very few packs.”

Response: Alternative 5 considered in the plan/EIS would release and establish a small number of wolves (up to 14 in the long-term if needed) into the park in a highly managed manner as a tool in managing the elk and restoring vegetation. In addition, the modified Alternative 3, the preferred alternative in the final plan/EIS, would pursue the use of a highly managed wolf population as an adaptive management tool if monitoring indicates that management objectives are not being met by other means.

Public Comment:
856C

Commenter:

Affiliation:
Individual

Comment: “Regardless of the hybridization issue, the huge amount of monitoring and handling proposed in the EIS for reintroduced wolves would be incredibly stressful for these animals. The purpose and need to handle wolves involved in research has been questioned in the past. Blood work conducted on coyotes captured and handled for radio-telemetry studies revealed elevated blood levels of glucose and leukocyte counts which can be indicative of a stress response. Behavioral symptoms of traumatic stress disorder have also been recorded for a wild wolf that was repeatedly subjected to human handling in the form of helicopter darting, repeated translocations, and temporary captivity. This is the type of treatment that the proposed reintroductions would face in [Rocky Mountain National Park].”

Response: The concerns expressed by the commenter are valid and true. Alternative 5 would use wolves as a tool and therefore they would be highly managed. As a result, actions to manage the wolves would result in stress to those individuals. The National Park Service recognizes this and would, within the constraints of an action, reduce to the greatest extent possible any pain or distress that the actions may cause.

Public Comment:
808J

Commenter:
Humane Society of the
United States

Affiliation:
Organization

Comment: “Neither Alternative 5 nor Alternative 2 includes the possibility of setting up a fund for reimbursement of ranchers who lose livestock to wolves. This has worked reasonably well in the Yellowstone ecosystem, under the leadership of Defenders of Wildlife, and we suggest that the [National] Park Service look for suitable partners in establishing such a fund in the event wolves are reintroduced.”

Response: The plan/EIS, under the description of Alternative 5 in the “Alternatives” chapter, addresses this concern. The plan/EIS recognized that no state or federal compensation programs exist for wolf-caused losses; however other programs established by private groups, such as Defenders of Wildlife, may be applicable. Under the modified Alternative 3, the preferred alternative in the final plan/EIS, wolves may be used in the future to redistribute the elk population if monitoring indicates that other redistribution actions are ineffective in meeting management objectives for vegetation recovery. This would take place if there were opportunities to cooperate with adjacent land managers and the state, and if supported by state and federal policy. If wolves are used in the future to manage the elk population, the National Park Service would at that time seek suitable partners for such a fund.

<i>Public Comment:</i> 1159B	<i>Commenter:</i> Audubon Society of Greater Denver	<i>Affiliation:</i> Organization
1166A		Individual

TOPIC: ALTERNATIVES ELIMINATED FROM FURTHER CONSIDERATION

Issue: Alternatives Eliminated - Hunting in Park

Comment: “The true failure of the DEIS is that it did not include the most viable and cost effective alternative and that is to allow licensed hunters, under supervision of Park staff, to act as the "contractors" to cull elk herds. However, to call an action a cull and not a hunt in no way precludes members of the general public that is licensed hunters, from assisting the park in its objectives under "controlled circumstances." The park and its DEIS have arbitrarily eliminated this option from the set of alternatives. Thus the NRA believes that the DEIS is a flawed document.”

Response: The National Park Service disagrees that this alternative was arbitrarily dismissed. The National Park Service and cooperating agencies held numerous meetings in the development of the alternatives over a two-year period. The use of hunters to control the elk population both inside and outside the park was carefully considered throughout this development process. The National Park Service and cooperating agencies considered the use of hunters in the management of elk in the form of a traditional hunt.

In summary, the National Park Service considered and rejected a traditional hunt as a reasonable alternative for this plan for the following reasons: 1) implementing a traditional hunt in Rocky Mountain National Park would significantly conflict with the long-standing traditional uses of the park and have significant impact on the visitor use and experience; 2) allowing a traditional hunt would require changes to basic NPS policy and, a change in federal law; 3) case law supports dismissing an alternative that would require a major change in long-standing basic policy; 4) other alternatives, such as lethal reduction by NPS staff and authorized agents, could be implemented without changing current laws and policies; 5) other alternatives, such as using trained NPS staff and their authorized agents, raise fewer safety concerns, would impact other visitors to a lesser degree, and

would have substantially the same environmental effects ; 6) other alternatives, such as using lethal reduction by NPS staff and their authorized agents, would have a higher degree of efficiency, and 7) other alternatives, such as using lethal reduction by NPS staff and their authorized agents would better meet the purpose, needs, and objectives of the plan, in accordance with Council on Environmental Quality(CEQ) regulations, than would a traditional public hunt. A revised description of the rationale for dismissal of traditional hunting in the park is provided to further clarify the National Park Service’s position and is provided in the “Alternatives Eliminated from Further Consideration” section of the “Alternatives” chapter.

Many commenters suggested the use of members of the public to assist in lethal reduction activities (culling) in the park. In response to these comments, the National Park Service has clarified in the “Alternatives” chapter of the final plan/EIS that the lethal reduction activities in the park under any of the action alternatives would be conducted by NPS staff and /or their authorized agents as allowed by NPS Management Policies. An authorized agent could include but is not limited to qualified volunteers. A full discussion of authorized agents and culling is provided in Appendix H of the final plan/EIS. Authorized agents would need to be certified in firearms training, specially trained in wildlife culling, and be required to pass a proficiency test in order to qualify to participate in lethal reduction activities. The actions to reduce elk population in the park would not be considered hunting. It is important for the reader to understand the differences between public hunting and culling activities. Although public hunting and culling are both used as conservation tools in ungulate management, there are differences between hunting and culling that must be clarified. Hunting is a recreational activity administered by state wildlife agencies through licenses and it involves fair chase and the taking of meat by the individual hunter. Culling, on the other hand, is a tool used to reduce populations that have exceeded their carrying capacity. It is a very controlled and structured activity, not a recreational activity like hunting, to minimize and/or prevent impacts on other members of the public and other resources. Because of the controlled nature of the activity, the proven skill of those authorized to take action, and the ability to be flexible in timing, location, and choice of management tools, culling actions are more efficient and potentially safer than hunting. Another important distinction is that carcasses and/or meat resulting from culling actions can be donated through an organized program to eligible recipients. There could be no personal take of meat by cullers. More details and explanation of the differences between hunting and culling activities are provided in the text that follows as well as in Appendix H.

<i>Public Comment:</i>	<i>Commenter:</i>	<i>Affiliation:</i>
822A	National Rifle Association	Organization
807C	Congressman, Honorable Mark Udall	Congressional Representative

Comment: “I do not believe the comparison to a hunt in Connecticut is valid. Most elk hunters I know are serious dedicated hunters who often spend a week or more in pursuit of elk even when the weather is harsh. There are more than enough interested hunters since there are far more applicants for elk hunting in Colorado than licenses available.”

Response: The National Park Service recognizes the importance of hunting in Colorado. The use of hunters to manage the elk population inside the park was carefully considered in the development of the plan/EIS. The commenter may be correct in suggesting that hunters would be more interested in hunting in Colorado than Connecticut. Numerous people during public scoping and review of the draft plan/EIS expressed interest in helping the park reduce the elk population, but there is no assurance that this public interest in participating in population control would continue over the 20-year life of the plan. Without consistent annual hunter participation, the National Park Service would eventually need to perform the lethal reduction actions and incur

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the costs of such actions.

In response to the public's comments regarding use of members of the public in culling activities, the National Park Service has clarified in the final plan/EIS that lethal reduction activities in the park under any of the action alternatives would be conducted by NPS staff and /or their authorized agents as allowed by NPS Management Policies. An authorized agent could include but is not limited to qualified volunteers. A full discussion of authorized agents and culling is provided in Appendix H of the final plan/EIS. Please see response to comment 822A above for the complete rationale for dismissal of public hunting in the park as an alternative.

Public Comment:
30B

Commenter:

Affiliation:
Individual

Comment: “Under Title 36, Volume I of the Code of federal Regulations, You, the NPS, can grant hunters such as myself the privilege of hunting National Parks where overpopulations and conservation is needed. I do believe that a season can be implemented as not to conflict with the use of the general public.”

Response: In 1984, after careful consideration of Congressional intent with respect to hunting in national parks, National Park Service promulgated a rule (36 CFR 2.2) that allows public hunting in national park areas only where “specifically mandated by federal statutory law.” The National Park Service recently reaffirmed this approach in its 2006 management policies. Grand Teton National Park is the only national park in the lower 48 states in which ungulate hunting is allowed. Congress passed specific legislation in 1950 authorizing hunting (by licensed hunters deputized as park rangers) in portions of Grand Teton National Park, in part because elk were being fed on adjacent U.S. Fish and Wildlife Service lands. Hunting is not authorized in Rocky Mountain National Park. See response to comment 822A above.

Public Comment:
1164A

Commenter:

Affiliation:
Individual

Issue: Self-sustaining Wolf Population

Comment: “Defenders of Wildlife urges you to issue a new Draft Plan that fully considers restoration of a self-regulating population of wolves within Rocky Mountain National Park (RMNP).”

Response: The National Park Service did consider an alternative that would establish a self-sustaining wolf population as a means of managing elk and restoring vegetation on the primary elk range. Over a two-year period, the National Park Service and cooperating agencies met and collaborated in the development of the alternatives, which included discussion and evaluation of a self-sustaining wolf population to manage elk and vegetation. The National Park Service held a formal workshop in March 2005 with a panel of experts from multiple agencies to discuss the use of wolves as a means of managing the elk population. Based on this meeting and numerous other meetings with technical experts, the National Park Service and the experts agreed that at this time, without support from neighboring federal, state, and local agencies, the reintroduction of a self-sustaining wolf population would not be feasible. In addition, the National Park Service considered the concerns by neighbors of perceived and real threats; the degree of expected conflict with livestock and domestic pets; the limited suitable habitat available for wolves outside the park; and the intensive management that would likely be required to respond to external issues. As a result of these deliberations, this alternative was eliminated from further consideration.

Public Comment:
805A

Commenter:
Defenders of Wildlife

Affiliation:
Organization

Comment: “[The National Park Service] has unlawfully rejected a Reasonable Alternative (i.e. self-sustaining wolf population). ... Based on the scientific evidence presented in the Draft Plan, the National Environmental Policy Act requires the Draft Plan to include a full and extended discussion of a sustaining wolf population in [Rocky Mountain National Park]. Dismissing this alternative does not comply with the National Environmental Policy Act to the "fullest extent possible", as required by Section 102, making the Draft Plan fatally defective.”

Response: The NPS Director’s Order 12: Conservation Planning, Environment Impact Analysis and Decision-Making (NPS 2001) states that a full range of alternatives must be examined. The Council on Environmental Quality (CEQ, Question 2) defines reasonable alternatives as those that are technically and economically feasible and that show evidence of common sense. The alternatives carried forth by the National Park Service in the plan/EIS are believed to be those that are feasible to implement. Regarding the evaluation of an alternative that would establish a self-sustaining wolf population, the National Park Service did consider this alternative as means of managing elk and restoring vegetation on the primary elk range. See response to comment ROMO-805A above.

Public Comment:
806D

Commenter:
Sinapu

Affiliation:
Organization

Comment: “The Endangered Species Act: Under recent court rulings (Defenders of Wildlife vs. Department of the Interior), the limited re-introduction of wolves in the Yellowstone region is insufficient to remove the wolf from the list; re-introduction in Colorado would seem to be not only a good idea for the elk, but also for the eventual stabilization and de-listing of the wolf in general.”

Response: Restoration of wolves is not the purpose of this plan. A self-sustaining wolf alternative for the management of elk was evaluated and dismissed from further consideration as stated in the “Alternatives” chapter, “Alternatives Eliminated from Further Consideration” section of the plan/EIS. Of the alternatives considered in the plan/EIS, Alternative 5 would use an experimental population of wolves to control the elk population in a highly managed approach. As stated in that alternative, as long as the wolves are considered to be a federally protected species, approval to use wolves as a tool to manage elk in Rocky Mountain National Park would need to be granted by the U.S. Fish and Wildlife Service. The preferred alternative in the final plan/EIS, the modified Alternative 3, could use wolves as a tool under an adaptive management approach. If, based on monitoring of the elk population and vegetation on the elk range, management objectives are not being met, the National Park Service would consider release of wolves into the park to redistribute elk according to the management process described in Alternative 5. Release would only occur if opportunities exist at that time to cooperate with adjacent land managers and the state of Colorado, and if supported by state and federal policy.

Public Comment:
436E

Commenter:

Affiliation:
Individual

Issue: Translocation of Elk to Other areas

Comment: Many commenters responded suggesting that the National Park Service transport elk to other areas as an alternative to lethal control of the population.

Response: This alternative was considered in the development of the alternatives but dismissed from further consideration early in the planning process, as current National Park Service and state policies prohibit exportation of elk from areas in which animals are known to be infected with chronic wasting disease. Although translocation has been used in the past by the park, prior to the known occurrence of chronic wasting disease in the area, and other NPS units to address elk overpopulation, the incidence of chronic wasting disease in the Rocky Mountain elk population at this time makes trapping and transporting a potential hazard to wildlife and to public health and safety. Therefore, this alternative was dismissed from further consideration.

Public Comment:
29A, 44B, 288A

Commenter:

Affiliation:
Individual

TOPIC: SUGGESTED NEW ALTERNATIVES OR ELEMENTS OF ALTERNATIVES

Issue: Supplemental Elk Feeding

Comment: Some commenters suggested feeding elk to reduce the elk foraging on sensitive vegetation.

Response: The use of hay bales or artificial feeding would result in an increase in the number of elk and more concentrations of elk, which would not resolve the need for the plan. In addition, encouraging high concentrations of elk would increase the potential risk of spreading chronic wasting disease within the population.

Public Comment:
190D

Commenter:

Affiliation:
Individual

Issue: Use of Fertility Control Agents

Comment: “We support your preferred alternative 2 [in the draft plan/EIS] but with the following considerations: In addition to lethal reduction, sterilization should also be used to limit the number of new born calves so the birthrate does not neutralize the lethal reduction rate. Although accessibility to females appears easier than to bulls during rutting season, why not consider sterilizing predominant bulls who undoubtedly impregnate 30 to 50 or more cows per season. Seems like that method would be more efficient assuming you can get access to the bulls.”

Response: The National Park Service recognizes that the birthrate would increase as the elk population is reduced. This increase in recruitment of newborns into the population has been accounted for in the alternative development and is reflected in the annual number of elk to be removed. Treating bulls would not be efficient in reducing the elk population size as one male can breed with many females. The treatment of all dominant bulls, which is infeasible, would not ensure that subordinate males would not then breed. Targeting females, however, would allow an efficient reduction in the elk population by taking the fewest number of animals. By

removing females, the calves that they would produce in the current year and future years would not be recruited into the population. Thus, the population would be reduced by the number of individual females removed plus the offspring that they would have produced during their breeding years. Alternative 4 presented in the plan/EIS would control the elk population primarily through use of fertility control of female elk. Alternative 3 as modified in the final plan/EIS, the preferred alternative, would use fertility control as an adaptive management tool if logistical capabilities for using fertility control improve and longer-acting, multi-year drugs become available.

Public Comment:
42A

Commenter:

Affiliation:
Individual

Comment: I would favor an embellished 'Alternative Four' (using fertility agents to reduce populations), by greatly increasing the numbers of elk treated and eliminating reductions by lethal means. The agent Neutersol would be injected into the bull's reproductive sacs, after the elk has been rendered briefly unconscious from a tranquilizing dart (the procedure would be extremely painful without anesthesia). Neutersol is a one-time injection with a 99+% effectiveness. The bull could be ear-notched or tattooed to be easily recognized as sterile.”

Response: See response to comment 42A above regarding why treating bull elk with fertility control agents would be infeasible in controlling the elk population. Early in the planning process, the agencies evaluated an alternative using available fertility control technologies to treat female elk to manage the elk population without the need to lethally remove elk. Only short-term fertility control agents would be available for immediate implementation. Based on population modeling projections, approximately 900 female elk would need to be treated annually to reach a population at the high end of the natural range of variability (1,600 to 2,100 animals). This alternative was dismissed from further consideration as unreasonable to implement for a number of reasons. It would be logistically and economically infeasible for agency staff or contractors to capture and treat annually such a high number of free-ranging female elk. Treating 400 deer per year even with the most effective, remotely delivered contraceptive is beyond the logistical capabilities of most commercial ranching facilities or zoos (NPS 2004c). The capture, treatment, and marking of 900 female elk in Rocky Mountain National Park, considering the terrain and free-ranging nature of the elk, would be significantly more difficult than this, and well beyond the financial, logistical, and operational abilities of the park, especially given the many concurrent demands on park resources and funding. In addition, the ability to capture and treat 900 female elk each year would decline over time, as elk would become more wary of management actions, reducing the ability for this alternative to meet the long-term management objectives of the plan. To prevent births in the following year, treatment would occur between mid-July and September, when visitation to the park is high. The impacts on visitors from a high number of elk that would bear a marking and the high frequency of management actions in the summer months would result in a significant level of adverse impacts to visitors that could be reduced via alternate management actions.

Public Comment:
1162A

Commenter:

Affiliation:
Individual

Comment: “The [Humane Society of the United States] does not believe that any of the proposed alternatives provide a long-term solution to the current elk and vegetation situation. Therefore, the [Humane Society of the

ALTERNATIVES

United States] proposes alternative 6 which includes broad-scale immunocontraception of the elk, temporary fencing of vulnerable vegetation, aversive conditioning of elk to aid dispersion, and a possible introduction of free-ranging wolves.”

Response: The commenter proposes a modification to Alternative 4, in which fertility control would be implemented as logistically feasible, fences would be installed to protect aspen and willow, and wolves would be used instead of lethal reduction action to remove the remaining 80 to 150 elk that would be needed to meet management objectives. The proposed alternative does not provide additional benefit beyond those alternatives already evaluated. Increasing fertility control and the marking required to track treated elk increases the adverse effects on visitor experience. In addition, this proposed alternative would result in maximum handling of animals (both elk and wolves). The reader is directed to the response to comment 1162A above for rationale as to why fertility control alone as a management tool to reduce the elk population was dismissed from further consideration.

The National Park Service did consider the use of a self-sustaining wolf population as an alternative for managing elk in the park. The National Park Service and experts have concluded that at this time, without support from neighboring federal, state, and local agencies, the reintroduction of a self-sustaining wolf population would not be feasible. In addition, the National Park Service considered the concerns by neighbors of perceived and real threats; the degree of expected conflict with livestock and domestic pets; the limited suitable habitat available for wolves outside the park; and the intensive management that would likely be required to respond to external issues. As a result of these deliberations, this alternative was eliminated from further consideration. See also response to comment 805A above for further discussion on elimination of a self-sustaining wolf population as a management alternative.

Since release of the draft plan/EIS, the National Park Service has reconsidered its preferred alternative based on concerns expressed by the public and further evaluation of the ability of the park service to implement an alternative, given current staff resources and funding constraints. The final plan/EIS preferred alternative is the modified Alternative 3, which would achieve an elk population size of 1,600 to 2,100 elk gradually over the 20-year planning period with 600 to 800 in the park subpopulation. This alternative would also use fences and redistribution methods to protect vegetation on the primary elk range. Based on annual monitoring of the population size, if the population is within this range and vegetation objectives were being met, no further population reductions would be taken for that year. In addition, this alternative would pursue the use of other tools, such as fertility control or wolves, as adaptive management tools that would reduce or eliminate the need for lethal reduction of elk.

<i>Public Comment:</i>	<i>Commenter:</i>	<i>Affiliation:</i>
808A	Humane Society of the United States	Organization
273A		Individual

Comment: “Incorporate fertility control agents into salt blocks that are used one month each year.”

Response: The agent cannot be administered in that manner because it would risk exposure to other wildlife that are not the subject of this management plan. In addition, encouraging high concentrations of elk would increase the potential risk of spreading chronic wasting disease within the population.

<i>Public Comment:</i>	<i>Commenter:</i>	<i>Affiliation:</i>
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Issue: Culling Old and Sick Elk and Increasing Hunting Licenses

Comment: “I believe a better solution would be to selectively cull the sick, the old and the crippled among the herds, as predators do, and then reintroduce predators (wolves) to control the herds. If more reduction in the size of the herds is necessary, because we have let it get so far out of control, then reduce the additional animals by issuing more hunting permits for the areas surrounding the park. This could potentially generate additional revenue (special hunting permits) to help with the expenses of re-establishing the predators to the park. I’m sure that additional action such as enclosures and such would initially be necessary to protect certain areas until the number of animals is reduced to acceptable levels.”

Response: Targeting only the sick, old, and crippled elk in the population would not provide the reductions needed to control the population size and meet the management objectives of the plan. In addition, it would be difficult to target sick, old, and crippled animals, especially in large numbers, as animals that are visibly impaired are usually short-lived. Under the action alternatives, the National Park Service would mimic the behavior of wolves to the extent possible but more elk would need to be removed.

In regards to increasing hunting permits, the Colorado Division of Wildlife has doubled the number of elk hunting licenses, liberalized annual bag limits by allowing the harvest of additional female elk, and allowed special hunts to address damage. These actions have reduced the elk population somewhat. However, harvest of elk outside the National Park alone will not be adequate to address damage to vegetation within the park and elk human-conflicts, because many of these elk use lands closed to hunting.

Since release of the draft plan/EIS, the National Park Service has reconsidered its preferred alternative based on concerns expressed by the public and further evaluation of the ability of the National Park Service to implement an alternative, given current staff resources and funding constraints. The final plan/EIS preferred alternative is the modified Alternative 3, which would achieve an elk population size of 1,600 to 2,100 elk gradually over the 20-year planning period with 600 to 800 in the park subpopulation. Based on annual monitoring of the population size, if the population is within this range and vegetation objectives were being met, no further population reductions would be taken. In addition, this alternative would pursue the use of other tools, such as fertility control or wolves, as adaptive management tools that would reduce or eliminate the need for lethal reduction of elk.

Public Comment:
280B

Commenter:

Affiliation:
Individual

Issue: Cooperation with American Indians

Comment: A number of commenters suggested that the National Park Service should involve American Indians in the management of elk in the park.

Response: Due to the number of public comments received suggesting the involvement of members of tribes, under the preferred alternative in the final plan/EIS lethal reduction would be carried out by NPS staff or their authorized agents, which could include professional staff from tribes. The National Park Service will also work with tribes and organizations that represent tribes to donate carcasses and/or meat from carcasses in which chronic wasting disease has not been detected to tribe members to the extent possible, through an organized program and based on informed consent, pursuant to public health guidelines.

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Public Comment:
453B, 1161S

Commenter:

Affiliation:
Individual

Issue: Mountain Lions to Control Elk Population

Comment: “Try to relocate mountain lions from populated areas into the park as a tool to manage the elk herd.”

Response: There are no data to suggest that mountain lions are not already at carrying capacity in the park. In addition, mountain lions do not prey on elk as their primary food source and would not be effective in reducing the elk population and meeting the management objectives of the plan.

Public Comment:
15B

Commenter:

Affiliation:
Individual

Issue: Dog Walkers to Control Elk Population

Comment: “Allowing hikers to walk with their dogs under control, but off-leash, in specific areas at desired times/seasons might be another way to control elk feeding and generate revenue instead of costs.”

Response: Under the modified Alternative 3, the preferred alternative in the final plan/EIS, contractors with trained herding dogs could be used for herding elk within the park to direct movement from the primary winter range in the summer to the traditional summer range. Hikers with dogs would not be specially trained and able to perform this activity in a controlled manner that would be effective in meeting management objectives. In addition, the Code of Federal Regulations (36 CFR Part 7 Section 7.7d) prohibits the use of pets on trails or in the backcountry of the park. The use of trained herding dogs by NPS staff or their authorized agents is allowable as a management tool in accordance with 36 CFR Part 1 Section 1.2.

Public Comment:
664E

Commenter:

Affiliation:
Individual

Issue: Alternative Hunting Practices Outside of the Park

Comment: “While it is unclear what impact public hunting has on park elk and though [Animal Welfare Institute] takes no position on the hunt itself, the [National Park Service] should engage in negotiations with the Colorado Division of Wildlife to allow only elk cows to be killed in areas open to hunting on lands adjacent to the park. The Draft EIS suggests that the bulk of elk hunted at present are males, Draft EIS at [page] 19, yet, as the [National Park Service] concedes in its own analysis of its proposed lethal control plan, if elk are to be hunted, removing female elk of reproductive age is the most effective means of generating a population level effect.”

Response: In the game management unit (GMU) adjacent to the national park’s elk winter range addressed in the plan/EIS, one of the primary management goals has been to reduce elk population numbers through harvest of female elk. In an effort to achieve this, the number of antlerless elk hunting licenses available in 2006 (2,350) is almost four times greater than the number of licenses for male elk (605). These licenses are projected to result in the harvest of more than twice as many female as male elk this year. However, harvest of female elk outside the national park alone will not be adequate to address damage to vegetation in the park and elk human-

conflicts, because many of these elk use lands closed to hunting.

It should also be noted that the National Park Service does cooperate with the Colorado Division of Wildlife and other agencies in the management of the elk population. The National Park Service, the U.S. Forest Service, and the Colorado Division of Wildlife are members of the Rocky Mountain Council for Cooperative Wildlife Management. It was initiated in 1962 with a Memorandum of Understanding concerning "The Rocky Mountain Cooperative elk studies" and in 1974 an additional Memorandum of Understanding gave the group its formal name and expanded it to cover all wildlife species.

Public Comment:
804M

Commenter:
Animal Welfare Institute

Affiliation:
Organization

Comment: "I am saddened that the Division of Wildlife has not stepped up to the plate as was done in 1963 with a special hunt. In October of 1962, Colorado Game and Fish Department Director Harry Woodward called on Secretary of Interior Stuart Udall to allow a pilot program of controlled hunting in the park, itself. When rebuffed, Woodward took a more dramatic step. In 1963, he announced a special pre-season hunt for elk in the region east and north of the National Park. The hunt extended from January 26 through February 17 and was opened to resident and non-resident hunters alike, with a bag limit of one elk of either sex. Many landowners opened their land for the hunt. Through the efforts of the Colorado Cattleman's Association and the Game and Fish Department, ranches were tied into a network of headquarters. Concentrations of elk were reported to all cooperating ranch owners. In this way, hunters kept informed of the location of elk."

Response: Over the years, the Colorado Division of Wildlife has tried many methods to liberalize elk harvest with hunting outside the National Park in an effort to manage elk numbers and elk grazing impacts on all lands. These actions have slowed the overall increase in the elk numbers. Harvest has increased in recent years, with an estimated 2006 harvest in excess of 700 elk. However, the amount of private and public lands that do not allow hunting continues to increase in this hunting unit. Elk use these un-hunted areas as a refuge, and as a result the harvest of elk only in areas that are currently accessible to hunting has not been adequate to address on-going concerns.

Public Comment:
839F

Commenter:

Affiliation:
Individual

Comment: "In the general view of alternatives, why is bow-hunting within the Estes Park community limits not given consideration? The strategy has proven effective in a variety of contexts, and with proper qualification of hunters and careful setting of norms for the hunt may be carried out with a high level of safety and negligible costs (target-shooting tests, restriction to elevated stands, and specification of bow pull-strengths, among other considerations)."

Response: Hunting outside the park is under the jurisdiction of the Colorado Division of Wildlife. There are archery elk hunting licenses and season in all areas within game unit (GMU) 20 for bulls, cows, and either sex. Archery hunting access is restricted in some areas in the Estes Valley by property owners and by town ordinance.

Public Comment:

Commenter:

Affiliation:

856B

Individual

Comment: One commenter suggested using property tax incentives for landowners that grant hunting access on their lands.

Response: Hunting outside the park is managed under the jurisdiction of the Colorado Division of Wildlife. According to the Colorado Division of Wildlife, this suggestion will be taken into consideration.

Public Comment:

1160D

Commenter:

Affiliation:

Individual

Comment: One suggestion was made that the state of Colorado extend the hunting season into February as they have seen large migrations into game management unit 19 in February.

Response: The Colorado Division of Wildlife already has extended some elk hunting into February and is considering more elk hunting in February during the elk population management planning process.

Public Comment:

1160E

Commenter:

Affiliation:

Individual

Comment: “Why not simply increase the number of elk permits each year? That is up to the state and the [National] Park Service said they have no control over what happens outside the Park although in a different context, it was stated that the Park was working closely with the local governments on this issue. Which is it?”

Response: The Colorado Division of Wildlife has doubled the number of elk hunting licenses, liberalized annual bag limits by allowing the harvest of additional female elk, and allowed special hunts to address damage caused by elk. These actions have possibly reduced the elk population somewhat, or more likely, only slowed the elk population increase. The National Park Service collaborates with the Colorado Division of Wildlife in the regional management of elk as members of the Rocky Mountain Council for Cooperative Wildlife Management which was initiated in 1962 and also involves the collaboration of the U. S. Forest Service.

Public Comment:

1169B

Commenter:

Affiliation:

Individual

Issue: Create Suitable Habitat Outside of the Park

Comment: “Provide water resources outside the park. This could be effective considering our dry Septembers. Perhaps get them moving into different areas away from the park earlier than they normally would. You would be surprised what gathers around a simple stock tank.”

Response: The suggested actions would be outside the National Park Service’s jurisdiction to undertake.

Public Comment:
1160C

Commenter:

Affiliation:
Individual

Comment: “Elk management should start outside the park. To begin I believe you should approach the [U. S.] Forest Service and local landowners for help. Natural foods that elk love could be planted there to draw elk outside the park. This is currently being done on private property on the western slope. Better foods mean they stay in an area. I have witnessed these phenomena and some property owners would cooperate if they only knew what to plant. Your biologists could advise them.”

Response: This suggestion would not resolve the need for the plan, as over time supplemental feeding would result in increased recruitment of calves into the population, causing the population to increase. The National Park Service believes that although individual elk from the in-park subpopulation may be attracted to forage outside the park, other elk would eventually move into or be born and remain in the park (filling up existing habitat), keeping the in-park subpopulation at carrying capacity.

Public Comment:
1160A

Commenter:

Affiliation:
Individual

Issue: Enhancements for Willow Restoration

Comment: “Import native willow from areas outside the park. This could improve the genetic diversity of all your plants and increase areas overgrazed. How about aerial application of fertilizers and repellants? You apply fertilizer with slurry drops on forest fires so why not strengthen your stressed living aspen groves. Study substances that prolong the effect of repellants. A lot of animals do not like the smell of fertilizers.”

Response: The specifics regarding the source of willow cuttings will be determined at a later date. There is no documented basis for the use of repellants on a large-scale basis. Repellents that have been used have been conducted on a small scale and need to be reapplied frequently, making this suggestion logistically unfeasible. Moreover, there is no indication that there is a nutrient deficiency preventing willow growth, so fertilizers would not be necessary. Fertilizers would also increase plant production and forage for elk, increasing the number of elk as a consequence which would not resolve the need for the plan.

Public Comment:
1160F

Commenter:

Affiliation:
Individual

ELK POPULATION

TOPIC: ELK POPULATION: SIZE, DISTRIBUTION, DENSITY AND BEHAVIOR

Issue: Elk Population Size

Comment: “It is established in the scientific literature that elk wintering in Rocky Mountain National Park and in Estes Park are two distinct subpopulations (Lubow et al 2002). The Draft EIS recognizes this fact (page iv) however; the population estimates used throughout the Draft EIS, the alternatives, the objectives, and the consequences treat both herds as one. This one fact invalidates the Draft EIS because a significant proportion of town elk do not use the Park at all and those that do use it for only approximately three months out of the year (Draft EIS page 119).”

Response: To meet the objectives of the plan, management actions would be taken to address the entire elk population that is the subject of the plan. The plan/EIS, as the commenter states, recognizes that there are distinct subpopulations within this population, with one subpopulation using the park in the winter and the other wintering outside the park. However, both use the park May through October and are having an effect on park resources as detailed in the “Purpose of and Need for Action” and “Background” sections of the plan/EIS. Based on available published literature and modeling, it can be stated that in general, between 75% and 90% of the entire population (both park and town subpopulations) migrate to higher elevations or the Kawuneeche Valley for the summer (Larkins 1997). This would be considered a significant portion of the population that is in the park during the summer and fall months. Under the modified Alternative 3, the final plan/EIS preferred alternative, lethal reduction actions would be taken predominantly between November and February which would target elk in the park subpopulations. However reductions could occur at any time of the year as needed to meet management objectives, which would include lethal reduction of elk from the town subpopulation when those animals are inside the park. Because the majority of the herd does spend a large part of the year outside the park, reducing the overall elk population in the Estes Valley would be more effective if complimentary actions, such as conducting special guided hunts in areas closed to traditional hunting, are taken by the Colorado Division of Wildlife. The final plan/EIS has been revised to include the target population size for both subpopulations within the natural range of variation. This has been provided in the “Objectives” section of the “Purpose and Need” chapter and “Alternatives” chapter of the plan/EIS.

Public Comment:
820N

Commenter:

Affiliation:
Individual

Comment: “Disease is another factor that likely influences elk populations in the park. The EIS mentions the incidence of chronic wasting disease in both free-ranging and captive elk but does not discuss its possible effects on the population density of animals in the park (EIS pg 20 and elsewhere). The EIS notes that [chronic wasting

disease] occurs in 0.3% - 2.1% of elk in region, based upon hunter harvest surveys just outside the park (EIS pg 125). While the current level of [chronic wasting disease] are not likely to result in large-scale population declines, an epidemic model revealed that [chronic wasting disease] will have an effect on a protracted time scale and that population declines would occur once infection rates exceed 5%. So while currently there may not be a discernable effect of [chronic wasting disease] on elk populations in [Rocky Mountain National Park], these effects may become apparent in coming decades.”

Response: The population model that would be used annually to estimate the population size incorporates mortality from all sources, including disease. The level of management action that would be taken to control the population size would be adjusted annually based on the current population size estimates. Based on adaptive management, management actions to control the population size would not be taken if the population size were within the range specified within the alternative and vegetation objectives were being met. Under the modified Alternative 3, the final plan/EIS preferred alternative, the population would be reduced to the higher end of the natural range: 1,600 to 2,100 elk with 600 to 800 elk in the park subpopulation. Based on annual monitoring of the population size, if the population is within this range and vegetation management objectives are being met, no further population reductions would be taken.

Public Comment:
808E

Commenter:
Humane Society of the
United States

Affiliation:
Organization

Comments: “Elk are a host to a wide variety of others diseases and parasites that may impact their population numbers. Of the 190 diseases and parasites that have been reported in elk and their European counterpart the red deer, six are considered as high risk agents that may impact elk and possible other animal populations. These pathogens and parasites include bacteria that cause brucellosis (*Brucella abortus*) and bovine tuberculosis (*Mycobacterium bovis*); the tick *Dermacentor andersoni* that transmits Colorado tick fever, Rocky Mounain spotted fever, and may cause tick paralysis; *Ixodes pacificus* a tick that transmits Lyme's disease; and mites of the genus *Pwsoroptes*, the angent of psoroptic mange. The EIS makes no mention of these pathogens, their occurrence in [Rocky Mountain National Park], nor their possible impact on the elk or other species, including humans.”

Response: Similar to the previous comment (808 E), if pathogens were having an effect on the population numbers, then this would be detected in the population estimates that would be calculated annually. As stated in the earlier response, the plan is based on an adaptive management approach, and if the elk population size is determined based on monitoring to be within the range specified in the alternative (1,600 to 2,100 with 600 to 800 in the park subpopulation elk under the preferred alternative in the final plan/EIS) and vegetation management objectives were being met, then no further elk reduction actions would be taken.

Public Comment:
808F

Commenter:
Humane Society of the
United States

Affiliation:
Organization

Issue: Elk Behavior

Comment: “Disruption of elk breeding behavior. The [National] Park Service's preferred alternative [draft plan/EIS] maximizes the impact of reductions on elk social behavior by scheduling reductions to encompass the elk breeding season that peaks in late September. This timing ensures maximum disruption of normal elk

ELK POPULATION

breeding behavior. The preferred alternative would have the most disruptive effect and it would continue throughout succeeding breeding seasons for the foreseeable future. All of the natural behaviors of rutting elk that create a tremendous draw for visitors would be reduced as they are in hunted populations. Harem size and normal breeding behaviors such as bugling, harem herding, and sparing between bulls, would all decline as has been documented for hunted herds.

Disruption of elk daily activity, habitat selection and social behavior. The [National] Park Service preferred alternative is comparable to the most severe hunting intensities outside of the Park. This level of hunting pressure has been determined to significantly alter natural patterns of daily activity, habitat selection, and social behavior in hunted herds. By focusing pressure on cows the [National] Park Service will maximize the disruptive effect of removals on behavior of elk because cows alter their behavior more readily than bulls in response to hunting pressure.”

Response: Under the modified Alternative 3, the final plan/EIS preferred alternative, lethal reduction actions would be taken predominantly between November and February which would target elk in the subpopulations that winter inside the park boundary. However, reductions could occur at any time of the year as needed to meet management objectives, which would include lethal reduction of elk in the fall when some elk that winter in Estes Park are still inside the park. Because the majority of the herd does spend a large part of the year outside the park, reducing the overall elk population in the Estes Valley would be more effective if complimentary actions, such as conducting special guided hunts in areas closed to traditional hunting, are taken outside the park by the Colorado Division of Wildlife. Progress made toward reducing the town subpopulation during winter when elk are outside the park would reduce the need for lethal reduction actions inside the park boundary during the breeding season.

Public Comment:
820J, 820K

Commenter:

Affiliation:
Individual

Comment: “Alternative two would teach elk to fear humans as their sole predator, while a wolf-reintroduction program would teach them to fear wolves as their primary predator. Elk will be most wary of wolves if Alternative Five is used, whereas if Alternative Two is used, elk will learn to fear humans as their natural predators, and will make themselves scarce in the presence of humans. Therefore Alternative Two would be harmful to tourism because tourists enjoy elk to come near them. This will not happen if humans play the solitary role of "natural" predator, because the elk will flee from tourists.”

Response: The objectives of the plan include decreasing the level of habituation to humans that is currently exhibited by elk. The plan/EIS “Visitor Use and Experience” section of the “Environmental Consequences” chapter has recognized that lower elk numbers and increased wariness by elk would somewhat reduce viewing opportunities in the park and would have a negligible-to-minor, adverse effect on some visitors. Visitors would continue to have many opportunities to view elk, including during the fall rutting season. Since release of the draft plan/EIS, the National Park Service has reconsidered its preferred alternative based on concerns expressed by the public and further evaluation of the ability of the National Park Service to implement an alternative given current staff resources and funding constraints. The final plan/EIS preferred alternative is the modified Alternative 3, would achieve an elk population size of 1,600 to 2,100 elk gradually over the 20-year planning period with 600 to 800 in the park subpopulation. As a result, visitors would be negligibly affected because changes in population size would largely be undetectable to the visitors, and elk would continue to be seen congregating in open meadows. Visitors would also benefit from viewing elk exhibiting natural behaviors and in a setting reflective of natural conditions. The park would opportunistically monitor visitation patterns and

visitor responses to changes in elk numbers and distribution to help identify educational needs of the public and to promote improved understanding of the elk and vegetation management plan.

<i>Public Comment:</i>	<i>Commenter:</i>	<i>Affiliation:</i>
834E	Wolf Advocate	Organization
820G		Individual

Comment: “Reduction in scientific, research value of elk by making them less abundant and difficult to observe and by making them fearful of people resulting in changes in use of habitats and in social behavior. The only elk populations in the United States that are managed at the carrying capacity of their habitats are those in some National Parks. All elk populations outside of National Parks are kept below carrying capacity of their habitats by hunting and are afraid of humans. Outside of national parks the most important determinants of population size and structure, movements, distribution and habitat selection of elk are hunting mortality and avoidance of humans. The scientific value of national park elk lies in their not fearing humans because they provide our only model of elk population structure, population dynamics, social behavior, and habitat selection in the absence of hunting.”

Response: The commenter may be correct in that elk in areas that are hunted may be more wary of humans. Elk however use Estes Park as a refuge from hunting and exhibit behaviors that indicate a level of habituation to humans. Under natural conditions, as defined in the plan/EIS, in the presence of wolves, elk would be less sedentary and more wary. One of the management objectives of the plan is therefore to decrease the level of habituation to humans that elk currently exhibit and to restore elk behaviors reflective of natural conditions. The scientific value of the unnatural behavior of elk and the interaction with humans is debatable. Observing and studying the natural behaviors of elk and the response of vegetation would be valuable to research since it would increase manager’s and researcher’s understanding of the park’s natural resources and ecosystem processes.

<i>Public Comment:</i>	<i>Commenter:</i>	<i>Affiliation:</i>
820H		Individual

Issue: Elk Densities and Movements

Comment: “There are a number of erroneous or unsubstantiated statements in the EIS. The Draft EIS states (page iv) that elk in the lower elevations during the summer is not "natural". There is no basis in fact for that statement. Elk were abundant in Estes Park when white settlers first arrived. There is also no basis in fact for the statement that concentrations of elk in wet meadow areas (which supply abundant forage) are unnatural. There is no basis in fact for claims that concentrations of elk on winter ranges are unnatural. Over ten years since reintroduction of wolves, elk in Yellowstone continue to aggregate on the northern winter range in groups numbering in the hundreds.”

Response: When settlers came to the Estes Valley, they noted that elk migration from lower elevations (the winter range) to higher elevations (the summer range) was occurring at that time. An excerpt from Estes (1939) – referring to animal migrations during the 1860s – stated, “winter drove all the game down to the foothills, except the elk, they would remain in the park [referring to the Estes Valley] until summer, then they went up over the range or mountains” (Monello et al. 2005).

In addition, August and McNaughton (1998) provide evidence that non-migratory elk are having an adverse

ELK POPULATION

impact on vegetation. These elk cause concern because they can severely inhibit the regrowth capabilities of important winter forage species. In particular, the herbaceous plants in willow communities may be particularly vulnerable because the majority of grazing is occurring during the growing season (Augustine and McNaughton 1998). Furthermore, evidence was provided in the plan/EIS to support the statements regarding the high concentrations of elk on the primary winter range. On the core winter range densities have been documented to be greater than 260 elk/mile². This level of elk densities are the highest concentrations ever documented for a free-ranging population in the Rocky Mountains (Monello et al. 2005, Singer et al. 2002). Known elk densities reported for other areas of comparable habitat in the Rocky Mountains range from 3 to 52 elk/mile² (Monello et al. 2005). It is the purpose and the objective of this plan to restore vegetation to natural conditions within these areas and, based on the evidence provided in the plan/EIS regarding the effects of elk grazing on vegetation, the National Park Service believes that actions to reduce the densities of elk on the primary elk range are justified.

The commenter is correct in stating that elk in Yellowstone continue to congregate within the park; however, evidence from Yellowstone indicates that elk densities have decreased as a result of the presence of wolves and elk have decreased their use of areas that have predators (Ripple et al. 2001). Research in Yellowstone National Park also indicates that willow and aspen are benefiting from this reduced grazing pressure by elk (Ripple et al. 2001). As such, under the Rocky Mountain National Park Elk and Vegetation Plan, the preferred alternative, the modified Alternative 3 in the final plan/EIS, would use redistribution methods to reduce grazing pressure on vegetation communities on the elk range to meet vegetation management objectives.

Public Comment:
820M

Commenter:

Affiliation:
Individual

TOPIC: ELK POPULATION – INDIRECT EFFECTS

Issue: Impacts on Elk Population – Poaching

Comment: “My concerns are that, by allowing qualified marksmen, poachers will take that as an open invitation to come to the park in the guise of being eligible marksmen.”

Response: This may be a perception for some; however, it remains illegal to do so, and those that act in this manner would be arrested and prosecuted. The effect on the elk population from poaching activities has been addressed as a cumulative effect in the plan/EIS, “Environmental Consequences” chapter, and “Elk Population” section. The use of NPS staff and their authorized agents who would be certified in firearms training, specially trained in wildlife culling, and be required to pass a proficiency test in order to qualify to participate in culling activities, would not be confused as hunters as they would wear clothing to identify themselves as agents of the National Park Service.

Public Comment:
650B

Commenter:

Affiliation:
Individual

VEGETATION

TOPIC: IMPACTS ON VEGETATION

Issue: Impacts on Willow and Aspen

Comment: “Horseshoe Park has experienced one major event which does not appear to have been addressed in the study. With the Lawn Lake Dam breach in 1982, the remaining beaver dams and Cascade Dam were destroyed which has significantly reduced the quantity of impounded water in Horseshoe Park thus lowering the water table. This is very evident in the reduced volume of water currently in Sheep Lakes. The difference in pool elevation between Sheep Lakes and the former Cascade Lake is only 36 feet and they are approximately one mile apart. If you plot the hydraulic gradient and backwater curves between Cascade Lake and Sheep Lakes using the normal pool elevation of each lake and take into account beaver dams along Fall River prior to 1982, you will probably find a significant difference in the water table elevation in Horseshoe Park in 1982 versus today. The conclusion here is that the elk most likely are not totally responsible for the changes that have occurred in Horseshoe Park.”

Response: The plan/EIS does not claim that elk are the only factor responsible for hydrologic changes in Horseshoe Park. The plan/EIS “Affected Environment” chapter, “Vegetation” and “Water Resources” sections describe the impact that the Lawn Lake Flood had on the hydrology of streams in Horseshoe Park and the resulting decline in beaver and willow.

The plan/EIS acknowledged that willow declines over the last 50 to 60 years can be attributed to a variety of factors, including changes in water availability. The alterations in hydrology and the impacts that has had on willow on the elk range has been described in the plan/EIS, “Affected Environment” chapter, “Vegetation” section. The National Park Service recognizes that the current condition and trend of willow communities is due to both the effects of elk and the current hydrologic conditions on the elk range and that these hydrologic conditions also play a critical role in development of vegetation communities. The plan/EIS states that given the current conditions regarding hydrology in these areas, a lack of beaver is accelerating the decline in willows in these areas by inhibiting the development of appropriate sites for willow seedling establishment and by limiting recharge of shallow aquifers. Modeling efforts indicate that willow communities can be improved if both elk numbers and water use are restored. And recent research has shown that beaver, even in years of low precipitation, can have large effects on the hydrology and expand riparian habitat even in areas that have experienced hydrologic changes in the past (Westbrook et al. 2006). Through the process outlined above and in the plan/EIS, the National Park Service proposes to remedy this current condition. In addition, restoration efforts in the area of the Lawn Lake flood are in progress. See also response to comment 804F and 804U in “Hydrology” section and 804V in the “Other Wildlife and Wildlife Habitat” section of this volume.

Public Comment:
777A

Commenter:

Affiliation:
Individual

VEGETATION

Comment: "...the Draft EIS, though conceding that montane riparian willow has been declining over the past 50 to 60 years due to a variety of factors, ... fails to disclose what factors may have caused or contributed to this decline and whether those factors have been addressed."

Response: See response to comment 777A above. The main causes others than hydrologic conditions, lack of beaver, and increased elk herbivory for decline of riparian willow on the primary winter range include removal for development and haying that occurred in the past in Moraine Park and the Lawn Lake Flood that altered the willow community in Horseshoe Park. None of these other factors are preventing restoration of the willow community on the elk range. The plan/EIS "Affected Environment" chapter, "Vegetation" section details the factors that have affected riparian willow on the elk range in the past.

A recent study conducted in Rocky Mountain National Park along a reach of the Colorado River on the elk primary summer range found that beaver can have profound impacts on hydrologic processes in the area. The area of the primary summer range has been previously impacted by the Grand Ditch, which has reduced summer flows in the Colorado River by approximately 50 percent since the late 1800s. This change in flow likely altered how beaver dams affected the hydrologic process on the primary summer range, as did the reduction in beaver that occurred as a result of trapping. A recent study analyzed the effects of only two beaver dams on hydrologic processes on a reach of the Colorado River on the primary summer range. Given the altered flow condition and current precipitation patterns, researchers found that beaver dams and ponds greatly enhanced the depth, extent, and duration of inundation associated with floods and that the water table was elevated during periods of both high and low flows (Westbrook et al. 2006). Each beaver dam studied attenuated the water table decline that occurs in drier summer months over nearly one quarter of the 58 hectare study area. This study suggests that through dam building, beaver can create and maintain hydrologic regimes at very large spatial scales, which can expand riparian habitat.

Public Comment:
804F, 804U

Commenter:
Animal Welfare Institute

Affiliation:
Organization

Comment: "Willow is described as the dominant woody shrub on almost all wet meadow or riparian areas in [Rocky Mountain National Park]. Elk are a dominant ungulate in RNMP. Elk herbivory impacts on willow, therefore, are to be expected, are entirely natural, and are limited to the core winter range within [Rocky Mountain National Park]. The [National Park Service] claims that elk herbivory on willow is severe and excessive and is affecting wildlife habitat for a large number of bird, butterfly, and plant species, yet it offers no direct evidence of such impacts beyond comparing willow production between grazed sites and fenced experimental plots."

Response: As described in the "Affected Environment" and "Environmental Consequences" chapters, "Vegetation" sections of the plan/EIS, many parameters, including willow production, have been measured on the elk range that indicate elk are having an impact on willow. It is recognized by the National Park Service that some level of elk herbivory is natural, but under more natural conditions with an intact predator base the amount of herbivory would be expected to be lower as elk concentrations would be lower. At current herbivory levels, authors have shown that elk herbivory is resulting in a conversion of tall to short willow on the elk range (Peinetti et al. 2001, Zeigenfuss et al. 2002, Cooper et al. 2003) and that willow cover has declined by 20% on the primary winter range (Singer et al. 2002, Zeigenfuss et al. 2002, Peinetti et al. 2001). Although data have not been collected on willow habitat types on the primary summer range, there have been observations by research scientists studying the park and by park staff that similar effects are occurring on the primary summer range in the Kawuneeche Valley. As part of the management plan, collection of baseline data and monitoring of vegetation would be conducted prior to any management actions. Riparian habitats in particular support the

highest level of songbird diversity of any western habitat type, while being one of the rarest (Leukering and Carter 1999). If this habitat is lost, species that depend upon it will also be impacted.

Public Comment:
804T

Commenter:
Animal Welfare Institute

Affiliation:
Organization

Comment: “Elk probably do adversely impact willow and aspen within their winter range, however, no study has documented that elk are the only or even the primary cause of declines in either species. Other important factors in declines of willow and aspen include human-related changes in water tables, climate change, fire exclusion, and declines in beaver (initially related to introduction of an exotic disease). On summer range the primary negative impact on willow is global warming that has resulted in a decline in snow cover that is critical to maintaining alpine willows. On summer range, willow stands grazed by elk have declined, however; declines have occurred in willow stands that are not grazed or are only lightly grazed by elk. Elk do not impact aspen on summer range - aspen is not preferred forage on summer range (Stevens 1980). It is doubtful whether actions proposed in the Draft EIS will reverse trends in aspen and willow since they are region wide. Aspen has been declining on Forest Service land adjacent to Rocky Mountain National Park for decades despite elk populations well below range carrying capacity.”

Response: Regarding other factors affecting willow on the elk range, see previous response to comment 777A above. Studies that have controlled elk grazing with all other factors left constant have shown increased growth in these species. In addition, in areas without heavy elk browsing, these species are also able to grow and do not experience the same effects as seen in high concentration areas of the elk range. Based on the evidence provided in the plan/EIS, high levels of elk herbivory is the main reason that willow cannot recover on the primary winter range. It has been recognized in the plan/EIS “Affected Environment” chapter, “Vegetation” section that on the summer range, the declines in willow in the subalpine and alpine cannot be definitively correlated with elk herbivory, but they do support the general observations by park staff and researchers (Zeigenfuss 2005). It has been recognized that climatic conditions and snow cover may also be contributing to the changes in willow in alpine areas. Only limited data have been collected on willow habitat types on the primary summer range in the Kawuneeche Valley, however there have been observations by research scientists studying the park and by park staff that similar effects are occurring here as on the primary winter range. As part of the management plan, monitoring and establishing baseline data would be conducted prior to any management actions.

The aspen located on U.S. Forest Service lands that are referred to in the comment are likely aspen in mixed conifer forests. Aspen which are successional to conifer are little affected by elk as the commenter points out; however these are not the aspen proposed for protection and management. The aspen that are the focus of this plan/EIS are those that are successional to grassland such as those found in the Kawuneeche Valley on the primary summer range. Ecosystem modeling conducted for the park has predicted that these aspen on the elk range that are successional to grassland would continue to decline without fencing protection from herbivory (Coughenour 2002). A few studies have indicated a lack of regeneration of aspen in the Kawuneeche Valley, which has been attributed to locally heavy elk use in both the winter and summer (Suzuki et al. 1999, Kaye et al. 2003). Redistribution of elk may help in the regeneration of aspen without the use of fences; however, fences would be used to protect aspen until the effectiveness of such actions can be further evaluated through monitoring.

Public Comment:
820B

Commenter:

Affiliation:
Individual

Comment: “Studies on Aspen damage in [Rocky Mountain National Park], Yellowstone, and other areas have found strong inverse link between a viable wolf population and elk overgrazing on aspen. The 2004 recommendations recognized this fundamental biological fact as one of the prime determinants when considering its options. Sharpshooting will not deter elk from loafing in their winter aspen groves and chewing the trees literally to death; half the purpose of this management plan is being ignored by this new proposal.”

Response: All action alternatives incorporate redistribution actions to reduce densities of elk to promote recovery of aspen and willow on the elk range. In addition, as stated in the response to comment 804S in “Purpose of and Need for Action” section of this volume, due to the degraded condition of the aspen on the elk range and the uncertainty of the success that can be achieved with the use of redistribution actions, all action alternatives incorporate the option to fence aspen as needed to meet the management objectives of the plan.

Public Comment:
436C

Commenter:

Affiliation:
Individual

Issue: Impacts on Alpine Vegetation

Comment: “The concern raised for alpine tundra may be considered as much a tourist value as an inherently ecological one: excess concentrations of elk at high altitudes (as observed in June 2006) may be of some or great weight here.”

Response: Page ix of the Executive Summary displays the significant resources that the park is mandated to protect, which includes the alpine tundra area. The elk and vegetation management plan therefore has evaluated the impact of management actions on these resources, as was presented in the “Environmental Consequences” chapter, “Vegetation” section of the plan/EIS.

Public Comment:
856D

Commenter:

Affiliation:
Individual

WATER RESOURCES

TOPIC: IMPACTS ON HYDROLOGY

Issue: Management Actions Effects on Hydrology

Comment: “The proposal to slaughter elk in [Rocky Mountain National Park] will do nothing to restore beaver populations within the primary winter range. Elk did not cause the decline of the beaver. ... The [National Park Service] failed to disclose in the Draft EIS the full range of activities inside and external to the park and the [National Park Service] that may be adversely affecting the amount of water available to facilitate beaver restoration.”

Response: The commenter is correct in that elk did not cause the decline of beaver. The decline in beaver populations within the park have been detailed in the plan/EIS, “Affected Environment” chapter, “Other Wildlife and Wildlife Habitat” section. As discussed in that section, beaver declines in the park were likely initiated by trapping in the 1940s. Intense elk browsing of riparian willow, however, has apparently prevented the recovery of beaver (Baker et al. 2004), as is evident in the park where beaver colonies mostly occur in areas with low elk use and beaver are largely absent from willow areas with heavy elk use. Elk herbivory results in shorter willow, which is largely unsuitable habitat for beaver that prefer relatively tall, unbrowsed willow (Baker et al. 2004). Under the modified preferred alternative (Alternative 3), reducing the size of the park subpopulation to 600 to 800 elk, reducing densities through the use of redistribution techniques, and fencing 440 acres of riparian willow on the primary winter and summer ranges would reduce the consumption rate of willow by elk. This reduction in herbivory would allow increases in willow height and production on the elk range that would provide suitable habitat for beaver recolonization.

The National Park Service recognizes the importance of beaver within the ecosystem and in meeting the management objectives of the plan for restoration of montane riparian willow on the elk range. As such, under all action alternatives, there is the potential to reintroduce beaver to the elk range, if natural recolonization is not occurring, when willow vegetation has been restored to areas of approximately 10 acres or more. Once beaver have recolonized, there would be a positive effect on hydrology by raising groundwater elevations, increasing stream sinuosity, and increasing the amount of surface water on the elk range (Naiman et al. 1988). This then would create a feedback mechanism that would increase beaver and willow populations.

The plan/EIS acknowledged that willow declines over the last 50 to 60 years can be attributed to a variety of factors, including changes in water availability. The alterations in hydrology and the impacts that has had on willow on the elk range has been described in the plan/EIS, “Affected Environment” chapter, “Vegetation” section. The National Park Service recognizes that the current condition and trend of willow communities are due to both the effects of elk and the current hydrologic conditions on the elk range and that these hydrologic conditions also play a critical role in development of vegetation communities. Modeling efforts indicate that willow communities can be improved if both elk numbers and water availability are restored. Through the process outlined above and in the plan/EIS, the National Park Service proposes to remedy this current condition.

Public Comment:
804V

Commenter:
Animal Welfare Institute

Affiliation:
Organization

OTHER WILDLIFE AND WILDLIFE HABITATS

TOPIC: IMPACTS ON OTHER WILDLIFE SPECIES

Issue: Birds and Butterflies

Comment: “In regard to elk impacts to bird and butterfly species, it is one thing to theorize about such impacts based on the assumption that elk herbivory destroys bird and butterfly habitat and that, therefore bird and butterfly populations must be in decline, versus proving that such impacts are real. As revealed in the Draft EIS, there is no evidence that bird and butterfly population have been adversely impacted by elk herbivory or elk concentrations in the park.”

Response: The commenter is correct that data have not been collected to indicate that bird and butterfly populations have been adversely impacted. However, the conclusion reached in the plan/EIS is logical in that these species depend on this habitat for forage and shelter and if the habitat is not available, these other wildlife species cannot be supported resulting in significant adverse impacts to these other wildlife species.

Public Comment:
8400

Commenter:
Animal Welfare Institute

Affiliation:
Organization

PUBLIC HEALTH AND SAFETY

TOPIC: IMPACTS ON PUBLIC HEALTH AND SAFETY

Issue: Human-Elk Conflicts

Comment: “While wildlife and humans conflict, there is no evidence provided in the Draft EIS that the elk population has or is causing an increase in and/or unacceptable conflicts with humans who live or recreate in the area. Indeed, the Draft EIS reports that elk damage to landscaping (which costs the city of Estes Park some \$12,000 to \$14,000 a year to repair) may actually be generating over \$300,000 for local landscaping companies, that one automobile per month strikes an elk despite a significant increase in traffic volume due to increased development, that 70 percent of residents interviewed reported that elk interactions with visitors have resulted in no injuries to date.”

Response: This issue was raised by both cooperating agencies and the public during the scoping phase of the process and therefore was evaluated according to the requirements of the National Environmental Policy Act. Based on the best available information regarding human elk conflicts, the commenter is correct in stating that accident levels are low, although there are documented incidents that occur every year as a result of habituated elk (see “Affected Environment” chapter, “Public Health and Safety” section). This concern is not part of the purpose and need for elk management or an objective of the plan/EIS, but the risk to public health and safety due to habituated elk is a concern of the public and agencies outside the park and was therefore analyzed in the plan/EIS.

Public Comment:
804P

Commenter:
Animal Welfare Institute

Affiliation:
Organization

Issue: Risks to Visitors from Management Actions

Comment: “Concerns were raised by many commenters regarding the risk to visitors from lethal reduction activities that could take place at night and the potential for actions taking place in areas of high visitor use. Some suggested closing the park entirely or portions of the park to reduce risk to the public.”

Response: Limited areas of the park on the elk range may be temporarily closed during operations to conduct management actions. Closure of the entire park will not be necessary. Since release of the draft plan/EIS, the National Park Service has reconsidered its preferred alternative based on concerns expressed by the public and further evaluation of the ability of the National Park Service to implement an alternative given current staff resources and funding constraints. The final plan/EIS preferred alternative is the modified Alternative 3 which would achieve an elk population size of 1,600 to 2,100 elk gradually over the 20-year planning period with 600 to 800 elk in the park subpopulation. This alternative would involve lethal reduction of up to 200 elk per year. Management activities could be conducted at any time of the day using multiple methods that would minimize impacts on visitors and would be mitigated to eliminate risks to visitor safety as described in the “Elements

PUBLIC HEALTH AND SAFETY

Common to All Action Alternatives” section in the “Alternatives” chapter. These measures, in addition to appropriately sized closures of limited park areas, could include use of subsonic ammunition, which has a shorter range than conventional rounds, and shooting from elevated stands, which can establish shooting lanes and reduce the distance bullets could travel via backstops. Every action would involve the presence of agency spotters who would ensure that the area is clear of people and to prevent individuals from entering the area during lethal reduction activities.

Public Comment:
355B, 820I

Commenter:

Affiliation:
Individual

SOCIOECONOMICS

TOPIC: **IMPACTS ON SOCIOECONOMICS**

Issue: Evaluation of Socioeconomic Impacts

Comment: A few comments were received promoting the re-introduction of wolves as they would provide incentives for tourists to visit the region resulting in large economic benefits. Wolves bring millions of dollars in tourist money per year to areas they live in because of their popularity among the general public.

Response: The socioeconomic analysis presented in the plan/EIS recognized both the social and economic benefits to tourism in the vicinity of the park (see “Environmental Consequences” chapter, “Socioeconomics” section). As presented in the plan/EIS, it was projected that there could potentially be a 10% gain in visitors to the region, which would result in \$3 million in additional sales and \$1 million in personal income. The National Park Service recognized the socioeconomic benefits that would result with the release of wolves inside the park; however, there were additional elements evaluated and considered in determining the preferred alternative.

<i>Public Comment:</i>	<i>Commenter:</i>	<i>Affiliation:</i>
834F	Wolf Advocate	Organization
839B		Individual

Comment: “The DEIS covers a wide range of socioeconomic impacts of the proposed actions. One issue which we didn't see discussed was how the reduced elk populations and recovery of the aspen and willow in the core winter range areas (which also happen to be some of the most heavily used areas in the park) would affect the fall tourist season. Many residents of the Front Range visit the Park in September to view the aspen in fall color, and it would seem that increased aspen regeneration would lead to increased color and thus perhaps increased visitation levels. In turn this would likely bring an increase in income to the tourist-related businesses in the Estes Park area. If this economic impact was covered in the DEIS we couldn't find it, and it would be worth investigating.”

Response: There is a segment of visitors that come to the park and region in the fall primarily to enjoy the colors of autumn, as was discussed in the “Affected Environment” chapter, “Visitor Use and Experience” section. This is not thought to be a large segment of visitors, and as such the socioeconomic benefit of restoration of vegetation would not likely have a substantial impact on visitation to the area and would result in negligible to minor, long-term benefits. This information was presented in the “Environmental Consequences” chapter, “Socioeconomics” section of the plan/EIS.

<i>Public Comment:</i>	<i>Commenter:</i>	<i>Affiliation:</i>
1159C	Audubon Society of the	Organization

Issue: Evaluation of Impacts Outside of the Park

Comment: “As a resident outside of Rocky Mountain national Park however, I am concerned about the impact on my property with the overabundance of elk already evident. It would seem that by eliminating the elk in the fashions described would certainly force remaining elk out of the protected area of the park and in to the surrounding 'safe' areas outside the boundaries of the park and in 'non-hunting' residential areas. Does the plan address this concern and if so, in what way?”

Response: The plan/EIS does address the concern of movement of elk outside the park as a result of management actions. In the description of Alternative 2 in the “Alternatives” chapter of the plan/EIS, it is stated that the long-term effects of management actions such as lethal reduction using suppressed or unsuppressed weapons and aversive conditioning on movement of elk is uncertain. For analysis purposes, the action alternatives (Alternatives 2, 3, 4, and 5) assumed that there would continue to be elk movement between the town and park. If management actions in the park cause additional elk to seek refuge in town or if migration of the town subpopulation ceases or declines, eliminating the ability of the National Park Service to reduce the population, the impacts on properties outside the park would need to be mitigated by the Town of Estes Park and by the Colorado Division of Wildlife, which has jurisdiction over wildlife outside the park boundaries. With the gradual reduction in the elk population under the modified Alternative 3, the preferred alternative in the final plan/EIS, the number of elk removed annually would be up to 200, reducing the potential for large numbers of elk to move outside of the park due to management actions.

Public Comment:
688B, 687C

Commenter:

Affiliation:
Individual

Comment: “The executive summary cites problems of elk concentrations in developed areas outside of Rocky Mountain National Park (page vi). It is not appropriate in an EIS on elk and vegetation management in Rocky Mountain National Park to cite or attempt to address problems outside of the Park. These problems should be addressed by those with statutory responsibility for management of wildlife in those areas.”

Response: It is not an objective of the plan to manage elk outside park boundaries. If issues occur or continue to occur outside the park it will be up to the Colorado Division of Wildlife and local government agencies to take further management actions. Although the scope of the plan is limited to within park boundaries, the plan must acknowledge impacts that may result both inside and outside the park.

Public Comment:
820L

Commenter:

Affiliation:
Individual

Comment: “The National Park Service’ sensitivity to business that visitors generate in Estes Park is thoughtful and neighborly. Still, the posturing in the EIS for tourism and more visitors ought not override the agency's conservation mandate and concerns for wildlife and the purpose of the publicly owned national park.”

Response: The impacts on visitor experience and the economics as a result of actions to manage elk and

vegetation were issues identified during the scoping process by the public and by other agencies. The “Issues and Impact Topics” section of the “Purpose of and Need for Action” chapter addresses potential issues and impact topics that were brought forth during public scoping and through the interdisciplinary planning process. Under NPS Director’s Order 12, issues are defined as problems that any of the alternatives may cause, or they may be questions, concerns, problems, or other relationships, including beneficial ones. Issues alert the reader to what the environmental problems might be if an action is taken. The National Park Service is not posturing but merely disclosing impacts to the regional and local economy that may result from taking a federal action as required by the National Environmental Policy Act.

Public Comment:
355C

Commenter:

Affiliation:
Individual

Divider page for Business

Back of divider



Public Comment Form

Draft Elk and Vegetation Management Plan and Environmental Impact Statement

DRAFT PLAN / EIS

The Draft Plan / EIS identifies and evaluates a range of alternatives for managing elk and vegetation within Rocky Mountain National Park and provides an assessment of environmental effects. The goal of the comment period is to obtain your thoughts and input on whether the Draft Plan / EIS adequately addresses environmental issues and concerns and if the overall analysis of impacts is accurate and thorough. Comments may be submitted in writing to the address on this mailer, on the internet at <http://parkplanning.nps.gov/romo>, faxed to (970) 586-1397, emailed to romo_superintendent@nps.gov, or hand delivered to the park headquarters.

Comments on the Draft Plan / EIS must be received by July, 4 2006.

I attended your meeting on 5/25/06 at the Holiday Inn and reviewed the Alternatives you presented.

It is not my choice to have Alternative 2 enforced. That level of killing is an abomination. If I had to choose, of course, it would be none of the Alternatives. However, Alternative #4 would be closest. I just wish you had had the foresight years ago to initiate this proposal.

I would beg you to take another ~~census~~ census of the elk present now in the Park. If it is below your population level of 1,600 to 2,100 elk, I would hope you could start Alternative #4 without killing other elk.

My restaurant business is enhanced greatly by the elk viewing and is the main focus of most tourists.

Please be cautious in your decision.

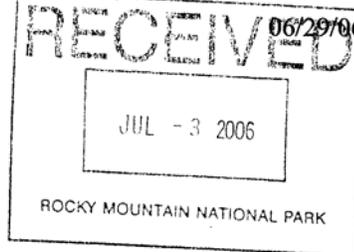


Wayne Drew Corcoran
Mountain Home Cafe, Estes Park
15 Year Resident



4950 State Highway 210 SW • Pillager, MN 56473
 218-746-3900 office • 866-456-6806 answering service
 email: mrdeer@brainerd.net • www.TanksAnimalCapture.com

Rocky Mountain National Park
 Von Baker, Superintendent
 1000 Highway 36
 Estes Park, CO 80517-8397
 970-586-1206



To Whom It May Concern:

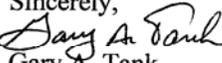
As you can see by our brochure we are in the business of animal capture, transportation and quarantine of a wide variety of animals from tiger and snakes to axis deer and elk, and would like to offer our services to help you find a solution to your ever growing elk population. We have a portable handling facility that consist of 8' by 16' panels that can be placed in any configuration to trap, hold, and load the animals on to trailers.

I am a third generation elk and deer rancher located in central Minnesota with a life time of experience handling elk and deer at my place and hundreds of other elk and deer farms across the country.

In my experience dealing with municipalities with urban deer and geese problems, contraception and or introduction of other species to control another are not only ineffective but extremely expensive and it can also create an entirely new set of unwanted problems that may be worse than the original. Sharp shooting and or hunting will likely mean changes in either the National Parks rules or federal laws. Capture and relocate, or capture and sterilization, or capture and slaughter may be very viable options for the Rocky Mountain National Park.

Because of things like elevation, terrain, migration routes and areas, accessibility to these areas, time frame, politics and a whole host of other unknowns we would like the opportunity to meet with the decision makers. We would make a formal proposal to help curb the elk overpopulation in the Rocky Mountain National Park now and in the future.

If you or your board members have any questions feel free to call anytime.

Sincerely,

 Gary A. Tank

Lions, tigers and bears...oh my!

ROMO-0003

Page 1 of 2

Yellow Wood Guiding
Jared Gricoskie
4990 Osage Dr. Apt D8
Boulder, CO 80303

National Park Service
Rocky Mountain National Park
Estes Park, CO 80517

Elk and Vegetation Management Plan

As a weekly visitor to the park, and also an entrepreneur that will make a career due to the wonders of Rocky Mountain National Park I view this issue to be a milestone for Colorado and Rocky Mountain National Park. As a naturalist I can see the impact of the elk herd on each and every willow in the various meadow parks in the park and in town. I could also list a number of specific examples of the need for some sort of active management regarding the bloated elk herd.

I avidly support Alternative # 5 for various reasons in respect for my own personal and business goals, but also from the goals and ideology of the National Park Service and the state of Colorado. Above all the reestablishment of wolves in the park would help to restore the natural balance of the predator-prey relationship. Below is my justification for this option.

- Yellowstone National Park has shown the amazing restoration of habitats due to the presence of wolves, wildflower populations alone have seen a wonderful rebound. Yellowstone has much more ranching land close to the park, so the negative impact of the wolves has been seen by ranchers there. Rocky Mountain National Park being surrounded by National Forests provides an excellent buffer to the Colorado ranching community. The economic impact of wolves must also be viewed with the charismatic megafauna impact on tourism. The general view of the public view towards the wolf is as an asset, and people want to see these amazing social animals. The impact to the Estes Park and greater Rocky Mountain National Park economy will see a growth due solely to the possibility of seeing wolves within this park. Yellowstone has also experienced this effect, nature-based tourism has grown solely due to the reintroduction of wolves to that park. The impact of the national media will be minor if other options are used, but like with Yellowstone the introduction of wolves will be a heralded event with the national media drawing attention to the national parks in a time when gas prices are high, and vacations to Rocky Mountain National Park could offer new experiences and adventures not seen in 100 years.
- The next advantage of wolves in the park is of course their biologic and ecologic benefit to the greater ecosystem. Time and time you can see the negative impact of removing climax predators from an ecosystem. I need not give specific details of the reintroduction of various predators and the impact of their presence in an ecosystem. The National Park ideal of preservation denotes the moral obligation to preserve not only what is in the park now, but what animals should be present in the park. The precedent of the Greenback Cutthroat Trout shows that this indeed fits with the policy of the national park.
- The fewer acres of fenced willow and aspen habitat will lessen the negative impacts to the aesthetic values of Rocky Mountain National

Park. Including wolves to the management equation offer both the reduced fences as well as the aesthetic values of wolves.

- Multiuse impacts due to closers for yearly elk reduction will have a negative impact on visitors throughout the year. Visitors do not want to watch en mass as elk are killed. On the contrary it will be hard keeping people away during the introduction of wolves. Also as a birder the more fenced in willow and aspen habitat may restrict access to habitats that house bird species found nowhere else in the park.
- The interpretation value of wolves provides yet another asset to share with visitors to the national park. From bus loads of school children to the weekend hiker, they will have the chance to experience and learn about an animal that is more often seen in children's fairy tails than in the natural landscape. The cultural stigma of wolves provides an excellent catalyst for education to all visitors.
- The need for wildlife biologists for the active management of the wolves and elk will provide a few jobs to a field full of highly educated and passionate people that struggle to find employment. These positions are much more socially glamorous then someone pounding in fence posts. The experience of coming across a biologist in the park will only enrich a visitor's experience.

One final piece of advice may be to add initiatives to increase the beaver population within the park. The beaver provides and creates willow habitats. With park populations at lows it may be wise to transplant beavers from surrounding valleys into the park to supplement the other management options. Many ranchers that use flood irrigation in the surrounding valleys have an overabundance of beavers that hinder their fields and against regulation kill these industrious beavers. Providing a trade off of transplanting beavers out of ranchers irrigation ditches will help offset the long standing intolerance of wolves in the rancher's ranges.

So in conclusion it is evident that some action must be taken to protect the willow and aspen habitats within the park and town. Every action will have its supporters and detractors but we must look at the overall long term effects of our actions in order to not make the same mistakes we have made before.

Sincerely,



Jared Gricoskie
Yellow Wood Guiding

Divider page for Organizations

Back of divider page

ROMO-0854

Page 1 of 1

**Comment submitted electronically via NPS Planning, Environment, and Public
Comment website (PEPC)**

Alpine Anglers a Trout Unlimited Chapter feel that the reduction plan would be of great benefit to the Beaver population as well as all fisheries effected by the out of control Elk population. The re-establishment of the beavers with the all the various benefits to the ecosystem would be great. No action would be the worst alternative.

Dallas Maurer


Drake, CO 80515



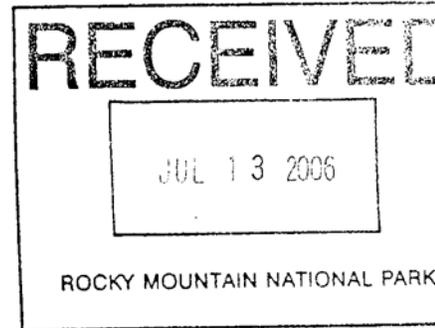
ANIMAL WELFARE INSTITUTE

PO Box 3650 Washington, DC 20027-0150 www.awionline.org
telephone: (703) 836-4300 facsimile: (703) 836-0400

July 5, 2006

BY E-MAIL AND REGULAR MAIL

Mr. Vaughn L. Baker, Superintendent
Rocky Mountain National Park
Estes Park, CO 80517



Superintendent:

On behalf of the over 25,000 members of the Animal Welfare Institute (AWI), I submit the following comments on the Draft Environmental Impact Statement on the Elk and Vegetation Management Plan for Rocky Mountain National Park (hereafter Draft EIS).¹

The proposal to engage in a long-term strategy to reduce the elk population in Rocky Mountain National Park (RMNP) using lethal control techniques represents a step back in time for the National Park Service (NPS). The slaughter of wildlife residing in national parks was practiced in the past when the NPS blatantly ignored its own legal mandates preferring to intensively manage and manipulate park wildlife based on inadequate science. Remarkably, though the Leopold Report from the late 1960s compelled the NPS to rediscover its natural regulation mandate, the elk slaughter plan under consideration by the RMNP is entirely antithetical to this mandate.

The Draft EIS attempts to justify the proposed 20-year lethal elk control program by claiming that it is consistent with the NPS natural regulation mandate and that elk reduction is needed to restore the park to a more natural condition and to aid in the recovery of particular species that have allegedly been harmed by excessive elk herbivory primarily on the core elk winter range within RMNP. The NPS claim that its natural regulation mandate justifies the intentional manipulation of park wildlife and the park ecosystem to achieve a desired condition for the park is entirely inconsistent with the proper interpretation of the natural regulation mandate. It also sets an enormously dangerous precedent for the future management of all national parks.

¹ Since the deadline for public comments on the Draft EIS fell on a federal holiday, we ask that the National Park Service, as is a common practice within all federal agencies, accept these comments on July 5, 2006. Also, in the event that the National Park Service elects to reopen the comment period to receive additional input on the Draft EIS, AWI reserves the right to submit supplementary comments.

The natural regulation mandate is the principal standard that separates the NPS from other federal land management agencies. The management of national parks must allow nature to dictate ecological conditions. Wildlife population dynamics, movements, distribution and habitat use patterns must be dictated by natural conditions. While wolves and grizzly bears may have once been part of the ecology of RMNP and may have aided in suppressing elk population growth, they were not present when RMNP was established. Indeed, other than Yellowstone and parks in Alaska, there are few national parks that have a full assemblage of native vertebrates. As a consequence, the proposal put forth by the RMNP, if approved, would set a precedent that would allow any national park to engage in the slaughter of park wildlife claiming that its actions are essential to replace the depredation and other impacts of predators who no longer exist and whose restoration may be biologically, ecologically, or socially unacceptable.

Had the natural regulation mandate been intended to be interpreted as it is by the RMNP, surely other national parks would have already attempted to propose lethal control in place of depredation to restore "natural" conditions. If this were the case, there would be no need for the Organic Act to explicitly allow for the "destruction of such animals and of such plant life as may be detrimental to the use of any parks..." 16 U.S.C. 3. This statute exists because it was the intent of Congress in promulgating the Organic Act to ensure that the destruction of wildlife within national parks, unless explicitly allowed for in a park's enabling legislation, would only occur when the animal or animals were demonstrated to be detrimental to the use of any park. Such a determination requires absolute and irrefutable proof of a significant adverse impact to the park, park wildlife, or other park resources that is detrimental to the park's use. The RMNP is not attempting to justify its elk slaughter program under this statute and, in fact, considering its lack of conclusive evidence of long-term and permanent elk herbivory impacts on vegetation in throughout the park, it could not meet the standard required to justify the proposed slaughter. Instead, the RMNP is relying on a "lethal control = predation = restoration of particular species" argument that, when subject to even minimal scrutiny, can be easily rejected. Even if such a slaughter could be justified, it must be considered an option of last resort. In this case, not only does RMNP's own data justify the termination or rejection of this proposal but it is clear that there are a variety of other non-lethal management options that RMNP should attempt first before even considering lethal control.

The RMNP's strict interpretation of its natural regulation mandate is perplexing considering that few, if any, national parks actually adhere to this legal mandate. In Yellowstone, for example, while there may be debate over the impact of snow-packed roads on bison ecology, there is no question that bison (and other wildlife) use the roads as energy efficient travel corridors, that bison movement and distribution patterns have changed as a result of the roads, and that the roads introduce a level of artificiality into the Yellowstone ecosystem. Yet the NPS has been consistently opposed to terminating oversnow winter use activities and its road packing program to restore more natural conditions and processes to Yellowstone's winter ecology. Similarly, though RMNP clearly desires to restore "naturalness" to the park, it is not proposing to remove roads, buildings, or other infrastructure to achieve this objective. While admittedly, the NPS

has a secondary mandate to allow public use of the parks, there is no law requiring the NPS to construct roads, restaurants, hotels, or other infrastructure to facilitate such use.

Ultimately, the restoration of natural conditions should be the goal of all national parks. Achieving this goal, however, must be done in an ecologically holistic manner that does not rely on lethal control of existing native wildlife or intensive management of token predators to obtain, temporarily or permanently, some perceived notion of what was or is "natural." Admittedly, the reintroduction of wolves – and grizzly bears -- to RMNP is a proposal worth significant study, but it is not appropriate or biologically advisable to limit such an effort to a single national park that is not large enough to sustain a viable population of either species. In this case, the RMNP is only proposing to introduce gray wolves (see Alternative 5) not for the purpose of reestablishing gray wolves, a federally protected species, as a viable population and critical component of the ecosystem but rather as a tool, subject to intensive management, to predate upon and disburse elk who have become sedentary and/or are found in high concentrations on winter range. Such a project, considering the proposed intensive management strategies – including sterilization of males wolves, intensive manipulation of wolves to maintain them within the park's boundary, immediate removal of any wolf killing livestock, removal of wolves who do not hunt or harass elk, euthanasia of removed wolves if sanctuary space is unavailable, and lethal control of adults wolves and wolf pups -- would blatantly violate both the Endangered Species Act and the NPS Organic Act and implementing regulations that provide the basis for the NPS natural regulation mandate.

AWI opposes the reintroduction of gray whales as proposed in Alternative 5, the environmentally preferred alternative, because of the anticipated intensive management requirements, because RMNP is not large enough to sustain a viable wolf population, and due to concerns over the acceptance of wolves by local residents and communities. AWI would only support wolf restoration if: 1) restored wolves were provided complete protection (not designated as a non-essential, experimental population) under the Endangered Species Act as a species or as a Distinct Population Segment should wolves in Montana, Idaho, and Wyoming be delisted; 2) the recreational hunting of wolves is not allowed; 3) restoration efforts are ecosystem wide and not limited to only RMNP; 4) restoration efforts are endorsed by all relevant state and federal agencies; and 5) restoration efforts are endorsed by an overwhelming majority of the public. In time, if socially acceptable, grizzly reintroduction should also be considered but only if subject to the same criteria as indicated above.

Beyond the issues associated with the NPS interpretation of its natural regulation mandate and the feasibility or advisability of predator reintroduction in RMNP, the Draft EIS provides ample evidence demonstrating that the proposed slaughter of elk is not necessary or consistent with NPS statutory and regulatory mandates. This evidence demonstrates that the elk population has declined since 2002, that aspen may not be a natural component of RMNP, that RMNP does not have adequate baseline vegetation monitoring data, and that there are an abundance of non-lethal strategies that RMNP should attempt to address alleged elk herbivory impacts on particular species before it embarks on it proposed elk slaughter. In addition, the Draft EIS fails to disclose critical

information relevant to the issues and impacts under review. For example, the Draft EIS contains no information on long-term precipitation patterns or anthropogenic impacts to surface waters, groundwater tables, or underground aquifers despite its focus on restoring beavers to improve hydrological conditions in the park. In addition, despite the precedent setting impact of the underlying argument being used by RMNP to justify its proposed elk slaughter, the Draft EIS provides no analysis of how this effort, if successful, will affect wildlife management throughout the national park system.

Because of the lack of evidence to justify the lethal control of elk in RMNP and given the serious problems associated with wolf reintroduction to the park, AWI supports Alternative 1 – the no action alternative. In the event that the NPS believes that it must provide some protection for willow or other vegetative communities allegedly adversely impacted by the elk, it should consider employing fences – as proposed Alternatives 2, 3, 4, and 5 – to eliminate large ungulate impacts to particular species. As the NPS understands, it is not obligated to pick any one of the five alternatives subject to review in the Draft EIS, rather it can create new alternatives based on strategies subject to analysis. In this case, AWI suggests that the NPS select Alternative 1 as modified to allow for the use of fencing to provide protection, as necessary, to vegetative communities subject to browsing by elk.

The remainder of this comment letter will further elaborate on many of the concerns associated with the proposed elk slaughter and other actions contemplated in the Draft EIS while also identifying deficiencies in the analysis.

The purpose and need for the proposed action cannot be justified based on the existing evidence. In this case, since RMNP only identified Alternative 5 as the environmentally preferred alternatives, it is not clear if Alternative 5 is the preferred alternative or if RMNP and the NPS may select another alternative as its preferred alternative or proposed action as the National Environmental Policy Act process is completed. For this reason, reference to a proposed action in the context of these comments includes all of the components of Alternative 5 – elk slaughter, fencing, elk redistribution, and wolf reintroduction. Elk slaughter, fencing, and elk redistribution are also included in Alternatives 2 (maximum lethal control), 3 (less intense but longer term lethal control), and 4 (less intense lethal control). Alternative 4 also provides for fertility control of the elk population. Alternative 1 is the no-action or status quo alternative.

The actions of primary concern are lethal elk control and wolf reintroduction as both are highly controversial and, as proposed, illegal. The use of fencing to protect vegetative communities, while not natural and though potentially disruptive of the visitor experience, is acceptable as a means of providing short term or long-term protection to species subject to intensive elk or other ungulate herbivory. Similarly, the use of personnel on foot or horseback, noise makers, rubber bullets or similar devices, and trained dogs to harass and disburse sedentary elk or elk found in unnatural concentrations on their winter feeding areas, while not an ideal management strategy for use in a national park, is far preferable to lethal elk control.

The NPS attempts to justify its proposed actions using a variety of arguments. Many of those arguments are identified below along with a discussion of the deficiencies associated with each argument.

- A. RMNP argument: NPS management policies direct managers to strive to maintain the components and processes of naturally evolving park ecosystems. If biological or physical processes were altered in the past by human activities, they may need to be actively managed to restore them to a natural condition or to maintain the closest possible approximation of the natural condition. Natural conditions reflect the condition of resources that would occur in the absence of human dominance over the landscape and occur when components and processes of the natural systems are intact. Change in natural conditions, however, are expected and recognized as an integral part of the functioning of natural systems. Draft EIS at iii.

RMNP relies primarily on these policies and other similar standards imposed by the Organic Act to claim that its proposed slaughter of zero to 5,200 elk (depending upon the alternative selected) inside of the park over 20 years is consistent with NPS policies intended to restore natural conditions or processes. While RMNP should be commended for its desire to restore natural conditions to the park, its proposed strategies to achieve this objective are not consistent with NPS laws or policies.

First, RMNP is not an intact natural system not just because it does not comprise a complete ecosystem but also because of a variety of anthropogenic impacts that affect the park each day. Whether it is the diversion of water for local cities or agriculture, pollution impacts from external sources, the lack of a complete assemblage of native ungulates (e.g. bison), anthropogenic barriers to natural elk immigration and emigration, and the very existence of roads, building, and other infrastructure within the park, the true restoration of natural processes and conditions would require far more than killing elk or reintroducing a token and intensively managed wolf population.

Second, wolves and grizzly bears were extirpated from RMNP long before it was established in 1915. While humans were responsible for the extirpation of these predators, the NPS is proposing to kill elk to ostensibly repair the damage done by past human actions despite the fact that the current elk population is within the range of natural variation as determined by modeling efforts and despite the fact that non-lethal strategies are available to harass elk and redistribute elk across the landscape.

Third, since NPS policies provide discretion as to when or how the NPS should engage in restoration efforts (e.g., direct managers to “strive” to maintain the components and processes of naturally evolving park ecosystems; if biological or physical processes were altered by human activities they “may” need to be actively managed), RMNP has the discretion

and, indeed, the obligation to choose a more humane and non-lethal approach. In this case, choosing the lethal approach, particularly given the lack of evidence to justify such a slaughter and the existence of a number of alternative strategies to address NPS concerns without resorting to lethal control, is entirely inconsistent with NPS statutes, regulations, and policies. Even if the NPS did nothing, the Draft EIS contains no evidence that such a scenario would lead to permanent and long-term damage to the elk, other wildlife, or the majority of the vegetative communities in the park. Indeed, the only impact of such a scenario would be localized effects on specific vegetative species on core elk winter range within the park. Not only is such an impact entirely natural but it could ultimately aid RMNP by causing the continued decline in the elk population due to density dependent food limitations.

Fourth, RMNP claims that natural regulation of the elk population in the park has always relied on some of the park elk being killed by hunters using lands adjacent to the park. Draft EIS at 16. RMNP then claims that its elk have never been greatly influenced by the public hunt as its population growth rates have been primarily limited by the lack of food, yet hunter-killed elk numbers for lands outside of the park are at their highest historic levels. *Id.* While it is unclear what impact public hunting has on park elk and though AWI takes no position on the hunt itself, the NPS should engage in negotiations with the Colorado Division of Wildlife to allow only elk cows to be killed in area open to hunting on lands adjacent to the park. The Draft EIS suggests that the bulk of the elk hunted at present are males, Draft EIS at 19, yet, as the NPS concedes in its own analysis of its proposed lethal control plan, if elk are to be hunted, removing female elk of reproductive age is the most effective means of generating a population level effect.

- B. RMNP argument: The RMNP elk population is in excess of what would exist under more natural conditions. Such conditions include predation by grizzly bears and wolves and competition with bison.

Though RMNP concedes that modeling efforts are not always accurate predictors of real life conditions, Draft EIS at 42, it claims that under more natural conditions its elk population would fluctuate between 1,200 and 2,100 elk and that elk would be less sedentary, more wary, and less likely to concentrate on winter range. Draft EIS at iv. Though the RMNP elk population allegedly reached its peak between 1997 and 2001 when the population ranged from 2,800 to 3,500 animals, since 2002, the elk population (both park and town subpopulation combined) has declined to 1,700 to 2,200 animals. Draft EIS at v. The present population size, therefore, is within the estimated natural range of fluctuation as predicted by modeling efforts. While modeling exercises suggest that the elk population, with no management, would fluctuate between 2,200 and 3,100 animals, Draft EIS at xi, the Draft EIS also claims that the park subpopulation is estimated to be at its food-

limited carrying capacity and that the town subpopulation may be at or below carrying capacity. Id. Thus, while population numbers may increase they may also decrease depending on primary production, amounts and timing of precipitation, habitat destruction or fragmentation outside of the park, and other anthropogenic factors.

While these facts may or may not be consistent with what would be found if RMNP was fully intact, the NPS cannot engage in a massive elk slaughter operation – primarily to be conducted under the cover of darkness, using both standard firearms and firearms equipped with silencers, mainly in the fall but potentially year round -- when there is absolutely no evidence to suggest that the current elk population is at an excessively high number or causing long-term and permanent damage to park ecology without violating the NPS Organic Act, its implementing regulations, and NPS policies. Indeed, considering that the existing population is within natural variability (as determined through a modeling exercise) and that both subpopulations are at or below carrying capacity due to food limitations or other reasons, there is simply no factual basis for any further evaluation of the proposed elk slaughter plan.

Perhaps more important than overall elk numbers in RMNP, is elk density or concentration in its core winter range within RMNP and the sedentary behavior demonstrated by 25 percent or less of the total elk population. Lethal control, however, is not necessary to disperse elk and, in fact, may not be particularly efficacious since a dead elk is unable to teach other elk to be fearful or wary of humans. Non-lethal strategies, such as fencing to keep elk out of areas requiring protection, or harassment strategies (on horseback, using cracker shells or rubber bullets, or with trained dogs) is likely to be more effective since these activities can be continued without interruption (versus lethal control which would require disease sampling of the body, removal or other disposition of the carcass) and because they are based on the use of aversive stimuli which, in time, the elk will learn to fear. At a minimum, the NPS should attempt the use of these non-lethal strategies before embarking on its proposed slaughter.

- C. RMNP argument: High concentrations of elk and excessive levels of elk herbivory have degraded the vegetative communities that support large numbers of bird, butterfly, and plant species.

The impact of elk on plant species will be dealt with below though it is important to note that the Draft EIS is focused only on certain vegetation types located primarily within the elk's core winter range inside of the park and that, except for the alleged impacts in this localized area where wintering elk tend to concentrate, there is no evidence that RMNP elk are negatively affecting native biodiversity on a landscape scale. Draft EIS at 21.

In regard to elk impacts to bird and butterfly species, it is one thing to theorize about such impacts based on the assumption that elk herbivory destroys bird and butterfly habitat and that, therefore, bird and butterfly populations must be in decline, versus proving that such impacts are real. As revealed in the Draft EIS, there is no evidence that bird and butterfly population have been adversely impacted by elk herbivory or elk concentrations in the park. For example, the alleged decline in the ptarmigan on RMNP was determined to be more strongly influenced by local weather than the size of the elk population. Draft EIS at 155 citing Wang et al. 2002a and 2002b. For songbirds, though the Draft EIS contains information about species richness in different habitat types, there was not a shred of evidence to demonstrate that songbird populations have declined or otherwise have been affected by the elk. Draft EIS at 156. Similarly, for butterflies, while evidence may exist suggesting that they prefer certain habitats, no evidence was offered, beyond pure speculation, that RMNP elk were adversely impacting butterflies. Until such direct evidence is available, the NPS should not rely on simple assumptions to justify its proposed elk slaughter.

- D. RMNP argument: An increase in elk calving near areas where the public recreates in the Estes Valley and increased concentrations of elk in developed areas inside and outside the park increase the potential for human-elk conflict. Draft EIS at vi.

While wildlife and humans can conflict, there is no evidence provided in the Draft EIS that the elk population has or is causing an increase in and/or unacceptable conflicts with humans who live or recreate in the area. Indeed, the Draft EIS reports that elk damage to landscaping (which costs the city of Estes Park some \$12,000 to \$14,000 a year to repair) may actually be generating over \$300,000 for local landscaping companies, that one automobile per month strikes an elk despite a significant increase in traffic volume due to increased development, that 70 percent of residents interviewed reported that elk are an important part of the quality of life in the Estes Valley, and that elk interactions with visitors have resulted in no injuries to date. Considering that this data suggests that there is no conflict between residents of the Estes Valley and elk, the RMNP should not be relying on elk-human conflicts to attempt to justify its proposed elk slaughter.

- E. RMNP argument: Increased concentrations of elk could increase the risk of spreading chronic wasting disease in the elk population. Draft EIS at vi.

Chronic wasting disease is a legitimate concern for the future of elk in RMNP. Even the NPS, however, concedes that it is unknown whether chronic wasting disease is a naturally occurring pathogen in wildlife populations. Draft EIS at 20. If it is naturally occurring, the NPS natural regulation mandate should allow the disease to persist regardless of its potential impact on elk or other species. Disease is known to be a natural factor that can exert control on

wildlife populations. The NPS needs to make a determination as to whether chronic wasting disease is a naturally occurring pathogen and, if it determines it is naturally present in the elk population, it cannot use chronic wasting disease as justification for its elk slaughter plan.

- F. RMNP argument: Elk browsing stunts the growth and kills all young aspen trees on the core elk winter range and in some parts of the Kawuneeche Valley. Draft EIS at vi.

There is little dispute that elk eat aspen in RMNP and that elk herbivory impacts, though natural, is an issue of concern to park officials. What is in dispute, however, is whether aspen is a naturally occurring species in RMNP. Even the NPS concedes in the Draft EIS that “it is uncertain when aspen established in the area that is now RMNP, how its distribution fluctuated, and whether aspen found in the grassland areas of the primary winter range was present prior to elk extirpation by 1880.” Draft EIS at 42 citing Mondello et al. 2005. The Draft EIS goes on to claim, citing Coughenour 2002, that “other modeling has indicated that almost any population size of elk in the park can prevent aspen cohort establishment, and that current stands are primarily a result of aspen expansion while elk were extirpated from the area.” Draft EIS at 47. Though this evidence suggests that aspen only appeared in RMNP after elk had been extirpated from the area and that, conversely, had elk not been extirpated aspen may not have ever become established in the park, the NPS claims that “until further research can refute the hypothesis that the presence of aspen is not a result of elk extirpation, the park would manage aspen on the elk range as a natural component in those areas.” Id. Since this position is inconsistent with the bulk of the evidence about aspen existence in the park, the NPS could have – and should have – taken the opposite position that it would not seek to restore or recover aspen habitat until and unless it was demonstrated that aspen were native to the park.

Alternatively, whether the NPS determined that aspen naturally occur in the park or that aspen only appeared in the park as a result of elk extirpation, it could have elected to protect and recover aspen and its habitat through the use of fencing, habitat enhancement, and other potential strategies instead of resorting to a massive slaughter of elk to restore a species that may not have ever been a natural component of the park. The Draft EIS does not provide a rational explanation as to why the use of fencing is not an acceptable non-lethal alternative to address alleged elk herbivory impacts on aspen. Moreover, even if elk herbivory is impacting aspen regeneration, the Draft EIS fails to identify other factors (i.e. climatic patterns, reduction in soil quality, erosion, disease) that may also be affecting aspen.

- G. RMNP argument: Elk are severely inhibiting the ability of montane riparian willow to reproduce, as few willow plants on the primary winter range produce seed, and seedling survival is almost non-existent. Draft EIS at vi.

Willow is described as the dominant woody shrub on almost all wet meadow or riparian areas in RMNP. Id. Elk are a dominant ungulate in RMNP. Elk herbivory impacts on willow, therefore, are to be expected, are entirely natural, and are limited to the core winter range within RMNP. The NPS claims that elk herbivory on willow is severe and excessive and is affecting wildlife habitat for a large number of bird, butterfly, and plant species, id., yet it offers no direct evidence of such impacts beyond comparing willow production between grazed sites and fenced experimental plots. It does concede, however, that there are conflicting results on studies of the impact of elk herbivory on new biomass production and that the average annual offtake of willows attributable to elk is less than the level at which willow are “negatively affected.” Draft EIS at 137.

The problem with comparing vegetation productivity, composition, and abundance data from area open to grazing to areas where grazing is completely eliminated is, as the NPS concedes, that such comparisons do not consider the multitude of variables that affect vegetation growth and diversity, including herbivory itself. The legitimacy of such comparisons is similar to studying a caged tiger and arguing that the behaviors observed in captivity are mimetic of those in a wild tiger. In this case, though the Draft EIS makes it clear that RMNP has one or more fenced experimental plots, it doesn’t identify the location of all of the plots, does not indicate how many plots are in areas representative of elk core winter range, does not identify how many plots exist or their size, does not indicate whether the plots are inaccessible to all grazers and browser or just large ungulates, fails to disclose the soil type within each plot, fails to provide precipitation data for the plot or its surrounding area, fails to disclose how many years the plots have been in place and how many years the plots have been monitored, fails to disclose the production, composition, abundance, and trend data for each plot over time, and fails to delineate the topography and drainage patterns on each plot. Each of these factors, and other factors, would have to be monitored or measured to even begin to have a chance to predict the causes of changes in vegetation abundance, composition, and productivity estimates inside of each plot. In addition, though the RMNP is eager to disclose its data documenting alleged elk herbivory impacts to willows and other species, it fails to disclose any information about its monitoring methodology and practices for those specific sites in question. Much of the information identified above for the experimental plots would also be needed for the grazed/browsed areas in order to more accurately compare and contrast result between and among grazed sites and experimental plots. Yet, even the NPS concedes that it has not engaged in routine monitoring of the status of vegetative conditions, beaver populations, or visitor attitudes over the past decade, Draft EIS at 45, and admits that it must collect baseline data at sites not previously evaluated while collecting new data at previously evaluated sites. Draft EIS at 51. Until such

data and information are disclosed, elk herbivory impacts to willow or other species cannot be fully understood.

In regard to willows, the Draft EIS, though conceding that montane riparian willow has been declining over the past 50 to 60 years due to a variety of factors, Draft EIS at vi, fails to disclose what factors may have caused or contributed to this decline and whether those factors have been addressed. While the current condition of riparian willow habitats may be due to elk herbivory, the fact that the decline in willows began long before there were any concerns about elk herbivory, provides conclusive evidence that the elk had nothing to do with the willow's decline. Similarly, if the factors that caused the willow's decline are still in play, then elk herbivory may not be a limiting factor at all. The NPS is legally required to disclose such information and to provide evidence as to whether such factors are still of concern and/or what has been done to address such factors over time. It can't ignore these factors to achieve its self-serving justification for its proposed elk slaughter. Similarly, the RMNP should not even be considering the lethal control of elk until and unless all other non-lethal strategies (i.e. fencing, non-lethal harassment) are attempted.

One of these factors is, according to the Draft EIS, the decline in beavers on the primary winter range. The RMNP claims that a 90 percent decline in beavers on the primary winter range starting in 1939 has led to a 70 percent decline in surface water. Draft EIS at vii. The beaver decline was due to extensive beaver trapping throughout the park in the 1940s. Draft EIS at 18. The reduction in surface water has accelerated montane riparian willow declines by inhibiting the development of appropriate sites for willow seedling establishment and limiting recharge of shallow aquifers. Draft EIS at vii. The RMNP believes that lethal control of the elk population will allow for natural recolonization of the winter range with beaver or, if natural recolonization does not occur, purposeful reintroduction will occur to restore beaver population which, theoretically, will create habitat conditions to allow for the expansion of riparian willow habitat.

The proposal to slaughter elk in RMNP will do nothing to restore beaver populations within the primary winter range. Elk did not cause the decline of the beaver. Rather, humans were responsible as a result of extensive trapping in the park, trapping which clearly was inconsistent with the NPS Organic Act. Beavers won't return to the primary winter range until the habitat, primarily the amount of standing water, is sufficient to support beavers. Killing elk will not increase standing water. The construction of temporary dams to create potential beaver habitat along with some strategic fencing of willows to encourage their growth and maturation would be a far more effective strategy to restore beavers to the primary winter range. Of course, standing water can only be increased assuming precipitation amounts are high enough and that anthropogenic uses of the water or drawdown on the water

table are limited to ensure there is sufficient water available for the beavers. The NPS failed to disclose in the Draft EIS the full range of activities inside and external to the park and the park service that may be adversely affecting the amount of water available to facilitate beaver restoration.

Conclusion:

There are many additional deficiencies, both legal and scientific, contained in the Draft EIS. Such deficiencies include: 1) the NPS misinterpretation of its natural regulation mandate; 2) the NPS failure to collect or disclose additional information needed by the public and agency decision-makers to make an informed decisions; 3) the lack of factual support for the proposed lethal control program since the impact of elk on vegetative communities, if it is even a problem, is extremely limited in its geographic area (and well within what would be considered natural in an un hunted population), since there is no documented adverse impact on birds or butterflies, and since the elk population itself is within the natural range of fluctuation and potentially will decline further as a result of density dependent based food limitations; and 4) the NPS failure to consider the use of a variety of non-lethal strategies (fencing, hazing or herding of concentrated elk, creation of artificial dams) that could and should be used before lethal elk control is even contemplated. These deficiencies are reason enough to abandon the current proposal.

In addition, the NPS has failed to consider a reasonable range of alternatives by neglecting to consider at least one or two alternatives, in addition to Alternative 1, that emphasized non-lethal management strategies. Nor has it evaluated the precedent that could be set by this proposal and how it may affect wildlife management practices throughout the national park system.

To address these concerns, AWI proposes that the NPS consider the following options:

1. Suspend any further work on the Draft EIS;
2. Organize a coalition of federal, state, and local agency officials along with park stakeholder groups to engage in a comprehensive analysis of the existing data, to identify data gaps, and to develop alternative, non-lethal, strategies to address the alleged elk herbivory and other concerns of RMNP officials;
3. Coordinate a workshop of federal, state, university and other scientists engaged in the study of immunocontraceptive and other reproduction suppression techniques to collect the most up to date information on the safety, efficacy, behavioral impacts, and feasibility of all potential reproduction suppression agents and to develop a potential plan to implement a fertility control program if deemed appropriate and necessary;
4. Prepare a new Draft EIS to reflect the conclusions and recommendations made by both the agency/stakeholders and scientist groups referenced above.

Thank you in advance for considering these comments.

Sincerely,

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

D.J. Schubert
Wildlife Biologist

JUL-03-2006 13:19 From:

To: 9705861397

P. 2/2



Post Office Box 471 • Boulder, Colorado 80306

Parks and Open Space Department

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Fairgrounds: 9595 Nelson Road • Longmont, Colorado 80501 • (303) 678-6235/441-3927

June 27, 2006

Vaughn L. Baker, Superintendent
Rocky Mountain National Park
Estes Park, CO 80517

RE: Elk and Vegetation Management Plan DEIS for Rocky Mountain National Park

Dear Superintendent Baker,

As a neighboring land and resource management agency, we appreciate the opportunity to comment on the Elk and Vegetation Management Plan DEIS for Rocky Mountain National Park (RMNP). The Boulder County Parks and Open Space Department supports actions that sustain a natural range of variability in the elk population and also address the critical need to revive important vegetation communities in the elk range. It is with this understanding that we support implementing Alternative 2, the Preferred Alternative, to meet the RMNP elk and vegetation management objectives.

Alternative 2 would provide the most effective strategy to reduce the elk population, considering the absence of natural predators. Alternative 2 would aim to manage elk at the lower end of the natural range within the first four years, thereby promoting regeneration of essential at-risk vegetation communities within the elk range. Boulder County Parks and Open Space supports the emphasis on adaptive management in Alternative 2 and expects RMNP to monitor the effectiveness of the Elk and Vegetation Management Plan, as stated in the DEIS. We also believe it is essential to prioritize the at-risk vegetation communities when implementing the regeneration strategy, given the uncertainty of funding for federal resource management projects.

We appreciate the thought and consideration put into the resource management alternatives.

Sincerely,

Ron Stewart, Director
Boulder County Parks and Open Space Department

CC:

Ben Pearlman, Boulder County Commissioner
Will Toor, Boulder County Commissioner

Thomas A. Mayer, Boulder County Commissioner
Therese Glowacki, BCPOS Natural Resource Manager

G:\Public Agency Contacts\BCPOS letter to NPS_Elk DEIS.doc

Tom Mayer
County Commissioner

Ben Pearlman
County Commissioner

Will Toor
County Commissioner

Superintendent, Rocky Mountain National Park
Subject: Proposed elk culling
Date: July 4, 2006
From: Colorado Bowhunting Association

The CBA, Colorado Bowhunting Association, is made up of 2700 memberships and has been in existence for over 35 years. Our main mission is to protect, improve and enhance our bowhunting opportunities in Colorado. As much as our CBA members would like to increase our hunting opportunities and be part of the culling process in the RMNP, using bow and arrow as a method of take, we acknowledge that the best strategy in the RMNP may be to use high powered rifles to remove the excess elk in the most efficient/timely manner as this culling process is not a hunt.

As hunters, we surely understand the problem when big game animal numbers exceed their carrying capacity and it is unfortunate that a program was not developed years ago that would address the over population of elk in the RMNP. The elk in the RMNP have been studied and restudied for the past 30 years. The Colorado Division of Wildlife recently recommended to the RMNP, the utilization of hunters as part of the culling process but their recommendations were not accepted. We support the CDOW recommendations.

Our members respect these big game animals called elk, and work hard while ethically hunting to harvest one, but only 14% of archers and 20-30% of rifle hunters will be successful in "bagging" an elk. These statistics show that the vast majority of hunters return home without any elk meat but they return year after year to hunt again. I am sure you can realize the frustration in the hunting community when we are notified that government sharpshooters may be used to cull 1,500 to 2,000 RMNP elk over the next 16 years, and then, and maybe even harder to understand, is that the vast majority of the animals will be buried and the meat unused.

We understand the problem of CWD in the elk herd and that all of the animals would have to be tested but the RMNP should try to develop a volunteer network that would process, store, test and then utilize the meat. If the RMNP is willing to spend 18 million dollars during the next 20 years to cull elk, hunters and the general public are sure that a percentage of this money could be earmarked to develop a program so the meat can be utilized. Where can the meat be utilized? Some options are the hunting and non-

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Page 2 of 2

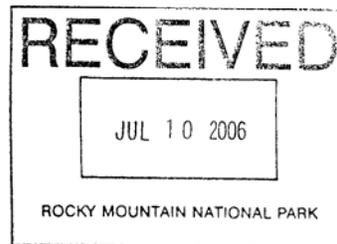
hunting public, Feed The Hungry programs, raptor programs, private wildlife centers that cater to meat eating animals.

The CBA recommends that a process be developed that addresses this issue of meat waste and that the RMNP develop a special task force to examine this issue. I would volunteer to be on that task force.

Don't "cut to the chase" and shortcut the process by shooting the elk and just burying them. Develop an ethical process that respects these grand big game animals while at the same time utilizes their meat. Also demonstrate to the citizens of Colorado and of the United States, that the National Park Service values public input and is also willing to value the elk of the Rocky Mountain National Park.

With respect, Paul Navarre, CBA/CDOW Liaison and CBA Board of Directors.

████████████████████
Phone: 970 416 1791





COLORADO OUTFITTERS ASSOCIATION, INC.

PO Box 849 * Craig, CO 81626



June 28 2006

Park Superintendent
Rocky Mountain National Park
1000 Highway 36
Estes Park, CO 80517-8397

Dear Park Superintendent:

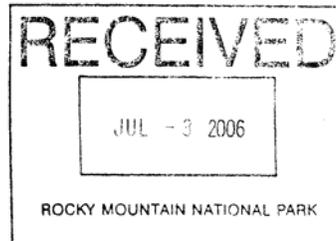
The Colorado Outfitters Association (COA) would like to request that the National Park Service work with the Colorado Division of Wildlife and the US Fish and Wildlife agency to consider sport hunting as a viable wildlife management tool to control the overpopulation of elk in Rocky Mountain National Park.

The benefits of having a limited hunt in RMNP are many: license sales, hunting tourism, herd dispersal, and the positive economic impact to the state of Colorado are just a few that come to mind.

The other options that the Park Service is considering are a huge waste of the taxpayers' dollars and will have no positive impact on our state.

Sincerely,

Larry Bishop
COA President





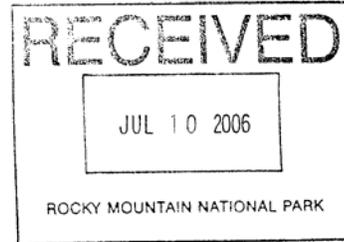
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Printed on Recycled Paper

June 30, 2006

Vaughn Baker, Superintendent
Rocky Mountain National Park
1000 Highway 36
Estes Park, CO 80517-8397



RE: Elk and Vegetation Management Plan Draft EIS

Dear Superintendent Baker,

Thank you for the opportunity to comment on the Elk and Vegetation Management Plan Draft EIS. Please accept these comments on behalf of the 490,000 members and supporters of Defenders of Wildlife.

The objectives of this Draft EIS as listed in the Purpose and Need section are to:

1. Restore and/or maintain the elk population to what would be expected under natural conditions to the extent possible.
2. Restore and/or maintain the natural range of variation in vegetation conditions on the elk range, to the extent possible.
3. Opportunistically collect information to understand chronic wasting disease prevalence in the park within the framework of the alternative.
4. Ensure that strategies and objectives of this plan/EIS do not conflict with those of chronic wasting disease management.
5. Continue to provide elk viewing opportunities.
6. Recognize the natural, social, cultural, and economic significance of the elk population.

Based on the best available science as well as on experience from Yellowstone National Park, restoring wolves is the most successful way to achieve these objectives. It is a winning strategy supported by the majority of U.S. citizens. It may even help control Chronic Wasting Disease. Unfortunately, the National Park Service's (NPS) Alternative 2 – the Preferred Alternative – does not rely on wolf restoration but rather relies on the band-aid approach of lethal elk control through shooting. Fewer elk through shooting may reduce elk impacts on vegetation, but it will not change elk behavior and therefore is not comparable to the success that would follow wolf restoration.

Defenders of Wildlife urges you to issue a new Draft Plan that fully considers restoration of a self-regulating population of wolves within Rocky Mountain National Park (RMNP). Given that RMNP is not large enough to contain a self-regulating population of wolves in isolation, we recommend that this scenario be developed within the context of a regional-scale wolf restoration plan involving the U.S. Fish & Wildlife Service, the U.S. Forest Service, the Colorado Division of Wildlife and the NPS. This is the process that NPS followed with the

overwhelmingly successful restoration of wolves to Yellowstone National Park, even though Yellowstone is not large enough to contain a self-regulating population of wolves and even though state agencies initially opposed that effort.

This Draft EIS clearly identifies the need for wolves and for wolf predation. In many places throughout the document it notes the mounting scientific evidence that the restoration of wolf predation has near-term and sustained benefits for vegetation. This need for wolves is also an opportunity to further the recovery of a species still listed as endangered under the Endangered Species Act while meeting the needs of the Park's resources and implementing the wishes of most Americans.

Defenders of Wildlife stands ready to help. We are committed to our promise to reimburse ranchers and farmers in the southern Rockies for verified livestock losses caused by wolves, and to help pay for proactive measures that prevent wolf/livestock conflicts in the first place. Further, we commit to both programs at least until such time as wolves no longer require federal protection. For a summary of this program to date, please see Appendix A.

The general views of wolf proponents and opponents are listed succinctly on Page 24 of the Draft EIS.

- Proponents of wolf release maintain that wolves would control elk populations and return a missing predator to the ecosystem.
- Opponents posit that the region is too developed and that the wolf no longer has a suitable niche within this human-dominated system. Others question whether a plan to release wolves in the park could occur without cooperation from other agencies or if it would be consistent with the Colorado Wildlife Commission draft Wolf Management Plan. There is also concern that release of wolves in the park would result in depredation of livestock and/or domestic animals.

The proponent viewpoint is supported by science. In Yellowstone National Park, scientists are documenting the important role reintroduced wolves are playing in rebuilding greater biodiversity within the ecosystem. Since the reintroductions in 1995 and 1996, studies have demonstrated the wolf's ability to cull weak and old ungulates (hooved animals such as elk and deer) (Smith, Peterson and Houston 2003) and to reduce long-term concentration of elk herds and the damage they do to sensitive meadows and wetlands (Ripple and Beshta 2004). In what is known as the cascade effect, wolves are exerting influence over a multitude of species within the park's ecosystem. Elk, wary of the reintroduced top predator, have altered their grazing behavior. With less grazing pressure from elk, streambed vegetation such as willow and aspen is regenerating after decades of overbrowsing. As the trees are restored, they create better habitat for native birds and fish, beaver and other species. In addition, wolves have reduced Yellowstone's coyote population by as much as 50 percent in some areas, which in turn has increased populations of pronghorn antelope and red fox (Crabtree and Sheldon 1999).

According to a recent scientific review of the ecological importance of top predators such as the wolf, the presence of these predators is essential to the long-term maintenance of biodiversity. In the interest of maintaining overall biodiversity, high priority should be given to the re-

establishment of such predators wherever they have been extirpated and where viable habitat remains to support their re-establishment (Terborgh et al. 1999; Soule et al. 2003).

The stated views of opponents, however, are clearly not reason enough to remove consideration of wolf restoration. This is for several reasons.

- Success for wolf restoration relies more on human tolerance than on proximity to human development. European countries contain wolf populations within short distances of millions of humans.
- Wolf restoration in Yellowstone shows that this can occur even if it is not in line with state plans. Endangered species recovery and National Park Service mandates should not take a back seat to the wishes of a handful of state wildlife commissioners.
- Depredation of livestock and/or domestic animals will certainly occur, but the numbers will be relatively minimal and the economic impact almost immeasurable. In addition, as stated above, Defenders of Wildlife stands ready to compensate for these losses. Finally, as in Yellowstone, the economic gains of wolf restoration will far outweigh the minor economic losses.

Scientists have verified what wolf supporters have long-suspected: wolves are good for the bottom line. Merchants in Yellowstone National Park's gateway communities have attributed an economic upturn to the return of the wolf (Milstein 1995, Brooke 1996). According to a 2006 study by John Duffield of the University of Montana, more than 150,000 people visit Yellowstone annually specifically because of wolves, bringing \$35 million to Montana, Idaho and Wyoming each year. Duffield determined that nearly 4 percent of the park's 2.8 million annual visitors say they would not have visited the nation's oldest national park if wolves were not there. In addition, those dollars turn over in local communities, pushing the regional economic impact to about \$70 million a year (Duffield, Patterson and Neher 2006). In Minnesota—a state from which the wolf never disappeared—the International Wolf Center in Ely added \$3 million to the local economy in 1995 and created, directly or indirectly, the equivalent of 66 full-time jobs (Schaller 1996). A 2005 study of ecotourism and red wolves in northeastern North Carolina demonstrated that tourists vacationing at the popular Outer Banks beaches would take day trips and spend money to visit nearby red wolf territory. While the chances of seeing a red wolf in the wild are slim, visitors are interested in attending wolf "howlings" and viewing other wildlife—such as black bears, river otters and waterfowl—that share red wolf habitat. The study also revealed that 100 percent of the local residents surveyed in the rural areas where red wolves reside would be interested in building tourism businesses based on red wolves and other wildlife (Lash and Black 2005). In the southwest, wolf-related tourism is growing and economic analyses show that Mexican wolf reintroduction has generated substantial regional economic benefits (Kroeger, Casey and Haney 2006).

Implementing the flawed Alternative 2 will prove a waste of money. It would cost \$16-18 million over a 20 year period for a less-than-adequate solution. Alternative 2 notes that if monitoring shows that management objectives are not being met, wolf restoration will be considered. In other words, there is a strong likelihood that millions will be spent on non-wolf efforts only to fall back on wolf reintroduction once those efforts fail. Instead of spending such a large sum of money on a first attempt that will not result in a permanent solution, why not spend that money on wolf restoration planning and implementation right from the beginning?

Once monitoring shows that management objectives are not being met, Alternative 2 would then consider wolf reintroduction only according to the process described in Alternative 5. But the process described in Alternative 5 does not equal wolf recovery but rather limits the population to a maximum of 14 heavily-manipulated wolves. In addition, Alternative 5 acknowledges that the proposed use of wolves may not be compatible with the provisions of the Endangered Species Act, as it does not promote recovery of the listed species and it is uncertain whether approval would be granted.

National Park Service management policies clearly underscore the strong conservation focus that should prevail in the management of the Parks. From the Draft Plan at p. 31:

Management Policies 2001 (NPS 2000b) establishes service-wide policies for the preservation, management, and use of park resources and facilities. These policies provide guidelines and direction for management of elk and vegetation within the park.

Section 4.4.1.1 requires that the National Park Service “adopt park resource preservation, development, and use management strategies that are intended to maintain the natural population fluctuation and processes that influence the dynamics of individual plant and animal populations, groups of plant and animal populations, and migratory animal populations in parks” (NPS 2000b).

Section 4.1.5 also directs the National Park Service to reestablish natural functions and processes in human-disturbed components of natural systems in parks (unless otherwise directed by Congress). Impacts on natural systems resulting from human disturbances include the disruption of natural processes. The National Park Service will seek to return human-disturbed areas to the natural conditions and processes characteristic of the ecological zone in which the damaged resources are situated. The National Park Service is to use the best available technology, within available resources, to restore the biological and physical components of these systems, accelerating both their recovery and the recovery of landscape and biological- community structure and function. This includes the restoration of native plants and animals, which Section 4.4.1.3 defines as “all species that have occurred or now occur as a result of natural processes on lands designated as units of the national park system” (NPS 2000b).

Given these policies, it seems logical that the NPS would fully explore the opportunity to develop a management plan based upon the best available scientific information. In light of overwhelming scientific evidence pointing to the absence of wolves as the root of RMNP’s problem with elk herbivory, it is puzzling that the Preferred Alternative does not include wolf restoration.

Wolves have restored balance in the Greater Yellowstone Ecosystem. In Yellowstone, we’ve seen that wolves do indeed balance prey populations and thereby alter vegetative communities.

We are hopeful that the same benefits will occur in Rocky Mountain National Park and across the southern Rockies.

Thank you for sincerely considering our comments.

Sincerely,



Jonathan Proctor
Southern Rockies Representative

Defenders of Wildlife is recognized as one of the nation's most progressive advocates for wildlife and its habitat. With more than 490,000 members and supporters, *Defenders of Wildlife* is an effective leader on endangered species issues. For more information, go to www.defenders.org.

Literature Cited

- Brooke, J. 1996. Yellowstone Wolves Get an Ally in Tourist Trade. *The New York Times*. Feb. 11.
- Crabtree, R. L. and J. W. Sheldon. 1999. Coyotes and canid coexistence. Pp. 17-163 in T.W. Clark, A.P. Curlee, S.C. Minta, and P. Kareiva, eds. *Carnivores in Ecosystems: the Yellowstone Experience*. Yale University Press, New Haven, CT. 49pp.
- Duffield, J. W., D. A. Patterson and C. J. Neher. 2006. *Wolves and People in Yellowstone*. Paper presented to 18th Annual North American Wolf Conference. Pray, MT. April 4-6, 2006.
- Kroeger, T., F. Casey and C. Haney. 2006. *Reintroduction of the Mexican wolf (Canis lupus baileyi) to the Southwestern United States: An economic perspective*. Paper presented to 18th Annual North American Wolf Conference. Pray, MT. April 4-6, 2006.
- Lash, G. Y. B. and P. Black, Ursa International. 2005. *Red Wolves: Creating Economic Opportunity Through EcoTourism in Rural North Carolina*. Report prepared for Defenders of Wildlife. Unpublished.
- Milstein, M. 1995. Call of the wild a boon to tiny town. *Billings Gazette*. July 3.
- Ripple, W. J. and R. L. Beschta. 2004. Wolves and the Ecology of Fear: Can Predation Risk Structure Ecosystems? *Bioscience*. 54(8): 755-767.

- Schaller D.T. 1996. *The ecocenter as tourist attraction: Ely and the International Wolf Center*. 4 pp. Available from Center for Urban and Regional Affairs (CURA). Minneapolis, MN.
- Smith, D. W., R. O. Peterson and D. B. Houston. 2003. Yellowstone after Wolves. *BioScience*. 53(4): 330-340.
- Soulé , M.E., J.A. Estes, J. Berger and C.M. Del Rio. 2003. Conservation goals for interactive species. *Conservation Biology*. 17:138-150.
- Terborgh, J., J. A. Estes, P. Paquet, K. Ralls, D. Boyd-Heger, B.J. Miller and R.F. Noss. 1999. The role of top carnivores in regulating terrestrial ecosystems. In: M. Soulé and J. Terborgh. eds. *Continental Conservation: Scientific Foundations of Regional Reserve Networks*. Washington, DC: Island Press; pp. 39-64.

Appendix A

History of Defenders of Wildlife's Compensation and Proactive Programs

In 1987 Defenders initiated a livestock compensation program to cover wolf-caused livestock losses in the northern Rockies. We have since extended the program to cover grizzly losses in the northern Rockies as well as wolf losses in the Yellowstone, Idaho, Arizona and New Mexico, and more recently, to cover lynx losses in Colorado. Now known as the Bailey Wildlife Foundation Wolf and Grizzly compensation trust, this dedicated trust helps to shift the economic burden of threatened and endangered species recovery from livestock producers to those who support reintroduction efforts. To date we have paid approximately \$665,805 to 492 ranchers impacted by these recovery programs.

Here's how our compensation program works: if a rancher suspects he or she has lost stock to wolves or grizzly bears, they contact either the local state wildlife agency, U.S. Fish and Wildlife Service or U.S.D.A. Wildlife Services. A wildlife biologist then visits the ranch to inspect the dead or injured livestock and verify cause of death or injury. Once the cause is verified, the agency or rancher notifies Defenders. Defenders pays 100% of the Fall market value for confirmed depredations by wolves or grizzly bears, and 50% of the value for probable depredations.

We hope that wolves one day reclaim parts of their former range in the southern Rockies. Occasionally, these carnivores prey on livestock or cause other problems. When depredations occur in the Southern Rockies, Defenders will strive to help resolve these conflicts associated with the recovery of these animals.

In this spirit Defenders has also created the Bailey Wildlife Foundation Proactive Carnivore Fund, which is intended to prevent conflict between imperiled predators and humans before it occurs. If ranchers or landowners have repeated predator problems, we ask them to think about what could be done to reduce conflict. If the concept is practical and within our means, we share the cost of the project. Projects can also be proposed by government agencies or by Defenders. Projects which we have supported include herding dogs, predator fencing, radio-collar activated alarm systems, and range riders.

Our proactive fund has three objectives: 1) to reduce conflicts between predators and humans; 2) to keep predators from being unnecessarily killed by agencies in response to human conflicts; and 3) to increase general tolerance for carnivores across the landscape.

Although the number of livestock lost to wolves is low overall, these losses can have a significant economic impact on those few ranchers who do experience chronic wolf predation. By taking responsibility for the occasional problems that wolves cause, Defenders of Wildlife hopes to increase landowner tolerance for wolves, reduce mortality and improve recovery prospects.

Appendix BWolf Ecotourism: Conserving Wildlife and Boosting Local Economies

Ecotourism: “responsible travel to natural areas that conserves the environment and improves the well being of local people” (The International Ecotourism Society, www.ecotourism.org)

Ecotourism is quickly coming to the forefront of family recreational activities. In recent years, more tourists have sought vacations where they can enjoy wilderness areas. According to the 2001 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation, 39% of all American adults participate in some form of wildlife-related recreation. Wildlife watchers alone spent \$38 billion in the United States in 2001. Wolf-oriented ecotourism, part of this larger social trend, is evident by the fact that many Americans are willing to travel long distances to see wolves. Wolf-related activities have generated economic benefits throughout North America.

Red Wolves in North Carolina

Since the first red wolves were reintroduced to northeastern North Carolina in 1987, an estimated 100 red wolves now roam in the wild. A 2005 study (<http://www.biodiversitypartners.org/econ/report/redwolf.shtml>) found that the red wolf and wildlife may increase tourism throughout the “Inner” Banks region. Alligator River National Wildlife Refuge holds weekly howling tours in the summer as part of this tourism.

- Red wolf activities are forecast to attract over 25,000 households and bring in about \$37.5 million to Eastern North Carolina, boosting tourism by up to 19% in the region.
- A Red Wolf Center could potentially bring more than \$1 million in gate receipts and food or gift purchases over a summer season.
- About 900 local residents and visitors from across the United States participated in howling safaris in the summer of 2005.

Gray Wolves in Yellowstone National Park

Since wolves returned to Yellowstone National Park in 1995, the charismatic predators have stimulated significant economic activity, indicating that wolves are clearly having a positive impact on the economy of the greater Yellowstone area. Visitors to the park now rank the wolf as one of the primary animals they come to see, thereby creating new demand for lodging, guided wolf-watching tours and a variety of wolf-related merchandise.

- In Cooke City, Montana, by the northeast entrance to Yellowstone, 22% more tourists passed through the town in the summer of 1995 than just one year prior, and 71% of business owners thought wolf recovery was responsible for the increased tourist travel.
- Safari Yellowstone is one of many guides and outfitters that offer wolf viewing opportunities in the park. Each year, about 200 people pay \$1,700 a week to come to Yellowstone to watch wolves.
- Merchants in the Lamar Valley report that stuffed wolves, books on wolves, wolf T-shirts and wolf stationary have been selling rapidly since the reintroductions.
- Each year, visitors to Yellowstone spend about \$35 million in Montana, Idaho and Wyoming, culminating in a regional economic impact of \$70 million a year.

The International Wolf Center in Ely, Minnesota

The International Wolf Center (IWC) is a wolf educational facility and a tourist destination for visitors to Ely, Minnesota. Along with outdoor recreational activities in the nearby lakes and forests, the IWC's educational programs and exhibit wolf pack are a main reason that tourists visit Ely. Visitors to the center have a major economic impact in St. Louis and Lake Counties.

- A third of all tourists to Ely visit the IWC, and about half of IWC visitors state that the center influenced their decision to visit Ely and that they might return on a future vacation.
- A recent survey shows that the IWC brings as much as \$3 million per year to Ely and creates as many as 66 jobs in tourism-related businesses and other industries.
- In 2004, the retail department at the IWC generated \$120,000 in net revenues.

Mexican Wolves in the Southwest

In 1998, the Mexican gray wolf was reintroduced in east-central Arizona and west-central New Mexico, including the Gila and Apache National Forests. Anecdotal evidence indicates that wolf reintroduction has triggered tourist visitation.

- The Arizona Heritage Alliance organizes wolf-related tours to the wolf reintroduction area during which participants lodge at local inns.
- Many private citizens lead hiking trips in the wolf reintroduction area for visitors to see wolves.
- The Grand Canyon Chapter of the Sierra Club organizes trips to the area to volunteer with wolf recovery. Participants stay at local lodges and generate benefits for the local economy.

Eastern Wolves in Algonquin Provincial Park

Algonquin Provincial Park in Ontario, Canada is the largest protected area for the wolf and has been successful in using wolves to attract visitors. Since 1963, the park's public wolf howls have been one of the most popular events in Algonquin. At these events, park naturalists imitate wolf howls in the hopes that a nearby pack will return the call, making an unforgettable thrilling experience.

- By 2005, more than 126,500 people had participated in the public wolf howl program.
- More than 2,000 people participate in the howling expedition each summer.
- Visitors to Algonquin contribute almost \$1.9 million to Ontario's economy.



**ESTES VALLEY
IMPROVEMENT ASSOCIATION, INC.**

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Page 1 of 1

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June 20, 2006

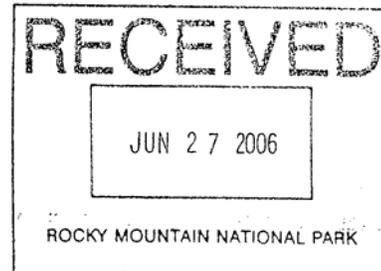
Mr. Vaughan Baker
Rocky Mountain National Park
Estes Park, CO 80517

Here is our choice for your Elk and Vegetation Management Plan for Rocky Mountain National Park.

EVIA recommends Alternative #2 with Alternative #5. We would also like as much fencing of aspen as possible.

Thank you,

Alice Gray
EVIA President





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RE: Elk and Vegetation Management Plan Draft EIS

Dear Superintendent Baker,

On behalf of the Humane Society of the United States and our over 9.5 million members and constituents, over 140,000 of which reside in Colorado, we submit the following comments on the Draft environmental Impact Statement for the Elk and Vegetation Management Plan for Rocky Mountain National Park (EIS). We understand all of the research and associated efforts that have gone into the creation of this plan, and we feel that a number of your proposed actions are feasible and garner considerable merit. However, many of the other proposed actions are not only impractical but could also compromise the very purpose of Rocky Mountain National Park (RMNP) which is stated to be "...primarily aimed at the freest use of the said park for recreation purposes by the public and for the preservation of the natural conditions and scenic beauties thereof." (EIS pg ix).

The HSUS does not believe that any of the proposed alternatives provides a long - term solution to the current elk and vegetation situation. Therefore, the HSUS proposes an alternative 6 which includes broad - scale immunocontraception of the elk, temporary fencing of vulnerable vegetation, aversive conditioning of elk to aid dispersion, and a possible introduction of free - ranging wolves.

Are comments on this draft EIS are as follows:

I. Purpose of the Proposed Action

First and foremost, the outcome of the draft EIS is a foregone conclusion. The purpose described in the draft EIS predetermines the outcome of the analysis: the draft EIS describes the purpose of the proposed action in terms of varying degrees of lethal control of the Park's elk. The singularly-focused means to achieve the protection of the forage and fauna of the area are listed in ways that are antithetical to the language and spirit of NEPA, which seeks the consideration of the broadest range of alternatives that can reasonably be implemented. Not surprisingly, under the narrow confines of the statement of purpose which is predicated on the killing of elk, the range of alternatives is severely limited and completely biased toward the lethal control of elk. Since all alternatives contain the option of killing elk (beside the "no action"

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alternative) this unreasonably narrows the scope and realistically allows for only those alternatives that incorporate some form of lethal cull. The final EIS must evaluate whether other alternatives can achieve the underlying goals of the Park without resorting to the destruction of the Park's wildlife.

Agency decision makers and the courts have long recognized the importance of defining the stated purpose of an Environmental Impact Statement in broad terms to elicit the greatest amount of relevant information possible and to meet the requirements of the National Environmental Policy Act. The Council on Environmental Quality, in correspondence with the Department of Transportation, cautioned agencies against defining the purpose of an EIS "so narrowly as to define competing 'reasonable alternatives' out of consideration (and even out of existence)."ⁱ

The consideration of only five similar alternatives, with one being the no-action or status quo alternative, is wholly insufficient to examine fully the broad spectrum of alternative actions that is contemplated by NEPA. The limited alternatives do not enable the agency to take a "hard look" at the environmental consequences of the proposed action as required by NEPA. *See Robertson v. Methow Valley Citizens Council*, 490 US 332, 350 (1989). Meaningful alternatives must be considered if the proposed action will have "some impact" on the environment. *Village of Palatine v. United States Postal Service*, 742 F. Supp. 1372, 1380 (N.D. Ill. 1990); *see also, Lower Alloways Creek Township v. Public Serv. Elec. & Gas Co.*, 687 F.2d 732, 739-40, n.14 (3rd Cir. 1982).

"The 'detailed statement' of 'alternatives to the proposed action' called for by § 102(2)(C) of NEPA, 42 U.S.C. § 4332(2)(C), has been aptly characterized as the 'linchpin of the entire impact statement.'" *Alaska v. Andrus*, 580 F.2d 465 (D.C. Cir. 1978), *vacated in part as moot*, 439 U.S. 922 (1978). The discussion of the validity and benefits of each proposed alternative, including associated costs and risks, should be detailed enough to reveal the agency's thought processes and analysis.ⁱⁱ

The narrow range of alternatives presented in the draft EIS is insufficient to allow the agency to consider options that would achieve the protection of the Park without resorting to killing the Park's elk. Although there are a variety of non-lethal methods that could be used to protect the area, the draft EIS does not explain why a combination of non-lethal methodologies is deemed insufficient to address the current elk situation.

II. Elk, Vegetation and the "Natural State" of RMNP

The EIS states the primary purpose of this plan is to "restore and / or maintain the elk population to what would be expected under natural conditions to the extent possible." (EIS pg. vii). However, the "natural", pre – European, conditions of both the elk and vegetation in the area now encompassed in RMNP are virtually unknown. In fact, the EIS clearly states that elk were completely extirpated from the area by 1880 and did not return until reintroduction efforts in 1913 – 1914 (EIS pg 14). From that reintroduction forward, elk population regulation has not been "natural" by any stretch of the imagination. Elk hunting was permitted in the park intermittently in the 1940' – 1960's. Since 1969, elk have been subject to "natural regulation" i.e. not hunted in the park. As with all of the past elk management plans that include a lethal

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component, the justification for this cull is the condition of vegetation, especially aspen clones and riparian willow.

Ironically, the EIS itself states that "...there is not direct evidence to support that elk in Rocky Mountain National park are negatively affecting native biodiversity on a landscape scale..." (EIS pg 21). However, we do recognize that the current state of elk in RMNP is not entirely "natural". While the actual population numbers of elk in the park may be within the range of "natural" variation by the parks own reckoning, their non-migratory behavior is not (EIS pg 7). This tendency towards non- migratory behavior is directly attributable to the lack of natural predators in the park (EIS pg iv and elsewhere).

The word "natural" is not applicable to any current or proposed action or aspect of elk ecology in RMNP. Even the actual elk in question are human reintroductions. Therefore, the aim of this plan should be an attempt to restore elk population numbers and environmental impacts to levels that are thought to reflect the historical condition in the park. Being that the "natural" condition of the park is purely subjective a diverse, self – sustaining ecosystem is a more realistic goal.

III. Historic and Current Population Regulation of Elk in RMNP

The EIS states that "[u]nder natural conditions, the elk population size and distribution would be controlled by a number of factors, including predators such as wolves and grizzly bears and hunting by Native Americans." (EIS pg 7). While this is true, the current elk population of 1700 - 2200 is well within the range of the historic elk population for the area which was said to fluctuate between 1500 – 3500 (EIS pg 8+13). The park has also recorded major population fluctuations within the past decade. Obviously, something is currently regulating these populations in the absence of natural predators and hunting pressure. Data from Yellowstone National Park and Banff National Park in Canada reveal that climatic variation may have a major effect on elk populations. ⁱⁱⁱ

Disease is another factor that likely influences elk populations in the park. The EIS mentions the incidence of chronic wasting disease (CDW) in both free – ranging and captive elk but does not discuss its possible effects on the population density of animals in the park (EIS pg 20 and elsewhere).

The EIS notes that CWD occurs in 0.3% – 2.1% of the elk in region, based upon hunter harvest surveys just outside the park (EIS pg 125). While the current levels of CWD are not likely to result in large - scale population declines, an epidemic model revealed that CDW will have an effect on a protracted time scale and that population declines would occur once infection rates exceeded 5%. ^{iv} So while currently there may not be a discernible effect of CWD on elk populations in RMNP, these effects may become apparent in the coming decades.

Elk are also host to a wide variety of others diseases and parasites that may impact their population numbers. Of the 190 diseases and parasites that have been reported in elk and their European counterpart the red deer, six are considered as high risk agents that may impact elk and possible other animal populations. ^v These pathogens and parasites include the bacteria that cause brucellosis (*Brucella abortus*) and bovine tuberculosis (*Mycobacterium bovis*); the tick

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Dermacentor andersoni that transmits Colorado tick fever, Rocky Mountain spotted fever, and may cause tick paralysis; *Ixodes pacificus* a tick that transmits Lyme's disease; and mites of the genus *Psoroptes*, the agent of psoroptic mange. The EIS makes no mention of these pathogens, their occurrence in RMNP, nor their possible impact on the elk or other species, including humans.

IV. The Aspen, Elk, Wolf Trophic Cascade

It has been known since the 1970's that ungulates will avoid areas of high wolf density to evade predation.^{vi} Further study has shown that elk will actually alter their patterns of habitat selection, especially in the summer, to avoid centers of wolf activity when wolves are reintroduced to an area.^{vii} Not only that, these changes in movement patterns and habitat use result from a shift in preference from aspen stands in the absence of wolves, to conifer forests in the presence of wolves to avoid wolf travel routes.^{viii}

The top down trophic cascade involving aspen, elk, and wolves has been examined primarily in Yellowstone National Park (YNP) since their wolf reintroduction in 1995. The basic synopsis of this interaction is as follows: wolves cause changes in elk movements and foraging behavior that result in a reduction in the utilization of aspen clone habitat. Subsequently, there is an increase in aspen regeneration and recruitment.^{ix} In fact, historical aspen recruitment, as indicated by incremental core samples, actually ceased in YNP during the same years that wolves were absent from the park.^x This cascade also has broader ecosystem effects, including the creation of improved beaver habitat that can result in increased beaver populations, even in the face of occasional predation on these rodents by wolves.^{xi}

A similar relationship has been observed between wolves, elk, and willow recruitment in Montana.^{xii} Similar to the aspen in YNP, the willow in the Gallatin Range on Montana experienced a decrease in browsing by elk and an increase in average height when wolves were present. Preliminary data also suggest that willow recovering due to the top down control of wolf predation pressure may also act as a buffer for recovering aspen, further fueling the regeneration of clones.^{xiii}

From these studies and many others, it is apparent that predation pressure by wolves alone can change the movements and foraging patterns of elk. Considering that wolves were just reintroduced to YNP in 1995 and returned to southwestern Montana in 1996, it is obvious that the effect on the elk population and their aspen and willow food sources was rapid and drastic enough to be measurable in less than a decade. If the park truly wishes to return to a state that mimics the historical situation found in the area, a wolf introduction may be all that is required.

V. The Impracticality of a Cull

One of the proposed activities that is part of all action alternatives is the lethal take of elk. Along with this planned cull is the arduous task of dealing with the resulting corpses. The HSUS does not believe that it is advisable nor feasible to remove and / or disperse at least 50 and up to 700 elk corpses annually. Elk are not small animals and RMNP has many remote areas. The prospect

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of removing large numbers of these animals from this montane habitat presents a logistical nightmare.

For those carcasses that are not removed, the idea of leaving headless corpses around the park in numbers that "...reflect a natural state to the greatest extent possible" is flawed (EIS pg 54). Once again, the use of the concept of "natural" is to be interpreted loosely. There is no indication of how many carcasses will be removed and how many will be left in the field. We believe that seeing the carcasses that are left behind will compromise the experience of visitors to the park.

If corpses are to be removed, either motorized vehicles or large pack animals must be brought in to haul each animal one by one. This will probably be done during the day, even though the shooting will actually occur at night simply due to logistical issues. As for the animals left headless in the field, one can only imagine the reactions of hikers and campers to the sights (and smells) of such grisly spectacles.

VI. Stipulations for a Wolf Reintroduction

We applaud the RMNP for proposing the reintroduction of wolves. However, the micromanaged, draconian guidelines and stipulations attached to this action make it not only counterproductive but downright detrimental to the reintroduced animals.

The idea of sterilizing only the male wolves to prevent initial reproduction while leaving the females intact is ill-advised. The study cited to justify this action clearly states that both members of a pair must be sterilized in order for the wolves to maintain normal social and territorial behaviors.^{xiv} Leaving females intact will only lead to hybridization with coyotes or dogs. While wolf – coyote hybridization did not commonly occur in this region historically^{xv}, hybridization between wolves and other canids is more likely to occur in small or inbred populations.^{xvi} Such hybridizations could easily occur, only to result in the destruction of the hapless hybrid pups.

Regardless of the hybridization issue, the huge amount of monitoring and handling proposed in the EIS for the reintroduced wolves would be incredibly stressful for these animals. The purpose and need to handle wolves involved in research has been questioned in the recent past.^{xvii} Blood work conducted on coyotes captured and handled for radiotelemetry studies revealed elevated blood levels of glucose and leukocyte counts which can be indicative of a stress response.^{xviii} Behavioral symptoms of traumatic stress disorder have also been recorded for a wild wolf that was repeatedly subjected to human handling in the form of helicopter darting, repeated translocations, and temporary captivity.^{xix} This is the type of treatment that the proposed reintroductions would face in RMNP.

Based upon these lines of evidence, the HSUS does not condone the proposed reintroduction of wolves into RMNP as it is presented in the EIS. However, we do believe that reintroducing wolves into the park that are permitted to reproduce and roam freely would serve to change elk movement patterns and result in vegetation recovery. We believe that a wolf reintroduction is the

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most ecologically and ethically sound option available to the park to resolve the current elk dilemma. Yet, the reintroduced wolves cannot be handled and treated as proposed in the DEIS to insure that the reintroduced wolves will exhibit normal social and foraging behaviors.

VII. Proposed Alternative 6

In light of the issues presented above, the HSUS proposes alternative 6. In this alternative, elk populations would be directly controlled solely through immunocontraception, following protocols discussed in Alternative 4 of the EIS (pg 63 – 67). Vegetation should be temporarily protected by specially designed fences that will keep elk out but allow other species to move freely into and out of the enclosure as detailed in the EIS (pg 46 – 47). Long - term vegetative management, including the possibility of beaver reintroductions, should follow the protocols outlined in the EIS.

In order to disperse the elk, we condone the use of aversive conditioning and herding tactics. Such activities may include the use of dogs, rubber bullets, and people on horseback to disrupt and move the elk herds from areas of concentrated browsing (see EIS pg 58 – 59).

Finally, as discussed in the last section, we conditionally approve the reintroduction of wolves into RMNP provided that the wolves are not intensively monitored and repeatedly handled, as currently proposed in the EIS.

VIII. Conclusions

As stated above, the current elk and vegetation management situation can be remedied through the use of non – lethal controls and a possible reintroduced wolf population. The proposed lethal culling of elk, as outlined in the EIS, is unnecessary and would present a host of logistical and aesthetic issues for the staff and visitors of RMNP. Additionally, the reintroduction of wolves as outlined in the EIS would not result in a wolf population that would exhibit natural social and foraging behaviors. In fact, such an introduction would only cause undue stress to the wolves and would most likely result in the untimely death of these overexamined individuals.

Based upon the shortcomings of the five alternatives presented in the EIS, the HSUS proposes its own alternative 6. This alternative calls for only non – lethal management of the elk herd, temporary vegetation exclosures, and the reintroduction of wolves without the sterilization and repeated human handling proposed in the EIS.

Although the Notice for the DEIS announced that comments would be accepted on July 4th, these comments are being submitted on July 5th as that is the first legal business day after the national holiday. If the normally-accepted, court-approved practice of accepting filings on the first business day after a prescribed filing date is not used in this case, we ask that these comments be accepted nonetheless.

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We look forward to reviewing the revised version of this plan when it becomes available.

Sincerely,

Lauren E. Nolfo-Clements, PhD
Wildlife Scientist
Wildlife and Habitat Protection

Endnotes

ⁱ *Simmons v. US Army Corps of Engineers*, 120 F.3rd 664 (7th Cir. 1997)

ⁱⁱ *Id.*

ⁱⁱⁱ Hebblewhite, M. 2005. Predation by wolves interacts with the North Pacific Oscillation (NPO) on a western North American elk population. *Journal of Animal Ecology* 74: 226 – 233.

Vucetich, J.A. 2005. Influence of harvest, climate, and wolf predation on Yellowstone elk, 1961 – 2004. *Oikos* 111: 259 – 270.

^{iv} Miller, M.W. and T.J. Kreeger. 2000. Epizootiology of chronic wasting disease in free – ranging cervids in Colorado and Wyoming. *Journal of Wildlife Diseases* 36(4): 676 – 690.

^v Corn, J.L. and V.F. Nettles. 2001. Health protocol for the translocation of free – ranging elk. *Journal of Wildlife Diseases* 37(3): 413 – 426.

^{vi} Mech, L.D. 1977. Wolf – pack buffer zones as prey reservoirs. *Science* 198: 320 – 321.

^{vii} Mao, J.S. et al. 2005. Habitat selection by elk before and after wolf reintroduction in Yellowstone National Park. *Journal of Wildlife Management* 69(4): 1691 – 1707.

^{viii} Fortin, D. et al. 2005. Wolves influence elk movements: behavior shapes a trophic cascade in Yellowstone National Park. *Ecology* 86: 1320 – 1330.

^{ix} Ripple, W. J. et al. 2001. Trophic cascades among wolves, elk, and aspen on Yellowstone National Park's northern range. *Biological Conservation* 102: 227 – 234.

^x Ripple, W.J. and E. J. Larsen 2000. Historic aspen recruitment, elk, and wolves in northern Yellowstone National Park, USA. *Biological Conservation* 95: 361 – 370.

^{xi} Ripple, W.J. and R. L. Beschta. 2004. Wolves and the ecology of fear: can predation risk structure ecosystems? *Bioscience* 54(8): 755 – 766.

^{xii} Ripple, W.J. and R.L. Beschta. 2004. Wolves, elk, willows, and trophic cascades in the upper Gallatin Range of southwestern Montana, USA. *Forest Ecology and Management* 200: 161 – 181.

^{xiii} Ripple, W.J. and R.L. Beschta. 2005. Willow thickets protect young aspen from elk browsing after wolf reintroduction. *Western North American Naturalist* 65(1): 118 – 122.

^{xiv} Spence, C.E. et al 1999. Surgical sterilization of free – ranging wolves. *Canadian Veterinary Journal* 40: 118 – 121.

^{xv} Pilgrim, K.L. et al. 1998. Testing for wolf – coyote hybridization in the Rocky Mountains using mitochondrial DNA. *Journal of Wildlife Management* 62(2): 683 – 689.

^{xvi} Niles, L. et al. 1991. Introgression of coyote mitochondrial DNA into sympatric North American gray wolf populations. *Evolution* 45(1): 104 – 119.

Randi, E. et al. 2000. Mitochondrial DNA variability in Italian and East European wolves: detecting the consequences of small population size and hybridization. *Conservation Biology* 14(2): 464-473.

Vila, C. et al. 2003. Combined use of maternal, paternal, and bi-paternal genetic markers for the identification of wolf – dog hybrids. *Heredity* 90: 17 – 24.

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^{xvii} Oelfke, J.G. et al. 2000. Wolf research in the Isle Royale wilderness: do the ends justify the means? *USDA Forest Service Proceedings* 15(3): 246 - 251

^{xviii} Smith, G.J. and O.J. Ronstad. 1980. Serologic and hematologic values of wild coyotes in Wisconsin. *Journal of Wildlife Diseases* 16(4): 491 - 497.

^{xix} Mallonee, J.S. and P. Joslin. 2004. Traumatic stress disorder observed in an adult wild captive wolf (*Canis lupus*). *Journal of Applied Animal Welfare Science* 7(2): 107 - 126.

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BOARD OF COUNTY COMMISSIONERS

Post Office Box 1190
Fort Collins, Colorado 80522-1190
(970) 498-7004
Fax (970) 498-7006

June 27, 2006

Vaughn Baker, Superintendent
Rocky Mountain National Park
Attn: Elk and Vegetation Management Plan
Estes Park CO 80517

Dear Mr. Baker:

The Larimer County Commissioners asked our Environmental Advisory Board to review the draft EIS for the Elk and Vegetation Management Plan. They have completed their review, and provided the attached memo dated June 27, 2006.

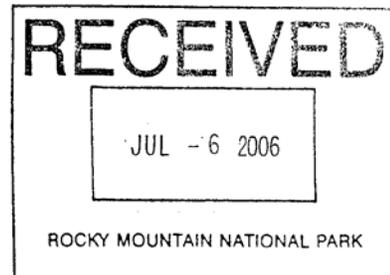
We were able to discuss the Advisory Board's findings at our Administrative Matters meeting today. The Board concurs with the conclusions offered by Mr. Lockwood, and adopted a resolution to forward these comments to the Park Service.

As always, Larimer County appreciates the opportunity to participate with the Park Service on important public policy issues. The goal of restoring the natural balance between elk and their environment has positive long-term implications for the Park.

Sincerely,

A handwritten signature in cursive script that reads "Glenn W. Gibson".

Glenn Gibson, Chair
Larimer County Board of Commissioners



ENVIRONMENTAL ADVISORY BOARD

Post Office Box 1190
Fort Collins, Colorado 80522-1190

To: Larimer County Board County Commissioners

From: Dale Lockwood, Chair *Dale Lockwood*

Date: June 27, 2006

Subject: RMNP Elk & Vegetation Management Plan

The Environmental Advisory Board has reviewed the draft Environmental Impact Statement for the Rocky Mountain National Park Elk and Vegetation Management Plan. The main objectives of the plan are to restore and maintain the elk population to that expected under natural conditions and to restore the aspen and mountain riparian willow vegetation that has been heavily damaged by elk overgrazing. The EIS analyzes five alternatives, including no change in current management practices. The four action alternatives involve the consideration of management techniques including lethal reduction of the elk population, redistribution techniques to prevent elk from overgrazing in concentrated areas, fertility control, wolf introduction and fencing of aspen or willow habitat.

The Park Service is proposing to proceed with Alternative 2 – which relies on rapid initial lethal removal followed by more moderate culling, limited aspen fencing, redistribution techniques such as herding, and possible use of wolves – as the preferred alternative. This decision was made even though the analysis in the draft EIS indicates that Alternative 5 – which relies on wolf introduction as a major component – is the *environmentally preferred* alternative because it best protects the biological and physical environment by reducing the densities and abundance of elk to levels that would allow recovery of vegetation on the elk range most reflective of natural conditions. Alternative 5 would appear to meet the Park Service obligation to maintain and restore the natural conditions and processes in the park. The Park Service chose Alternative 2 due to its higher degree of technical certainty for achieving the objectives, and fewer significant obstacles for implementation as compared to the use of wolves in Alternative 5.

The Environmental Advisory Board shared some the Park Service's consternation over selecting the practical over what might otherwise be the best alternative. Both alternatives involve lethal reduction and some fencing of aspen. However, the use of wolves in Alternative 5 has the added benefit of restoring a natural predator of elk, which should help to select a healthier, fitter and wilder elk population.

The current impacts to aspen and willow habitat are very serious and impact a number of ecological processes in the Park. We concur that the faster rate of culling in Alternative 2 would more rapidly reduce intensive browsing by elk, so that the vegetation may recover to a better state of health. This alternative also limits the amount of fencing that would be needed, and therefore can be considered a more natural condition than the extensive fencing involved in Alternatives 3 and 4.

Given the acknowledged hurdles for wolf introduction in the context of this Elk and Vegetation Management Plan, the Park Service has made a reasonable decision in choosing Alternative 2. This should not preclude consideration of wolf re-introduction as a restoration option for the park regardless of the current elk status. The EAB also considers it likely that wolf recolonization will occur in the future as wolves naturally migrate into Colorado. That event would be very positive in terms of restoring the ecological balance to the Park's ecosystem. In this light implementation of Alternative 2 may produce the greatest short-term benefits and result in an environment that can more naturally accommodate the wolves when they do arrive.

We appreciate this opportunity to comment on the Elk and Vegetation Plan.



06/29/2006 02:25 PM
AST

To: <romo_superintendent@nps.gov>
cc:
Subject: comments on DEIS

Dear Superintendent,
Attached is a comment letter from the National Rifle Association on the Elk and Vegetation Management Plan DEIS. A hard copy is in the mail.

Thank you,
Susan Recce

June 28, 2006

Superintendent
Rocky Mountain National Park
Estes Park, CO 80517

Dear Superintendent:

The NRA wishes to comment on the draft environmental impact statement (DEIS) entitled "Elk and Vegetation Management Plan" that evaluates five alternatives for managing elk and vegetation in the Rocky Mountain National Park.

The NRA opposes all five alternatives, including the preferred alternative, because they are not truly viable and/or not cost effective. Alternative 1 would continue the existing management program which essentially is non-management of the elk population inside the Park. It would not solve the problems of overpopulation and herd concentrations.

Alternatives 2 and 3 would employ Park staff or contractors to reduce the elk population by varying degrees over time. It is an alternative that would likely achieve the goal of population reduction, but at a high cost to the taxpayer. The cost estimates range from \$1.1 to \$1.3 million annually for a total cost between \$16.5 to \$18.2 million. This is a sizeable sum of money for an agency that is burdened with a huge operations and maintenance backlog.

The use of single-year, multi-year, or life-time fertility control agents proposed in Alternative 4 will not solve the immediate issue of overpopulation, it will be difficult to implement and its success in reducing elk herds over time is questionable. It recognizes this by including "lethal reduction methods" because of the "logistical constraints on using fertility control agents to reduce the population size to within management objectives."

Introducing wolves as proposed in Alternative 5 will give rise to a whole new set of management issues. We believe the Park is not prepared to address these issues, including the containment of wolves within the boundaries of the Park and the impact of wolves on species other than elk.

The true failure of the DEIS is that it did not include the most viable and cost effective alternative and that is to allow licensed hunters, under the supervision of Park staff, to act as the “contractors” to cull the elk herds.

According to Park biologist Mary Kay Watry, as quoted in The New Gun Week of June 20th, “hunting was actually considered early in the process as an option, but due to the CWD presence, it has been rejected.” Nowhere in the DEIS could information be found regarding a discussion about hunting as an option. Furthermore, it is puzzling how the presence of CWD would have caused hunting as an option to be rejected when the presence of CWD has not put a halt to ungulate hunts anywhere in the country.

What appears likely to be the real reason is contained in the additional statement made by Ms. Watry and reported by The New Gun Week as follows: “Besides, the law does not allow for hunting in national parks, and it would take an act of Congress to change that. So, Warty explained, the park service is working within existing law to solve the problem.”

The National Park Service does not have authority to allow hunting in the absence of Congressional direction because it created that as policy through rulemaking. The Service boxed itself into a corner on wildlife management options in 1983 when it implemented its General Regulations for areas it administers. One element of those regulations stated that unless Congress specifically authorizes hunting in a unit of the National Park System, hunting will not be allowed. It does not take an act of Congress to change that, simply the will of the National Park Service, through new rulemaking, to correct a mistake made two decades ago.

There have been numerous situations where a hunt would have been the most cost effective and efficient means of addressing an overpopulation of indigenous or exotic wildlife. Three examples are the white tailed deer overpopulation in Gettysburg National Military Park and in Cuyohoga Valley National Recreation Area, and the mountain goat population in Olympic National Park. The National Park Service, long before facing this latest wildlife management issue, could have amended its rulemaking to address the conundrum it created for itself.

The above statement notwithstanding, a population reduction goal attained by culling does not, by law, prohibit hunters from participating. The DEIS should have examined the alternative of having licensed hunters participate in the culling process in lieu of park personnel or contractors. In explaining the lethal method (culling), the DEIS states that it is “distinct from hunting in a national park because the lethal resolution would be done under controlled circumstances by agency or contracted personnel and would not allow for the ‘fair chase’ ethic associated with hunting.”

It goes without saying that a culling action does not utilize “fair chase” methods of hunting and

waives the restrictions imposed by state wildlife agencies in setting the means and methods of taking game by the public. However, to call an action a cull and not a hunt in no way precludes members of the general public, that is licensed hunters, from assisting the Park in its objectives under "controlled circumstances." The Park and its DEIS have arbitrarily eliminated this option from the set of alternatives. Thus, the NRA believes that the DEIS is a flawed document.

The authority to allow hunters to engage in a culling program, not a "recreational hunt", exists. The Secretary of the Interior has broad powers to "...provide in his discretion for the destruction of such animals and of such plant life as may be detrimental to the use of any of said parks, monuments or reservations." (16 U.S.C. Sec.3). The National Park Service's Management Policies of 1988 specify that these powers include the ability to designate agents to act as "authorized representatives" to achieve management goals under the direction and supervision of park employees.

Although some segments of the public would oppose the use of this authority by claiming that it would open the park to recreational hunting in violation of the National Park Service's regulations, such is not the case. Authorizing representatives of the public to assist the Park does not constitute recreational hunting when there is a specific management goal to be achieved, hunters are under the direct supervision of government employees, the rules of fair chase are waived, and the culling is not conducted as part of a regular hunting season as established by the state wildlife agency.

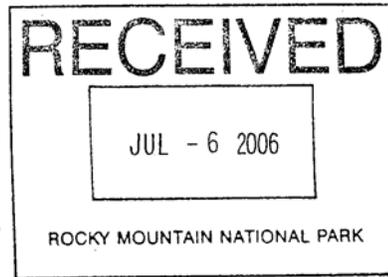
A supervised hunt would not have the practical and fiscal shortcomings of the other alternatives. In fact, the Park could charge a fee for participating in the controlled, supervised hunt and the proceeds could be returned to the Park to offset the cost of the supervised, culling program. The elk killed can still be tested for CWD and if the animal is not infected, the hunter can keep the meat for consumption. The Park would not incur the expense of setting up a meat donation program, as it proposes to do.

To dismiss utilizing hunters for a preferred alternative that will cost upwards of \$18 million is fiscally irresponsible. To deny a licensed hunter to participate in the culling operation is discriminatory. There is no evidence to suggest that hunters would not be as safe, humane and efficient, if not more so, than park employees or contractors.

In summary, the DEIS has failed the public by not proposing that hunters be incorporated in Alternatives 2 or 3 and therefore it should be withdrawn, amended and reopened for further public comment.

Sincerely,

Susan Recce
Director
Conservation, Wildlife and Natural Resources
National Rifle Association



NATIONAL WILDLIFE FEDERATION®

People and Nature: Our Future Is in the Balance

Rocky Mountain Natural Resource Center

June 30, 2006

Vaughn L. Baker, Superintendent
Rocky Mountain National Park
Estes Park, CO 80517

Subject: Draft Environmental Impact Statement - Elk and Vegetation Management Plan

Dear Superintendent Baker:

The National Wildlife Federation respectfully submits the following comments on the Draft Environmental Impact Statement - Elk and Vegetation Management Plan (DIES). As the nation's largest member-supported conservation education organization, the National Wildlife Federation (NWF) unites people from all walks of life to protect nature, wildlife, and the world we all share. NWF has educated and inspired families to uphold America's conservation tradition since 1936. Our common sense approach to environmental protection brings individuals, organizations, and governmental agencies together to ensure a brighter future for people and wildlife.

The National Wildlife Federation has a long history of working on wildlife issues throughout the West. Throughout our involvement in the region, NWF has advocated for science driven decision-making and management of wildlife. This plan presents alternatives for the management of elk and vegetation in the park for the next 20 years.

Having reviewed the plan we have the following comments concerning the alternatives proposed for the park:

The situation at Rocky Mountain National Park (Park) serves as an important example that National Parks do not exist either in isolation or as complete ecosystems. The National Park Service (NPS) has long recognized the problems of minimal big game winter range within the Park and has taken steps to address this issue by adding lands to the Park and developing cooperative management and research agreements with the Colorado Division of Wildlife (CDOW). However, the opportunities to add lands to the Park have virtually disappeared in the last 30 years and the development of private lands outside of the Park has greatly complicated cooperative management activities with CDOW. Rocky Mountain National Park should be used

2260 Baseline Road, Suite 100, Boulder, CO 80302 Tel: 303-786-8001

Rocky Mountain National Park
Elk and Vegetation Management Plan
June 30, 2006
Page 2

by the NPS as an example to the public of the value of undeveloped buffer areas around national parks. The NPS should not end its public education processes with this DEIS. Rather the NPS should continue to showcase the story of the Park to the surrounding communities and nationally, as appropriate, to ensure the management dilemma that has developed at Rocky Mountain National Park is neither forgotten nor repeated.

The National Park Service is not solely responsible for the impacts caused by the burgeoning elk population in Rocky Mountain. As Larimer County and the town of Estes Park have continued to encourage and allow development on the edges of the Park, management opportunities have been constrained. First, these new developments remove some habitat values for wildlife species, for elk, they become *de facto* refuges where hunting is not allowed or possible. Rather than experiencing hunting pressure, these elk are able to hold up on these developed lands and continue to add new members to the population. Additionally, elk occupancy of developed lands increases human/elk conflicts decreasing support for all wildlife and increasing management costs for the CDOW. We urge the NPS and the state of Colorado to engage in a public dialogue with Larimer County and the town of Estes Park to ensure the full costs of additional development are not borne by the wildlife and wildlife agencies alone. It is imperative that those external governmental agencies minimize further impacts to Park resources through more responsible planning and development efforts.

Although the opportunity to provide hunting access to these elk on public and private winter ranges east of the Park are declining, we urge the NPS and CDOW to continue to propose new and sweeping new proposals to provide extended hunting access to this herd. Decreased license costs, extended seasons and primitive weapon seasons (increased safety in developed areas) should be among the considered alternatives.

We support the National Park Service's preferred alternative to reduce the elk population in this area of Colorado. However, we are concerned the preferred alternative is designed to "hide" the dramatic impacts of reducing the elk population from the public. How can NPS hope to avoid future human-caused wildlife conflicts if it refuses to "daylight" its management action to the public? NWF is adamant in supporting maximum human safety during elk reduction actions, but we do not believe the public interest is served by only conducting elk reductions at night and by using silencers to reduce the noise from high caliber weapons. Park visitors and neighbors need to understand the consequences of human actions outside of the Park and that those consequences result in the destruction of native wildlife. Perhaps, if the public does experience restricted access and the noise of high power weapons, it will be more thoughtful and responsible in its future decisions. We do not advocate a cavalier or insensitive approach to the reduction, but rather consider it a "teachable" moment for the public and the impact of their decisions on wildlife and their habitats.

NWF appreciates the creative proposals found in the DEIS. For example, an Alternative considering the possible introduction of wolves and the ensuing experiment regarding the impact on the elk population and the prevalence of Chronic Wasting Disease (CWD). Regardless of this alternative not be the preferred alternative, NWF appreciates the thought provoking nature of this

Rocky Mountain National Park
Elk and Vegetation Management Plan
June 30, 2006
Page 3

idea, it certainly is an example of how the NEPA process can be used to elucidate ecological concepts and assess public reaction.

Thank you for your consideration of our comments. If you have any questions about this letter, please feel free to Dyanne Singler at 303/441-5163 or singler@nwf.org.

Sincerely,



Stephen C. Torbit, Ph.D., Director
Rocky Mountain Natural Resource Center
National Wildlife Federation



July 3, 2006

Via e-mail: romo_superintendent@nps.gov and facsimile (970-586-1397)

Vaughn Baker, Superintendent
Rocky Mountain National Park
Attn: Elk and Vegetation Management Plan
Estes Park, CO 80517

Re: Comments of Safari Club International and Safari Club International
Foundation on the Rocky Mountain National Park Draft Elk and
Vegetation Management Plan and Environmental Impact Statement

Dear Superintendent Baker:

Safari Club International and Safari Club International Foundation (collectively "SCI") appreciate the opportunity to comment on the Draft Elk and Vegetation Management Plan and Environmental Impact Statement ("Elk Plan"). SCI and its members have long been active in hunting and wildlife management issues related to the Rocky Mountain National Park ("RMNP") and surrounding areas. The staff of the RMNP has obviously put a great deal of thought and effort into developing the Elk Plan. SCI generally supports wildlife management efforts aimed at wildlife population control. It is unfortunate, however, that legal and policy constraints apparently prevent the NPS from considering the use of recreational sport hunting as part of the solution in RMNP.

Safari Club International, a nonprofit IRC § 501(c)(4) corporation, has approximately 50,000 members worldwide, including many who hunt near the RMNP and, in doing so, contribute to the sustainable use of the wildlife in the area. Its missions include the conservation of wildlife, protection of the hunter, and education of the public concerning hunting and its use as a conservation tool. Safari Club International Foundation is a nonprofit IRC § 501(c)(3) corporation. Its missions include the conservation of wildlife, education of the public concerning hunting and its use as a conservation tool, and humanitarian services. More specifically, the conservation mission of SCIF is: (a) to support the conservation of the various species and populations of game animals and other wildlife and the habitats on which they depend, and (b) to demonstrate the importance of hunting as a conservation and management tool in the development, funding and operation of wildlife conservation programs.

The NPS has well documented the need to manage the Elk population in RMNP. Several of the reasons the NPS has identified suggest that the use of recreational sport

Safari Club International - Washington DC Office
501 2nd Street, NE, Washington, DC 20002 • Phone 202 543 8733 • Fax 202 543 1205 • www.sci-dc.org

hunters could be part of the solution to the problem. The Elk Plan notes that “[t]he prohibition of hunting inside the park and the town of Estes Park while adjacent areas outside the park are open to hunting has created a ‘sanctuary’ that has contributed to the high elk concentration and more sedentary behavior.” Elk Plan at iv-v. “In addition, increased concentrations of elk in developed areas inside and outside the park also increase the potential for human-elk conflict as elk become more habituated and less fearful of humans.” Elk Plan at vi. The carefully regulated use of recreational sport hunters would help address both of these problems.

An added advantage of using sport hunters is that sport hunting generates revenue that could be used for conservation efforts related to game and nongame species within the park and surrounding areas. It is well established that sport hunting can generate funds, for example, through the sale of tags and licenses, that can be used to benefit wildlife and the ecosystem. In contrast, the use of park employees or contractors to manage wildlife through lethal means is often a costly undertaking. Although SCI understands that the NPS believes that statutory prohibitions prevent recreational hunting within the park from being considered as a viable option at this time, SCI encourages the NPS to consider any measures that might enhance the opportunities to sport hunt elk outside the RMNP as a means to manage elk populations within the park. See Elk Plan at 24.

SCI supports efforts by the NPS to donate as much as the harvested meat as possible for humanitarian purposes. Elk Plan at 54-55. SCI has long supported such humanitarian efforts, for example through its “Sportsmen Against Hunger” program. See information at <http://www.safariclubfoundation.org/humanitarian/#sah>. Using hunters for wildlife management in National Parks would facilitate the NPS’s ability to use harvested meat for such purposes, including through programs such as the one SCI runs.

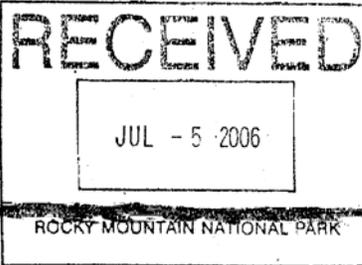
SCI is not here advocating the wholesale opening of RMNP or all National Parks to sport hunting. But for all the reasons discussed above, sport hunting should be a tool available to the NPS to use for wildlife management in limited situations, for example to control wildlife overpopulations and/or the presence of harmful invasive species. SCI encourages the NPS to consider actions that might be necessary to allow sport hunting to be a cost-effective and efficient option for dealing with wildlife overpopulation and related problems in National Parks.

SCI appreciates the opportunity to comment on this important issue. We look forward to working with the NPS on this issue. If we can provide any further information, please let us know.

Sincerely,

s/

Ralph Cunningham
President,
Safari Club International
Safari Club International Foundation



Rep Control Director
Colorado Restoration Program
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Advisory Board

- Vaughn Baker, PhD
Boulder, CO
- Stefan Amman, PhD
Arcata, CA
- John Turner
Arcata, CA
- William Smith, PhD
Boulder, CO
- Michael Jones, PhD
Boulder, CO
- Charles Williams, PhD
Boulder, CO

July 3, 2006

Vaughn Baker, Superintendent
Rocky Mountain National Park
Attn: Elk and Vegetation Management Plan
Estes Park, Colorado 80517

RE: Federal Register Notice: April 20, 2006 (Volume 71, Number 76)
Department of the Interior
National Park Service
Elk and Vegetation Management Plan
Draft EIS
Rocky Mountain National Park, CO

Our Mission

Sinapu, named after the Ute word for wolves, is dedicated to the restoration and protection of native carnivores and their wild habitat in the Southern Rockies, and connected high plains and deserts.

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Dear Superintendent Baker,

On behalf of the members of Sinapu, the Center for Native Ecosystems, Forest Guardians, and the 1,013 citizens of the United States and other countries that signed the attached petition (Attachment A), please accept the following comments regarding the Elk & Vegetation Management Plan Draft Environmental Impact Statement (hereafter "the Draft Plan"). We appreciate the time and effort the National Park Service ("NPS") has put into this plan, and understand the complexity of the issues addressed in the plan. Given Sinapu's specific niche, we are limiting the scope of these comments to those aspects of the plan that relate to a potential nexus with the restoration of wolves to Rocky Mountain National Park ("RMNP") and surrounding habitat.

Overview

As discussed in Sinapu's original comments during the scoping phase of this plan (letter dated August 9th, 2003), the confluence of previous failed attempts to control the elk population within RMNP and the ecological success of restoring wolves to Yellowstone National Park (i.e. wolves have had a remarkable and well-documented positive effect on aspen and willow communities there) clearly point the way to rescue RMNP's native plant communities. Unfortunately, because the Plan does not take a "hard look" at the opportunity to restore a self-regulating wolf population to the Park and

surrounding national forest lands, the Draft Plan violates the Park Service Organic Act ("Organic Act") 16 U.S.C § 1-20g, the National Environmental Protection Act ("NEPA"), 42 U.S.C § 4321, 4331-4332, and the Endangered Species Act ("ESA") 16 U.S.C § 1531.

I. The Draft Plan Violates the Organic Act and NPS Policies.

A. The Preferred Alternative violates the Organic Act because it is not consistent with the intent of the Act.

Congress, under the Organic Act, created the National Park Service—and the overarching management paradigm for all National Parks flows from there. Unlike any other land management agency, the NPS has as its primary mission to protect and preserve park resources. The Act's purpose is to:

"...conserve the scenery and the natural and historic objects and the wildlife and to provide for the enjoyment of the same in such manner and by such means will leave them unimpaired for the enjoyment of future generations. The authorization of activities shall be construed and the protection, management, and administration of these areas shall be conducted in light of the high public value and integrity of the National Park System and shall not be exercised in derogation of the values and purposes for which these various areas have been established, except as may have been or shall be directly and specifically provided by Congress." (16 U.S.C § 1).

Since the original enactment of the 1916 Organic Act, Congress and the courts have repeatedly affirmed that original intent and, in fact, fortified it as it applies specifically to the parks.

Case law, such as: *Michigan United Conservation Clubs v. Lujan*, 949 F.2d 202, 206 (6th Cir. 1991), *National Rifle Association of America v. Potter*, 628 F. Supp. 903, 909 (D.D.C. 1986). *Fund for Animals v. Norton*, 294 F. Supp. 2d 92; *Southern Utah Wilderness Alliance v. Nat'l Park Serv*, 387 F. Supp.2d 1178, all of which have interpreted the Organic Act, consistently held that conservation is required under NPS policies—and that conservation have primacy above all other values.

Under this line of cases, the proposed plan is unlawful under the Organic Act because lethal control methods and artificial fencing (when compared to the restoration of a primary natural ecological process such as wolf predation) do not promote the NPS duty of preservation, nor were these types of uses in the park considered by Congress when the Organic Act was enacted.

One scholarly article, as reported on the NPS.gov website, also gives an accounting of the trend of preservation:

"Congress went some distance toward functional definitions in two park-specific acts in 1970 and 1978. In an amendment to national park legislation, Congress declared that national parks "derive increased national dignity and recognition of their superb environmental quality through their inclusion . . . in one national park system preserved and managed for the benefit and inspiration of all the people." Clearly here Congress was holding national parks to an "increased" or higher standard of protection, this higher standard was based on the maintenance or achieving of superb "environmental quality," and each park benefited by being included in a system that benefited all:

that is, a threat to one was a threat to all. Further, Congress now called for preservation and management that would benefit and inspire "all the people," thus by implication ruling out management decisions that would redound to the benefit of only "some of the people": interest groups, local parties, one might argue even historically vested bodies that lacked clear national significance.

In 1978, Congress reaffirmed the Organic Act and declared that parks must be protected "in light of the high public value and integrity" of the park system in a way to avoid "derogation of the values and purposes" for which the parks, collectively and individually, were created. "High public value" is somewhat subjective and clearly changes over time; by the use of this criterion, Congress appears to have instructed the National Park Service to manage parks in relation to public sentiment and, in effect, sociological jurisprudence. By this standard in 1978 Congress gave a powerful mandate to the Park Service, a mandate which would prohibit actions that could have the effect of "derogation" of park values. Virtually all commentators at the time and since have concluded that the 1978 provision added to the Park Service's mandate to protect ecological values.¹

The NPS policies also clearly underscore the strong conservation focus that should prevail in the management of the Parks. From the Draft Plan at p. 31:

Management Policies 2001 (NPS 2000b) establishes service-wide policies for the preservation, management, and use of park resources and facilities. These policies provide guidelines and direction for management of elk and vegetation within the park.

Section 4.4.1.1 requires that the National Park Service "adopt park resource preservation, development, and use management strategies that are intended to maintain the natural population fluctuation and processes that influence the dynamics of individual plant and animal populations, groups of plant and animal populations, and migratory animal populations in parks" (NPS 2000b).

Section 4.1.5 also directs the National Park Service to reestablish natural functions and processes in human-disturbed components of natural systems in parks (unless otherwise directed by Congress). Impacts on natural systems resulting from human disturbances include the disruption of natural processes. The National Park Service will seek to return human-disturbed areas to the natural conditions and processes characteristic of the ecological zone in which the damaged resources are situated. The National Park Service is to use the best available technology, within available resources, to restore the biological and physical components of these systems, accelerating both their recovery and the recovery of landscape and biological- community structure and function. This includes the restoration of native plants and animals, which Section 4.4.1.3 defines as "all species that have occurred or now occur as a result of natural processes on lands designated as units of the national park system" (NPS 2000b).

¹ Robin W. Winks, *The National Park Service Act of 1916: "A Contradictory Mandate"?*, 74 *Denver U. L. Rev.* 575 (1997).

Therefore, based on the express mandate of preservation embodied in the Organic Act, Park Service policies and existing case law, the preferred alternative the Park Service selected is not a reasonable interpretation of the Organic Act and is thus arbitrary and capricious, falling outside the Park Service's statutory authority.

B. The National Park Service has unlawfully rejected Alternatives that are more consistent with the Organic Act and Park Service policies.

There is at-least one other alternative that the NPS could have chosen that would have been more consistent with the Organic Act: The restoration of a self-regulating population of wolves. The Plan's Executive Summary p. xii, recognizes Alternative 5 as the environmentally preferred Alternative because it "best protects the biological and physical environment by effectively reducing the densities and abundance of the elk population to levels that would allow fore recovery of vegetation on the elk range most reflective of natural conditions."

If the Plan recognizes that the release of a tiny number of wolves (relegated to not leave the boundary of RMNP and barred from reproduction (by sterilizing the males)) as biologically the best (of the alternatives considered), then a self-regulating population of wolves (an alternative not considered by the Draft Plan) would clearly be even better for the biology and ecological health for RMNP. By failing to take a "hard look" at an alternative that included restoring a self-regulating wolf population, the NPS expressly ignored overwhelming scientific evidence, along with the mandate of the Organic Act and existing case law.

Given the direction of Congress through the Organic Act of 1916, and given present Park Service policy, it seems logical that the Park Service would fully explore the opportunity to develop a management plan based upon the best available scientific information. Unfortunately, the Draft Plan takes a different tack.

As we first outlined in our comments (letter dated August 9th, 2003) during the scoping phase for the Draft Plan, mounting scientific evidence from Yellowstone National Park and elsewhere indicates that the restoration of wolf predation has near-term and sustained benefits for vegetation, specifically aspen, willow and other riparian dependent species.² Notably, the Draft Plan acknowledges this ecological research (Draft Plan at p. 222), but then turns a blind eye to the clear implications of such research as it relates to the Park Service's obligation, "to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." 16 U.S.C § 1.

In light of such overwhelming scientific evidence pointing to the absence of wolves as the root of RMNP's problem with elk herbivory, it is puzzling that the Draft Plan baldly downplays the implications of these

² See for example: ² Smith D.W., Peterson R.O. and D.B. Houston. 2003. Yellowstone After Wolves. *Bioscience*. 53(4): 330-340.

findings, choosing instead to implement a draconian plan to cull hundreds of elk under the cover of darkness—hardly a stab at restoring “all species that have occurred or now occur as a result of natural processes on lands designated as units of the national park system.” NPS 2000b. 4.4.1.3.

Given the above, the NPS’s decision to eliminate from further consideration the restoration of a self-regulating population of wolves represents a violation of the Organic Act of 1916 and contravenes existing Park Service management policy.

The Park Service has the legal authority and public obligation to make management decisions that maintain and/or restore the ecological fabric of our National Parks. Yet, in attempting to resolve the ecological consequences of wolf extermination, the NPS has decided to kill the messenger (sedentary elk).

In order to remedy the above shortcomings, we urge the NPS to issue a new Draft Plan that fully considers a new alternative scenario involving the restoration of a self-regulating population of wolves within RMNP. Given the RMNP is not large enough to reasonably contain a self-regulating population of wolves in isolation, we recommend that this scenario be developed within the context of a regional-scale wolf restoration plan involving the U.S. Fish & Wildlife Service, the U.S. Forest Service, the Colorado Division of Wildlife and the NPS.

II. NPS Plan Violates the Legal Requirements of NEPA.

A. NPS has unlawfully Rejected a Reasonable Alternative (i.e. self-sustaining wolf population).

NEPA requires that agencies consider alternatives to the proposed action. These requirements are set forth in section 102(2) (c) (iii) which states the responsible official of the agency must prepare “a detailed statement...on...alternatives to the proposed action”, and the 102(2)(E) requirement that that agencies “must study, develop, and describe appropriate alternatives to recommended courses of action which involves unresolved conflicts concerning alternative uses of available resources.”

The Draft Plan fails to fully comply with NEPA procedural requirements by failing to consider all reasonable alternatives. Further, the NPS decision disregards existing case law on how NEPA must be applied. Although NEPA does not require that the EIS discuss an infinite range of alternatives to the proposed action, the “rule of reason” guides both the choice of alternatives as well as the extent to which the EIS must discuss each alternative. *Defenders of Wildlife v. Andrus*, 627 F.2d 1238, 1246. Further, reasonable alternatives warrant an extended discussion. Under *Davis v. Mineta*, 302 F.3d 1104, 1119 (10th Cir. 2002) the 10th Circuit observed: “While it is true that defendants could reject alternatives that did not meet the purpose and need of the project, they could not define the project so narrowly that it foreclosed a reasonable consideration of alternatives.” *Davis*, 302 F.3d at 1119 (quotations omitted)(emphasis supplied) _quoting_ _Colo._ Env’tl. *Coalition v. Dombeck*, 185 F.3d 1162, 1174-75 (10th Cir.1999); “Alternatives were dismissed in a conclusory and perfunctory manner that do not support a conclusion that it was unreasonable to consider them as viable alternatives in the EA. As a

result, only two alternatives were studied in detail: the no build alternative, and the preferred alternative. FHWA acted arbitrarily and capriciously..." Davis 302 F.3d at 1122.

Based on the scientific evidence presented in the Draft Plan, NEPA requires the Draft Plan to include a full and extended discussion of a sustaining wolf population in RMNP. Dismissing this alternative does not comply with NEPA to the "fullest extent possible", as required by Section 102, making the Draft Plan fatally defective.

The purpose of NEPA is to insure a fully informed and well-considered decision; having failed to consider the restoration of a self-regulating wolf population, the Draft Plan does not promote the purpose and policy for which NEPA was created. As stated in NEPA Section 101, is necessary for all federal agencies to use "all practicable means" to administer federal programs in the most environmentally sound fashion. The purpose of NEPA is clearly not fulfilled when the NPS does not consider alternatives that the Draft Plan recognizes would be more environmentally sound.

In Alternative 5, the wolf alternative, the Plan discusses how this alternative would result in improvement in the "montane riparian willow and aspen habitat quality and quantity, the benefits would mostly accrue for the greenback cutthroat, Colorado River Cutthroat trout, boreal toad, wood toad, greater sandhill crane, lynx, and river otter." Elk Management Plan pp.270. The restoration of wolf predation would also benefit special status species that feed on carrion. In addition, because the species mentioned above as "special status species" are listed or are proposed to be listed under the ESA, the restoration of wolf predation as an ecological force would help to further the recovery goals of the ESA. These benefits were determined based on Alternative 5, which would only release a tiny number of highly managed wolves. These benefits have the potential to be far greater with a self-sustaining wolf population (in contrast to the scenario described under Alternative 5) because there would be a greater number of wolves acting in a more natural manner on the landscape (i.e. as part of a natural ecological process).

B. NPS Actions Fail to Mitigate Impacts of Overbrowsing

40 C.F.R. §1502.16(h) requires discussions in any EA/EIS include "[m]eans to mitigate adverse environmental impacts...". The Draft Plan fails this requirement (as it applies to the mitigation of the effects of elk herbivory) because it fails to fully consider the restoration of a self-regulating wolf population as a benchmark by which to measure other alternatives. **The Plan even recognizes that "the absence of an intact predator base is a key reason the elk population size, density and behavior is considered to be outside the natural range of variation."** (Elk Management plan p. 7) And, "empirical evidence from areas with intact wolf populations, such as Yellowstone and Baniff National Parks, indicates that elk would be more wary and less sedentary, resulting in lower densities." *Id.* Strangely, the NPS fails to take a "hard look" this evidence when considering alternatives.

Additionally, the NPS plan fails to mitigate other adverse impacts, as proposed by the Draft Plan. First, the Draft Plan insufficiently attempts to mitigate ethical concerns implicated by the proposed lethal control methods (under Alternative 2), which could potentially be very high in RMNP because lethal

control is inconsistent with the concept of wilderness. Second, the Draft Plan fails to mitigate the adverse impacts that the fencing would have. The fencing will be aesthetically displeasing to park visitors and could interfere with movement and activities of wildlife other than elk. The restoration of a self-regulating wolf population would avoid these adverse impacts while upholding the conservation mandate of the Park Service and furthering the recovery of at-least one endangered species (the Gray Wolf).

C. NPS Failed to Cooperate With Other Federal and State Agencies in Developing an Alternative That is Consistent With the Organic Act.

Although the DEIS, Chap.1 page 13, illustrates that the NPS, acting as the lead agency, signed a Memorandum of Understanding with several agencies regarding cooperative planning, for the reasons explained above, the preferred alternative fails to comply with NEPA in regard to such cooperative agency status. The Plan does not take into account "natural and social sciences...in planning..." as required by Section 101. This claim is based on the fact that if a "systematic" and "interdisciplinary approach" were used, the restoration of a self-regulating wolf population would have been fully considered, and perhaps chosen as the preferred alternative.

III. The NPS Has Violated the Endangered Species Act ("ESA").

A. The NPS violated Section 7(a) (1) of the ESA by rejecting alternatives that would conserve an endangered species

Under the ESA, all federal agencies are under a duty to conserve listed species. The ESA, under 16 U.S.C § 1531(c), declares that federal agencies "shall utilize their authorities in furtherance of this chapter." Because of the gray wolf's status as an endangered species, the NPS is under a duty to "conserve" the species. 16 U.S.C § 1531(b). The ESA at 16 U.S.C § 1532(3) defines "conserve" as an affirmative obligation for agencies to recover listed species "to use all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this act are no longer necessary."

In this instance, the NPS has clearly identified the need for wolves (and wolf predation), and has thus elicited the opportunity to further the recovery of a species still listed as endangered under the Endangered Species Act while meeting the needs of the Park's resources. Yet, the NPS chose not to "conserve" the endangered species:

Thus, at a minimum the NPS has a duty to consider the alternative of a self-sustaining wolf population. Instead the NPS has unlawfully rejected an alternative that would carry out the conservation mandate of the ESA.

B. Alternative 5 violates the ESA and existing Park Service policies.

The following section examines Alternative 5, as well as Alternative 2 inasmuch as Alternative 2 incorporates Alternative 5 by reference. As described in the Draft Plan, Alternative 5 calls for the reintroduction of a small number of highly manipulated/managed—and reproductively sterile—wolves into the core of RMNP. These wolves would be relegated to living inside the boundaries of RMNP, despite the fact that neither wolves nor their prey recognize lines on a map. Such a scenario does not constitute a “natural” ecological situation, and therefore has little likelihood of restoring “natural population fluctuation and processes that influence the dynamics of individual plant and animal populations, groups of plant and animal populations, and migratory animal populations in parks” as required under Management Policies 2001 Section 4.4.1.1.

Further, the scenario described under Alternative 5 fails to recognize that wolves are presently listed as an endangered species under the Endangered Species Act, and as such any actions involving individual members of the species are constrained by the take provisions of the law, as well as the affirmative duty to recover the species. Even if the NPS were to imagine Alternative 5 taking place within the context of an Experimental/Non-Essential designation under section 10(j) of the Endangered Species Act, actions by the NPS must further the recovery/conservation of the species. Section 10(j) allows the release of listed species as a means to implement the goals and policy of the ESA. 16 U.S.C. § 1539. Section 10(j) provides strict and unambiguous guidelines for using experimental populations (the species would thus be treated as a “threatened” species within RMNP). Section 10(j) allows the release of listed animals outside of the current range of that species if the release will further the conservation of the species. 16 U.S.C. § 1539 (2)(B). Based on the ESA guidelines for releasing experimental populations, Alternative 5 is unlawful. **Nothing within Alternative 5 leaves the impression that the recovery mandate of the ESA would be advanced as it relates to wolves; to the contrary, Alternative 5 invites only conflict with the recovery and protection goals of the ESA.**

Considering the above, we urge the NPS to replace Alternative 5 with a scenario that advanced the goals of the Draft Plan while concurrently advancing the recovery of gray wolves. Further, we urge the NPS to include a full consideration of the socioeconomic aspects of having wolves restored to RMNP, as required under NEPA. Ongoing socioeconomic research regarding wolf restoration in the Northern Rockies indicates that the net annual benefit to the local economies of Wyoming Idaho and Montana is approximately \$70 million.³

Conclusion

Given the fact that the Draft Plan, considered as a whole, violates the Organic Act, NEPA, and the ESA, we believe that the NPS should take a step back to further consider the clear implications of potentially restoring wolves to the landscape, and then reissue a draft management plan that reconciles the deficiencies of the first draft with the ecological, scientific and legal realities that clearly point to the

³ See BliingsGazette.com, April 7, 2006. *UM economist: Wolves a big moneymaker. Yellowstone Park survey finds animals have \$70M effect.*

restoration of a self-regulating wolf population to RMNP and surrounding national forest lands as a significant part of the solution to the problem of elk herbivory in RMNP.

We appreciate your consideration.

For the Wild,



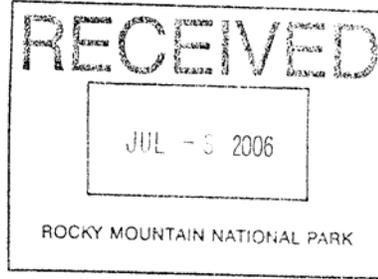
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Attn: Elk and Vegetation Management Plan
Estes Park, Colorado 80517

Federal Register Notice: April 20, 2006 (Volume 71, Number 76)
Department of the Interior
National Park Service
Elk and Vegetation Management Plan
Draft EIS
Rocky Mountain National Park, CO

Dear Superintendent Baker,

Wilderness Workshop (WW) represents the conservation interests of our 600+ members. We are providing comment herein concerning the Rocky Mountain National Park (RMNP) Elk and Vegetation Management Plan (The Plan) and associated Draft Environmental Impact Statement (DEIS). WW would like to thank RMNP for this opportunity to participate in the public lands management process. WW would also like to acknowledge the better working relationships between managers and stakeholders, and the more-informed decisions that result from this and other NEPA (National Environmental Policy Act, 42 U.S.C. 4321 et seq.) processes.

The Wilderness Workshop's mission is to protect and conserve the wilderness and natural resources of the Roaring Fork watershed, the White River National Forest (WRNF), and adjacent public lands. WW is a local, community-based non-profit organization that uses the best available science to forward its mission through research, policy work, administrative processes, education, legal advocacy, and grassroots organizing to protect the ecological integrity of Colorado's public lands. WW focuses on the monitoring and conservation of air and water quality, wildlife species and habitat, natural communities, roadless areas, and lands of wilderness quality.

Rocky Mountain National Park and its ecological and socio-economic well-being are of great importance to WW and its members. From a landscape ecology perspective, maintaining the integrity of RMNP as a preserve, refuge, and source for organisms, native biota, and genetic diversity is critical to the conservation of ecological integrity on other proximate public and private lands in the Southern Rockies region, including the Arapaho-Roosevelt and White River National Forests.

Rocky Mountain National Park is among the United States' most cherished national parks. While the issues and proposed actions this DEIS addresses are certainly controversial, RMNP managers must also remain cognizant of the many opportunities now at hand. These include invaluable opportunities for scientific inquiry and practical research; opportunities for public-private-NGO partnerships toward conservation and science-related ends; opportunities to learn from Yellowstone NP's experiences with similar ecological, social, and economic issues; opportunities to educate the various publics as to ecological realities and to dispel misperceptions and stereotypes about carnivores and elk; as well as opportunities to implement progressive, new science-based policy and wildlife management solutions.

Project Purpose and Need

The Rocky Mountain National Park Elk (*Cervus elaphus*) and Vegetation Management Plan states as its objectives:

1. Restore and/or maintain the elk population to what would be expected under natural conditions to the extent possible.
 - Maintain a free-roaming elk population.
 - Decrease the level of habituation to humans exhibited by elk.
 - Restore the elk population size to a level allowing it to fluctuate within the natural range of variation, between 1,200 and 2,100 elk.
 - Redistribute elk to disperse high densities of elk.
2. Restore and/or maintain the natural range of variation in vegetation conditions on the elk range, to the extent possible.
 - Prevent loss of aspen clones within high elk use areas.
 - Restore and maintain sustainable montane riparian willow.
 - Increase montane riparian willow cover within suitable willow habitat on the primary winter range.
 - Maintain or improve the condition of riparian and upland willow on the primary summer range.
 - Reduce the level of elk grazing on herbaceous vegetation.
3. Opportunistically collect information to understand chronic wasting disease prevalence in the park within the framework of the alternative.
4. Ensure that strategies and objectives of this plan/EIS do not conflict with those of chronic wasting disease management.

5. Continue to provide elk viewing opportunities.

6. Recognize the natural, social, cultural, and economic significance of the elk population.

In the DEIS, RMNP prudently acknowledges that un-naturally high concentrations of elk and elevated levels of herbivory have degraded and simplified various ecological communities upon which many species depend (DEIS at 2). WW applauds RMNP resource managers and staff for their holistic, ecosystem-based objective of bringing the Park's elk herd back to a more natural level—one that does not exceed the ecological carrying capacity of the land. It is a sign of effective leadership and progressive stewardship that RMNP managers now acknowledge the unnaturally large, imbalanced, and ecologically-deleterious size of today's RMNP/Estes Valley elk herd. WW suggests that RMNP explicitly incorporate management for multiple top-level predators as salient objectives within this Plan. To this end, WW recommends RMNP and its partners re-establish a population of wolves (*Canis lupus*) in the greater RMNP ecosystem—much as YNP managers re-established wolves and restored ecosystem balance in the Greater Yellowstone Ecosystem. Further, WW advocates that such ecologically-focused policies take precedent over recreational values in the near term. While there may be short-term economic costs associated with interference in park visitation/tourism, it is important to acknowledge that every day that the unnatural herd size persists equates to greater ecological harm. This ecological harm is long-term and intergenerational in scope, and may contribute to species extirpation and/or extinction.

Many public stakeholders are unfamiliar with ecological relationships, trophic cascade effects, roles of top-level carnivores and keystone species, predation risks, optimal foraging, and other ecological concepts. As evidenced by letters to the editor and discussions in the Rocky Mountain Elk Foundation's magazine, *Bugle*, during the past few years, some regard elk solely as game to be hunted, while others understand that elk and other species are critical pieces to a complex, often-ineffable ecological puzzle—of which carnivores are also a critical piece. Still others neither understand the culture or conservation role of modern hunting, nor the nuances of various ecological relationships in RMNP, Yellowstone NP, and/or elsewhere. Both hunter and non-hunter alike fall within each of the three aforementioned categories. Importantly, all citizens have the capacity to learn from public management actions and resulting case histories. Speaking to some of the very same ecological and social issues with which RMNP now copes, luminary forester, conservationist, wildlife scientist, and teacher Aldo Leopold (1949) wrote in his essay *Thinking Like a Mountain*,

In those days we had never heard of passing up a chance to kill a wolf. In a second, we were pumping lead into the pack, but with more excitement than accuracy: how to aim a steep downhill shot is always confusing. When our rifles were empty, the old wolf was down, and a pup was dragging a leg into impassable slide rocks.

We reached the old wolf in time to watch a fierce green fire dying in her eyes. I realized then and have known ever since, that there was something new to me in those eyes—something known only to her and to the mountain. I was young then, and full of trigger itch; I thought that because fewer wolves meant more deer, that no wolves would mean hunters' paradise. But after seeing the green fire die, I sensed that neither wolf nor mountain agreed with such a view...

Since then, I have seen state after state extirpate its wolves. I have watched the face of many a newly wolfless mountain, and seen the south-facing slopes wrinkle with a maze of new deer trails. I have seen every edible bush and seedling browsed, first to anaemic desuetude, and then to death. I have seen every edible tree defoliated to the height of a saddle horn. Such a mountain looks as if someone had given God a new pruning shears, and forbidden him all other exercise. In the end, the starved bones of the hoped-for deer herd, dead of its own too-much, bleach with the bones of the dead sage or molder under the high-lined junipers.

As Leopold eloquently described in *Thinking Like a Mountain* and elsewhere, human-land relationships often elude our ken until much damage has occurred—both to the ecological community as well as to the human community. Many citizens see elk (*Cervus elaphus*) as an emblem of our parks—the quintessential charismatic megafauna. Elk are indeed majestic creatures. Many of these same citizens, however, remain ignorant of ecological realities, and react adversely to ecologically-ambiguous Park management goals, such as that of bringing RMNP's elk herd and related ecosystem components closer to a natural balance. RMNP's accomplishing this goal will prove difficult, and the devil, as they say, is in the details. Nonetheless, RMNP can and will be successful in achieving this goal and WW and the undersigned groups offer our support to this end.

Despite present challenges, RMNP leadership must retain the integrity it has already exhibited by acknowledging the profound purpose and need for the proposed action/management plan. While the DEIS (at 1-3) notes that the RMNP/Estes Valley herd has tripled in size since 1969, such realities are exacerbated by the extensive development and habitat loss that has occurred on adjacent private lands during this same period.

Some RMNP visitors and full/part-time local residents have, perhaps, grown attached to the notion of *wild* elk browsing the ornamental shrubs that adorn their summer cabins or primary residences. Others, however, correctly see in these suburb-habituated elk a diminution of the region's ecological integrity. While arguments over such issues and their inherent ironies and complexities are intimately tied to one's personal values and *modus vivendi*, RMNP must affirmatively stand behind the extensive body of ecological and biological science which speaks to the unnatural state of the existing herd. RMNP must affirmatively promulgate the reality that ecological imbalances now ripple through RMNP's ecosystems and human communities as a result of the unnaturally large elk herd. That is to say, RMNP managers should not mince their words for political reasons

when speaking in public fora, but rather, stand behind the sound science, purpose, and need for action as presented in the DEIS.

RMNP must take action in order to bring the RNNP/Estes Valley elk herd to more sustainable levels. RMNP must do so not merely to avoid the herd's dying of "its own too-much", but also for the sake of the whole of RMNP's ecological communities. RMNP's success as a national park is inextricably linked to the holistic well being of RMNP's ecological communities.

Public Sentiment

The Federal Register's notice of the DEIS on April 20, 2006 has prompted a broad public discussion, reaching academic institutions; national, regional, and local newspapers and magazines; internet *blogs*; websites; and list-serves. Such broad policy discussions can generate much food for thought. It behooves public lands managers to consider such public discussions in addition to that information which is generated under the more formal processes associated with the NEPA (16 U.S.C. § 4332 et seq.).

In researching RMNP's management options, WW uncovered a multitude of opinions and suggestions as published in the aforementioned media fora. Some citizens proposed allowing various forms of elk hunts—allowing recreational hunters to harvest an elk, while also helping to accomplish RMNP's wildlife management goals. Other citizens proposed immediate re-introduction of a sizable wolf population to help accomplish such goals. Others seemed opposed to certain iterations, formats, or mixtures of these policy solutions. For example, one citizen noted that if public hunts manifest in "firing line" scenarios comparable to those that have occurred in Wyoming and Idaho and near Jackson, Wyoming's Elk Refuge, then the ecological benefits of the thinned herd would be outweighed by the public relations/image harm to the hunting community. Others stated that firing line scenarios did not constitute hunting in any real sense, and that managers could achieve the most desirable outcomes through appropriate wildlife management design, planning, preparation, and education.

One Idaho outfitter working to eliminate wolves from his home state recently noted that wolf reintroduction has "decimated elk herds" in Idaho, hurting hunters and small businesses like his (*Twin Falls Times-News* May 2, 2006)—this, in spite of record state harvest figures over recent years. While each has a right to her own opinion, sentiments such as that of the Idaho outfitter evince a lack of concern for holistic ecological integrity and land health, as well as an ignorance of ecological realities.

Striking the proper balance as between competing interests is, of course, complicated. Nonetheless, where America's national parks are concerned, ecological integrity and restoration and maintenance thereof should be a primary consideration. Secretary of Interior Dirk Kempthorne confirmed as much in the George W. Bush Administration's recent national parks policy statement. Secretary Kempthorne noted that "[conservation] is the heart of these policies and the lifeblood of our nation's commitment to care for

these special places and provide for their enjoyment."¹ Secretary Kempthorne noted further, "When there is a conflict between conserving resources unimpaired for future generations and the use of those resources, conservation will be predominant."²

In short, concerned citizens have fleshed out many nuances of RMNP's "elk problem" in various public fora. The Yellowstone NP experience, as well as wolf reintroduction in other states, are frequent references within the broad discussion over RMNP's management of its ecosystems. It would behoove RMNP managers to explore available databases of mainstream magazines and newspapers, as well as internet sources such as www.newwest.net; www.headwatersnews.org; and others for management suggestions and policy ideas—but also to gauge the varying degrees of understanding and ignorance of applicable issues and concepts. Importantly, per Secretary Kempthorne's mandate that conservation values trump other values (including recreation-based values), RMNP officials should restore wolves to the Park's ecosystems as well as make a good faith effort to restore the broad suite of keystone predators to the Park.

Ecological Importance of Healthy Aspen Stands

Quaking aspen (*Populus tremuloides*) is the most widely distributed tree in North America (Larsen and Ripple 2005). Aspen stands support a variety of plant associations, avian species, and are used for browse by several ungulate species (Gullion 1977, St. John 1995, Dieni and Anderson 1997, Larsen and Ripple 2005). Aspen is essential to the viability of certain wildlife species (DeByle 1985). A wide variety of songbirds, cavity-nesters, birds of prey, game birds, as well as large and small mammals depend on aspen communities (DeByle 1985). Aspen stands exhibit both species richness and species diversity (DeByle 1985). Because of the abundance of diverse habitat niches, species diversity is probably greater in mixed aspen-conifer stands as compared to pure aspen stands (DeByle 1985).

At least 85 North American avian species nest in tree cavities. 34 of these 85 species utilize tree cavities in the West's aspen ecosystems (DeByle 1985). These species include the American kestrel (*Falco sparverius*) and Merlin (*F. columbarius*); the flammulated (*Otus flammeolus*), western screech (*O. kennicottii*), northern pygmy (*Glaucidium gnoma*), and northern saw-whet owls (*Aegolius acadicus*); many species of sapsuckers (*Sphyrapicus spp.*) and woodpeckers (*Picoides spp.*); the western (*Empidonax difficilis*) and the great crested (*Myiarchus crinitus*) flycatchers; the purple martin (*Progne subis*); the tree (*Trachycineta bicolor*) and violet green (*T. thalassina*) swallows; many species of chickadee (*Poecile atricapilla*) and nuthatch (*Sitta spp.*); the brown creeper (*Certhia americana*); the house wren (*Troglodytes aedon*); western (*Sialia mexicana*) and mountain bluebirds (*S. currucoides*); and the starling (*Starnus vulgaris*) (Harrison, 1979, Scott et al. 1977, DeByle 1985). Winternitz (1980) found that 38% of breeding avian species in Colorado's aspen forests were cavity nesters. Scott et al. (1980) noted that over a variety of sites, between 17% and 60% of avian species in aspen stands were cavity nesters. Most cavity nesting species are insectivorous and are thus

¹ Web publication available at: <<http://cnn.netscape.cnn.com/news/story.jsp?floc=ne-politics-more&idq=/ff/story/0001%2F20060619%2F1708645415.htm&sc=1152>>

² Web publication available at: <<http://deseretnews.com/dn/view/0,1249,640188384,00.html>>

considered to be mostly beneficial to human-centered interests (Thomas 1979, DeByle 1985).

Because aspen trees of all sizes are subject to competition, disease, and decay, aspen stands permit significant opportunities for cavity excavation (DeByle 1985). Opportunities in aspen stands for cavity nesting species, thus, increase over time (DeByle 1985). This is the case, in part, because aspen is readily susceptible to heart rot, and is thus conducive to cavity excavation (DeByle 1985). Live aspen may stand for many years after fungi (e.g. *Fomes igniarius*) and decay (leading to a “punk” consistency) permit excavation (DeByle 1985). The volume of holes drilled in large, infected aspens indicates that birds prefer such trees for nesting (Scott et al. 1980, Winternitz 1980, DeByle 1985). Once completely dead however, aspen snags rarely remain standing for more than a few years (DeByle 1985). This being the case, aspen stands that fail to recruit new suckers or clones (i.e., younger age classes) will, over time, displace many of those species dependent upon a dynamic, healthy, self-renewing aspen stand.

Three species of accipiters (*Accipitridae spp.*), three species of buteos (*Buteo spp.*), four species of falcons (*Falco spp.*), the golden eagle (*Aquila chrysaetos*), and the turkey vulture (*Cathartes aura*) are all found in western aspen forests (DeByle 1985). Mourning doves (*Zenaidura macroura*) are also found in aspen forest edges (DeByle 1985). Game species found in aspen forests include sharp-tailed grouse (*Tympanuchus phasianellus*), blue grouse (*Dendragapus obscurus*), ruffed grouse (*Bonasa umbellus*), and wild turkey (*Meleagris gallopavo*) (DeByle 1985). Song birds and “smaller” species that make use of aspen stands are too numerous to list. Such species may be divided into various nesting guilds within aspen ecosystems; these include canopy nesters, shrub nesters, hole nesters, and ground nesters (Flack 1976, DeByle 1985). Avian species using aspen stands may also be divided into feeding guilds that include: ground-insect, ground-seed, foliage-insect, air perching, and air soaring (DeByle 1985). Salt (1957) found the aspen type (on a moist site, near Jackson Wyoming), had more than three times the volume of avian biomass than any of the other six vegetation types his study addressed (DeByle 1985).

Notably, ground nesting species including the hermit thrush (*Catharus guttatus*), Townsend’s solitaire (*Myadestes townsendi*), dark-eyed junco (*Junco hyemalis*), white-crowned (*Zonotrichia albicollis*) and Lincoln’s (*Melospiza lincolnii*) sparrows, veery (*Catharus fuscescens*), oven bird (*Seiurus aurocapillus*), night hawk (*Chordeiles minor*), and Connecticut (*Oporornis agilis*) and mourning (*Oporornis philadelphia*) warblers often depend on aspen forests for feeding habitat and on aspen forest understory plants and structure for protective cover and safe nesting sites (DeByle 1985). Such ground-nesters are very susceptible to habitat alteration and trampling by grazing animals (DeByle 1985). Nonetheless, because there are avian species associated with all structural levels and developmental stages of aspen forests, the age, structure, and condition of an aspen stand may select for certain guilds over others at any given time. For instance, Flack (1976) found that the number of birds nesting and/or feeding on the ground was inversely related to the litter cover on the forest floor (DeByle 1985). If maintaining high levels of biodiversity is desirable, then managers should strive to create diverse age classes, structure, function, as well as promote ecological integrity in general.

Most of the aspen communities in the Rocky Mountain states occur on public lands (DeByle 1985). North American aspen ecosystems are home to at least 55 species of wild mammals (DeByle 1985). These may include moose (*Alces alces*), elk (*Cervus elaphus*), mule deer (*Odocoileus hemionus*), white tailed deer (*Odocoileus virginianus*), snowshoe hares (*Lepus americanus*), cottontail rabbits (*Sylvilagus nuttallii*), beavers (*Castor canadensis*), porcupines (*Erethizon dorsatum*), pocket gophers (*Thomomys spp.*), shrews (*Sorex spp.*), mice (*Peromyscus spp.*), voles (*Microtus spp.*), ground squirrels (*Spermophilus spp.*), tree squirrels (*Sciurus spp.*), chipmunks (*Tamias spp.*), and many other species (DeByle 1985).

Ecological Importance of Riparian Ecosystems

Riparian systems typically occupy a small proportion of most landscapes; yet they serve critical ecological functions, affecting a wide range of aquatic and terrestrial organisms as well as hydrologic and geomorphic processes of riverine systems (Ripple and Beschta 2004). Through their root systems, riparian plant communities stabilize stream banks; create hydraulic roughness during overbank flows; provide hydrologic connectivity between streams and floodplains; sustain carbon and nutrient cycling; moderate instream and riparian zone temperature; create habitat structure and food web support; and more (NRC 2002, Ripple and Beschta 2004).

Beaver (*Castor Canadensis*) play important roles in aquatic and riparian systems by altering hydrology, channel geomorphology, biochemical pathways, and productivity (Naimen et al. 1986, Ripple and Beschta 2004). Beaver dams may flood topographic depressions and floodplains, consequently creating more habitat for aspen (*Populus tremuloides*) and willow (*Salix spp.*) (Naimen et al. 1988, Pollock et al. 1995, Ripple and Beschta 2004). Thus, beaver may influence the availability of surface water. Beaver can also increase plant, vertebrate, and invertebrate diversity and biomass and alter successional dynamics in riparian communities (Naimen et al. 1988, Pollock et al. 1995, Ripple and Beschta 2004). Wolves (*Canis lupus*) have been shown to frequent riparian areas, travel along riparian corridors, and prey on beaver (Allen 1979, Ripple and Beschta 2003).

Overbrowsing by Ungulates, Trophic Cascade Effects, & Predation Risk Effects

Elk (*Cervus elaphus*) are included among species that prefer aspen stands. Of browse species selected by elk, aspen has the highest percent of digestible dry matter (Hobbes et al. 1981, DeByle 1985). During the 20th Century, Yellowstone National Park's northern ungulate winter range saw a decline of overstory aspen (Houston 1982, Despain 1990, Kay 1990, Meagher and Houston 1998, Ripple and Larsen 2000). During the winter, elk browse the leaders off the aspen suckers, preventing their "escapement" to tree height, a process well documented in YNP and elsewhere in the Rocky Mountains (Bartos and Meuggler 1981, Kay 1993, Romme et al. 1995, Ripple and Larsen 2000). Kay (1990) and Wagner et al. (1995) stated that the decline of overstory aspen (in YNP) was due primarily to overbrowsing due to an overabundance of elk (Ripple and Larsen 2000). Although some have hypothesized that aspen decline might be related to an increase in aridity in the 20th century (Singer et al. 1988), others have found no evidence of a

relationship between aspen recruitment and climatic fluctuations or fire suppression (Baker et al. 1997). Romme et al. (1995) suggest, however, that an interaction of several variables including fire suppression, climatic variation, elk abundance, and a dearth of mammalian predators have contributed to the failure of aspen escapement to tree height in the last 100 years (Ripple and Larsen 2000). Other factors that have influenced the relative abundance and distribution of aspen (*vis-à-vis* effects on ungulate herbivory) in the YNP area include Native American predation on elk (Kay 1994), market hunting (Romme et al. 1995), and periods of frequent fire (Warren 1926, Romme et al. 1995, YNP 1997, Meagher and Houston 1998).

YNP officials have stated (1997:56), “There remains no question that ungulate browsing is the immediate cause of the decline of aspen on the northern range...” Until 1968, YNP managers used elk herd thinning as a management tool, carrying such actions out as quickly and efficiently as possible to minimize disruptions to park visitation (Wright 1998). Ripple et al. (2000) state that the 1995 re-establishment of wolves on YNP’s northern range may be of long-term benefit to aspen. “Given YNP’s policy of natural regulation, wolves may help re-establish an ecologically significant and historically important predator/prey relationship in the park.” (Ripple and Larsen 2000).

Ripple and Larsen (2000) proposed a trophic cascade relationship involving wolves (*Canus lupus*), elk (*Cervus elaphus*), and aspen (*Populous tremuloides*). While they reduce elk populations, keystone predators such as wolves may also affect aspen overstory recruitment by influencing ungulate movement and browsing patterns (a.k.a. predation risk effects) (Ripple and Larsen 2000). Predation risk effects are best understood by the notion that the risk introduced by the mere presence of a predator could have widespread effects causing many prey individuals to alter their foraging behavior (Schmitz et al. 1997, Ripple and Larsen 2000). For example, in YNP, when wolves were present, elk were found to use anti-predator strategies entailing avoidance of areas frequented by wolves (Ripple and Larsen 2000). Thus, wolves can affect the spatial organization, and hence the browsing patterns, of ungulates. Consequently, keystone predators and their avoidance by ungulates influences vegetation patterns with regard to both distribution and plant community health/vigor.

Researchers have also observed predation risk effects elsewhere. In Minnesota, for instance, white-tailed deer (*Odocoileus virginianus*)—during a period of declining numbers—were observed to be more numerous in wolf pack buffer zones, which comprised areas avoided by wolves so to minimize the chances of fatal encounters between packs (Mech 1977, Ripple and Larsen 2000). In Canada’s Jasper National Park, Dekker (1985) and Dekker et al. (1996) noted increased aspen overstory recruitment in areas frequented by wolves. White et al. (1998) found higher elk densities in low wolf predation areas, thus supporting Dekker’s conclusions that aspen may be regenerating in areas avoided by elk following a predator avoidance strategy (Ripple and Larsen 2000). Dekker et al. (1996) found that elk cow:calf ratios were 100:18-19 near wolf denning sites, while near roadways and areas inhabited by humans, cow:calf ratios were 100:48. White et al. (1998) found a strong correlation between wolf reintroduction to Jasper NP and recruitment of new cohorts of aspen suckers.

Short-, Mid-, & Long-Term Management Horizons

Because RMNP managers must address ecological, social, political, and fiscal realities; it would behoove RMNP to consider policy and management tacks for the *short term*, the *mid-term*, and the *long-term*. That is to say, without managing for top level predators in RMNP's ecosystems, resource managers will face the perpetual tasks of keeping ungulate populations in check, avoiding irruptions of local herds, and struggling to save over-browsed aspen stands and riparian shrub communities. With such perpetual tasks must come perpetual budgetary allocations, perpetual expenditures, and perpetual political will. In short, RMNP should be careful not to undertake ineffective policies that will be negated once political and/or fiscal realities force their abandonment. Culling elk at night with sharpshooters is—at best—a short-term remedy. Importantly, reintroduction of wolves is the most fiscally, ecologically, and economically viable approach in the long run. To this effect, since wolves returned to Yellowstone, the region has seen a \$10 million increase in economic activity (DOW 2006). Moreover, US Fish and Wildlife Service studies project that the wolf reintroduction program will continue to attract more park visitors, eventually bringing \$23 million annually to the Yellowstone region (DOW 2006).

Leadership, Political Will, Hard Choices

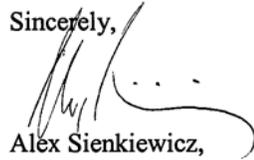
It should be apparent to RMNP managers that there are no silver bullets or quick-fixes to the “elk problem”. There will be real costs and dissatisfied stakeholder groups for any management alternative addressing RMNP's associated issues. As a general rule, candor, transparency, ongoing meaningful public participation, managing primarily for ecological integrity (as Secretary Kempthorne outlines), and promptly correcting misunderstandings and ignorance of ecological realities will do much to make the process go more smoothly.

Conclusion

During the 1930s and 1940s Aldo Leopold—known for his revolutionary and poignant essays on man and nature—advocated for the need to maintain wolves and other large carnivores in forest and range ecosystems. Leopold noted that carnivore loss often caused ungulate irruptions and ecosystem damage throughout much of the United States. To this effect, Beschta and Ripple (2005) (and other researchers) have documented the extensive body of research establishing the ecological harm associated with wolf extirpation. The work of Leopold as well as that of current researchers clearly indicates that large carnivores have an inimitable moderating effect on ecosystems vis-à-vis trophic cascades, predator risk effects, and other interactions (Ripple and Beschta 2005). RMNP must stand behind the established science and case studies of its application indicating that wolves and other keystone predators are not reasonably replaced by perpetual wildlife management efforts and quick-fixes such as nocturnal sharp-shooting alone.

While carnivore reintroduction and or management in RMNP presents a complex and confounding policy and management problem, reincorporation of wolves and other keystone predators into RMNP's ecosystems is both the ecologically and fiscally prudent in the mid and long term.

Sincerely,



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Literature & Law Cited

- Allen, D.L. 1979. *Wolves of Minong*. Houghton Mifflin. Boston, USA.
- Baker, W.L., J.A. Munroe, AND A.E. Hessler. 1997. The effects of elk on winter range in Rocky Mountain National Park. *Ecology* 20:155-165.
- Bartos, D.L. AND W.F. Meuggler. 1981. Early succession in aspen communities following fire in Western Wyoming. *Journal of Range Management* 34:315-319.
- Beschta, Robert L. AND W.J. Ripple. 2005. Linking Wolves and Plants: Aldo Leopold on Trophic Cascades. *Bioscience* 55(7):613-621.
- DeByle, N.V. *in* N.V. Debyle AND R. Winokur, eds. 1985. Aspen: ecology and management in the Western United States. USDA Forest Service General technical Report RM-119. Rocky Mountain Forest and Experiment Station, Fort Collins, USA.
- Despain, D.G. 1990. *Yellowstone vegetation: consequences of environment and history in a natural setting*. Roberts Rinehart. Boulder, USA.
- Dekker, D.G. 1985. Elk population fluctuations and their probable causes in the Snake Indian Valley of Jasper National Park: 1970-1985. *Alberta Naturalist* 15: 49-54.
- Dekker, D.G., W. Bradford, AND J.R. Gunson. 1996. Elk and wolves in Jasper National Park, Alberta, from historic times to 1992 *in* L.N. Carbyn, S.H. Fritts, D.R. Seip, eds. *Ecology and conservation of wolves in a changing world*. Canadian Circumpolar Institute. University of Alberta. Edmonton, Canada.
- Dieni, J.S., AND S.H. Anderson. 1997. *Ecology and management of aspen forests in Wyoming*. Wyoming Cooperative Fish and Wildlife Research Unit, University of Wyoming, Laramie, USA.
- DOW (Defenders of Wildlife). 2006. Web publication available at:
<<http://www.defenders.org/wildlife/wolf/ynpfact.html>>
- Flack, J.A. 1976. *Bird populations of aspen forests in Western North America*. Ornithological Monograph 19.
- Gullion, G. 1977. Maintenance of the aspen ecosystem as a primary wildlife habitat *in* T.J. Peterle, ed. *Proceedings of the XIIIth international congress of game biologists*. Wildlife Management Institute, Washington D.C., USA.
- Harrison, H.H. 1979. *A field guide to western birds' nests*. Houghton Mifflin, Boston, USA.

- Houston, D.B. 1982. The Northern Yellowstone elk: ecology and management. Macmillan. New York, USA.
- Kay, C.E. 1990. Yellowstone's northern elk herd: a critical evaluation of the "natural regulation" paradigm. Dissertation. Utah State University.
- Kay, C.E. 1994. Aboriginal overkill: the role of Native Americans in structuring western ecosystems. *Human Nature* 5:359-398.
- Larsen, E.J., AND W.J. Ripple. 2005. Aspen stand conditions on elk winter ranges in the Northern Yellowstone ecosystem, USA. *Natural Areas Journal* 25(4):326-338.
- Leopold, A. 1949. A sand county almanac with essays on conservation from round river. Ballantine Books, New York, USA.
- Levy, S. 2005. A top dog takes over. *Wild Again/Sinapu Newsletter*. Fall/Winter 2005:8-11.
- Meagher, M.M., AND D.B. Houston. 1998. Yellowstone and the biology of time. Oklahoma State U.P. Norman, USA.
- Mech, L.D. 1977. Wolf pack buffer zones as prey reservoirs. *Science* 198:320-321.
- Naimen, R.J., J.M. Milillo, AND J.M. Hobbie. 1986. Ecosystem alteration of boreal forests by beaver (*Castor Canadensis*). *Ecology* 67:1254-1369.
- Naimen, R.J., C.A. Johnston, AND J.C. Kelley. 1988. Alteration of North American streams by beaver. *Bioscience* 38:753-762.
- National Environmental Policy Act, 42 U.S.C. 4321 et seq.
- National Resource Council [NRC]. 2002. Riparian areas: functions and strategies for management. National Academy Press, Washington D.C., USA.
- Pollock, M.M., R.J. Naiman, H.E. Ericksen, C.A. Johnston, J.Paster, AND G. Pinary. 1995. Beaver as engineers: influences of biotic and abiotic characteristics on drainage basins in CG Jones, JH Lawton, eds. *Linking species and ecosystems*. Chapman and Hall. New York, USA.
- Ripple, W.J. AND R.L. Beschta. 2004. Wolves and the ecology of fear: can predation risk structure ecosystems? *Bioscience* 54(8):755-765.
- Ripple, W.J., AND E.J. Larsen. 2000. Historic aspen recruitment, elk, and wolves in Northern Yellowstone National Park, USA. *Biological Conservation* 95: 361-371.

- Rocky Mountain National Park. 2006. Elk and vegetation management plan draft environmental impact statement. Web publication available at: <http://www.nps.gov/romo/planning/elkvegetation/>
- Romme, W. H., M.G. Turner, L.L. Wallace, AND J.S. Walker. 1995. Aspen, elk, and fire in northern range of Yellowstone National Park. *Ecology* 76:2097-2106.
- Salt, G.W. 1957. An analysis of avifaunas in the Teton Mountains and Jackson Hole, Wyoming. *The Condor* 59(6):373-393.
- Schmitz, O.J., A.P. Beckerman, K.M. O'Brien. 1997. Behaviorally mediated trophic cascades: effects of predation risk on food web interactions. *Ecology* 78:1388-1399.
- Schneider, B. 2006. Rocky elk plan leaves better alternatives behind. *New West*. Web publication available at: <http://www.newwest.net/index.php/main/article/8086/>
- Scott, V.E., K.E. Evans, D.R. Patton, AND C.P. Stone. 1977. Cavity nesting birds of North American forests. U.S. Department of Agriculture, *Agriculture handbook* 511, Washington D.C., USA.
- Singer, F.J., Swift, D.M., Coughenour, M.B., AND Varley, J.D. 1998. Thunder on the Yellowstone revisited: an assessment of management of native ungulates by natural regulation, 1968-1993. *Wildlife Society Bulletin* 26:375-390.
- St. John, R.A. 1995. Aspen stand recruitment and ungulate impacts: Gardiner Ranger District, Gardiner, MT. Thesis, University of Montana, Missoula, USA.
- Thomas, J.W., ed. 1979. *Wildlife habitats in managed forests—the Blue Mountains of Oregon and Washington*. U.S. Department of Agriculture, *Agriculture Handbook* 553, Washington D.C., USA.
- Tyser, R.W., AND C.A. Worley. 1992. Alien flora in grasslands adjacent to road and trail corridors in Glacier National Park, Montana. *Conservation Biology* 6:235-262.
- Ripple, W.J., AND E.J. Larsen. 2000. Historic aspen recruitment, elk, and wolves in northern Yellowstone National Park, USA. *Biological Conservation* 95:361-370.
- Ripple, W.J., E.J. Larsen, R.A. Renkin, AND D.W. Smith. 2001. Trophic cascades among wolves, elk and aspen on Yellowstone National Park's northern range. *Biological Conservation* 102: 227-234.
- Terborgh, J., J. Estes, P. Paquet, K. Ralls, D. Boyd-Heger, B. Miller, AND R. Noss. 1999. The role of top carnivores in regulating terrestrial ecosystems. *Wild Earth* 9, No. 2:42-56.

Wagner, F.W., R. Forester, R.B. Gill, D.R. McCullough, M.R. Pelton, W.F. Porter, AND H. Salwasser. 1995. Wildlife policies in U.S. national parks. Island Press. Washington D.C., USA.

Warren, E.R. 1926. A study of beaver in the Yancey region of Yellowstone National Park. Roosevelt Wildlife Annals 1:1-191.

Winternitz, B.L. 1980. Birds in aspen. IN U.S.D.A. Forest Service. Management of western forests and grasslands for nongame birds. General Technical Report INT-86. Intermountain Forest and Range Experiment Station. Ogden, USA.

Wright, R.G. 1998. A review of the relationships between visitors and ungulates in national parks. Wildlife Society Bulletin 26:471-476.

Yellowstone National Park [YNP]. 1997. Yellowstone's northern range: complexity and change in a wildland ecosystem. Yellowstone National Park. Mammoth Hot Springs, USA.

**Comment submitted electronically via NPS Planning, Environment, and Public
Comment website (PEPC)**

2-Jul-06
Superintendent
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Estes Park, CO 80517

Re: National Park Service; Comment on Elk and Vegetation Management Plan for Rocky
Mountain National Park

To the National Park Service, regarding the Elk and Vegetation Management Plan for Rocky
Mountain National Park:

My name is Kirsten Emily Canfield, age 18, from Cheshire, Connecticut. My return address is 255 Nob Hill Road, Cheshire, CT 06410, and my email address is KEC8589@RIT.EDU. I am a student at Rochester Institute of Technology in Rochester, New York. I am an avid wolf-lover and conservationist, and the webmaster of Wolf Advocate (www.WolfAdvocate.com). I would like to voice my opinion regarding the possible alternatives listed in the Draft Elk and Vegetation Management Plan/EIS for Rocky Mountain National Park's elk situation.

I strongly favor the reintroduction of wolves to Rocky Mountain National Park (as described in Alternative Five) as the best way to trim down the park's elk population, which has grown too large and destructive due to a lack of natural predators.

Introduction

In this comment, I will be comparing and contrasting Alternative Two and Alternative Five, as described in the Draft Elk and Vegetation Management Plan/EIS, and explaining why Alternative Five is the better alternative. Alternative Two, Rocky Mountain National Park's staff's preferred alternative, is an intensive elk-shooting program, and Alternative Five is a reintroduction of gray wolves combined with an elk-shooting program.

Alternatives One, Three, and Four will not be considered in this comment, as I do not believe that any of these three plans would be more effective than Alternative Five. I have chosen Alternative Two to compare and contrast with Alternative Five because Alternative Two is the most seriously-considered plan by officials.

Yellowstone Example

The current situation in Rocky Mountain National Park is almost identical to the situation in Yellowstone National Park that led to the highly successful and beneficial reintroduction of gray wolves. The elk in Yellowstone National Park had no natural predators, so their population was allowed to grow unchecked. Their natural alertness decreased, and they had no incentive to migrate throughout the park. They would stay in one spot until they had completely stripped it of its vegetation, and then they would move to another nearby location and do the same. As a result, many places in Yellowstone became completely barren. The elk's stripping of the park's vegetation ruined the habitat of other species in the park, driving the other species away. Among the species that left Yellowstone National Park were the beavers, a species which is given special attention in the Draft Elk and Vegetation Management Plan/EIS because, just as they had in the

Yellowstone National Park situation, Rocky Mountain National Park's elk have driven away the beavers. Due to the increase in the Yellowstone National Park's elk population and its affect on the park's vegetation and habitat, Yellowstone park officials instated an elk-shooting program similar to Alternative Two as described in the Draft Elk and Vegetation Management Plan/EIS. This program had no affect whatsoever because the random shooting of elk only cut the population numbers, and did not encourage them to move from place to place. They still stayed in one area of the park until all the vegetation was gone. When wolves were reintroduced as another way of solving the elk problem, the ecosystem of Yellowstone National Park quickly recovered. Not only did the wolves remove the weak and sick animals of the herd and increase their natural alertness, but they also made the elk move from place to place while feeding. This way, the elk could only eat some of an area's vegetation before being shepherded off to another area, and the park's vegetation flourished once more. The destroyed habitats healed, and the species that had left the park, namely the beaver, returned on their own.

Alternative Two

Alternative Two proposes a twenty-year program to cull the Rocky Mountain National Park's elk population by shooting 200 to 700 elk per year for the first four years, and 25 to 150 elk for the next 16 years. This program would not be beneficial to the ecology or economy of the park and surrounding areas. Alternative Two calls for the killing of elk at random, which will not strengthen the herds overall as wolf predation would. Wolves make elk prove their strength and health before killing them, which would remove much of the sick and weak elk from the park's population. Alternative Two will harm the park's public image. The shooting of elk within the borders of Rocky Mountain National Park will trouble visitors much more than the knowledge that the elk's natural predators are keeping the population in check. If Alternative Five is used, much more attention will be given to the reintroduction of wolves than to the accompanying shooting of elk. Alternative Two would teach elk to fear humans as their sole predator, while a wolf-reintroduction program would teach them to fear wolves as their primary predator. Elk will be most wary of wolves if Alternative Five is used, whereas if Alternative Two is used, elk will learn to fear humans as their natural predators, and will make themselves scarce in the presence of humans. Therefore, Alternative Two would be harmful to tourism because tourists enjoy having elk come near them. This will not happen if humans play the solitary role of "natural" predator, because elk will flee from tourists. Alternative Two would cause trouble for the surrounding populated areas. If the park's elk are no longer safer from humans inside the park than outside it, they will move into surrounding towns and cities even more, and cause automobile accidents that are a direct safety hazard to residents. They would also get into residents' garbage and ruin their lawns, gardens, shrubbery, and trees.

Alternative Five

Alternative Five proposes a gray wolf-reintroduction program, as well as an accompanying lesser shooting program. Gray wolves are the elk's natural prey, and are the natural way to keep elk populations in check. Alternative Five is economically and environmentally the best alternative to solving the elk problem. The presence of wolves in Rocky Mountain National Park will bring more people to the park from all over the country. In addition, the reintroduction itself will draw many people, including biologists and students, who will want to witness it. Wolves bring millions of dollars in tourist money per year to areas they live in because of their popularity among the general public. For example, Yellowstone National Park tourists that would not be visiting the park if there were no wolves bring about \$35 million per year to the park, which has resulted in a \$70 million yearly economic impact to the Yellowstone region.⁽¹⁾ In North Carolina, the reintroduction of wolves brought an impact of more than one million dollars to local

economies.(2) With Yellowstone National Park in the same region as Rocky Mountain National Park, wolf-enthusiastic Yellowstone tourists (which spend roughly \$30 million a year in Yellowstone) will most likely visit Rocky Mountain National Park in the same vacation if Alternative Five is utilized. The presence of Yellowstone's larger and very famous wolf population provides incentive for tourists to visit the region, and a wolf population in Rocky Mountain National Park will encourage them to expand their economic benefits. The public image of Rocky Mountain National Park will be greatly enhanced by wolves' presence there. If Alternative Five is used, the park will be one of the few and first places in the United States where wolves roam freely, and where the ecosystem is naturally in balance once more. The goal of each of the alternatives stated in the Draft Elk and Vegetation Management Plan/EIS is simply to reduce the elk population within the Rocky Mountain National Park with the assumption that population-curb alone will benefit the vegetation in the long run. This is not an accurate assumption. Only Alternative Five offers the long-term success that the National Park Service seeks. As explained above in "Yellowstone Example," reduction of the elk population must be accompanied by constant elk migration. Both Alternative Two and Alternative Five cease human intervention after twenty years, but Alternative Five's effectiveness will continue for as long as wolves are present in the park. Even if, in the utilization of Alternative Two, park officials were to do the shooting in a way that encourages constant migration, that migration will stop at the end of the twenty-year period, and the original problem will present itself once again. As long as wolves are in the park, the elk will be in a continuous state of migration, which will keep the park's vegetation healthy in all areas, well after the twenty-year period is up.

Opposition to Wolves

Although the general public throughout the United States supports the wolf-reintroduction in general, the two groups of people that are generally opposed to wolf-reintroduction are ranchers and hunters. Ranchers generally oppose wolf reintroduction because wolves will sometimes learn to prey on livestock, and hunters generally oppose it because wolves kill the same animals that hunters do, leading to competition. A recent survey released by the National Agricultural Statistics Service shows that wolves account for less than one percent of cattle deaths in the United States, and only 2.3 percent of predator-related cattle deaths in the United States.(3) These deaths will be compensated by Defenders of Wildlife, an organization that has been lobbying for the reintroduction of wolves in Colorado for years, through their Bailey Wildlife Foundation Wolf Compensation Trust. This Trust already covers the Northern Rockies and Southwestern regions of the United States, where wolves have already been reintroduced, and its main purpose is to encourage the reintroduction of wolves by eliminating the economic burden that ranchers face in the presence of wolves. Because hunting is not allowed within the Rocky Mountain National Park, wolf rivalry with hunters will not be an issue in this case. The size of the elk population will be decreased no matter which alternative is chosen, which will result in hunters having less elk to kill regardless of wolf reintroduction.

Conclusion

Alternative Five is the best alternative listed for consideration in the Draft Elk and Vegetation Management Plan/EIS, for both economic and environmental reasons, and especially to ensure the long-term success of elk-management in Rocky Mountain National Park. The potential inconveniences wolves could cause if they are reintroduced to the Rocky Mountain National Park are less than the potential problems that Alternative Two will cause if elk are unintentionally encouraged to migrate outside of the park (see "Alternative Two"). The economic detriment that the maximum fourteen wolves could potentially cause to the ranching industry is significantly

less than the potential economic gain their presence will bring to local economies through tourism.

I hope that you will take my concerns into consideration, and strongly consider putting Alternative Five into effect to curb the elk population in Rocky Mountain National Park instead of Alternative Two.

Sincerely,

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KEC8589@RIT.EDU

Footnotes

1: Stark, Mike. "UM economist: Wolves a big moneymaker." BillingsGazette.com. 7 April 2006. Billings Gazette. 2 July 2006 < <http://www.billingsgazette.net/articles/2006/04/07/news/state/25-wolves.prt>>.

2: "The Million Dollar Wolves." Defenders of Wildlife. 2006. Defenders of Wildlife. 2 July 2006 < http://action.defenders.org/site/PageServer?pagename=dow_050306news_wolves&autologin=true&s_Affiliate=gen>.

3: Chard, Thomas, and Peggy Stringer. "2005 Montana and United States Cattle Predator Losses." National Agricultural Statistics Service. 5 May 2006. United States Department of Agriculture. 2 July 2006 < http://www.nass.usda.gov/Statistics_by_State/Montana/Publications/Press_Releases_Livestock/catprdl.htm>.

Works Consulted

United States. National Park Service. U.S. Department of the Interior. Draft Elk and Vegetation Management Plan/EIS. Colorado: Rocky Mountain National Park, April 2006 < <http://parkplanning.nps.gov/document.cfm?projectId=11012&documentID=14855>>.

"The Bailey Wildlife Foundation Wolf Compensation Trust." Defenders.org. 2006. Defenders of Wildlife. 2 July 2006 < <http://www.defenders.org/wolfcomp.html>>.

Divider page for American Indian

Back of divider



ROMO Information
Sent by: Pete Surney
05/11/2006 10:38 AM
MDT

[REDACTED]
Subject: Re: From ParkNet - Over-populated Elk Solution

Your comments have been forwarded to the appropriate email address. For more information about the DRAFT Elk and Vegetation Management Plan, including alternatives, please refer to the Rocky Mountain National Park website at <http://www.nps.gov/romo/planning/elkvegetation/index.htm>.

Information Office
Rocky Mountain National Park
(970) 586-1206

The National Park Service cares for special places saved by the American people so that all may experience our heritage.

-----rstgfp@gwtc.net wrote: -----

To: ROMO-Information@nps.gov

Date: 05/11/2006 10:23AM
Subject: From ParkNet - Over-populated Elk Solution

This message was sent from <http://www.nps.gov/romo/pphtml/contact.html>

Please respond to the address below.
This email was sent by: [REDACTED]

The Rosebud Sioux Tribe would like to receive some of the over-populated elk in the Rocky Mountain National Park. We would like to enhance the genetics in our herd located in SD. Chance Wooden Knife Director RST Game, Fish & Parks 605-747-2289

***Divider page for Public Agencies and Congressional
Representatives***

Back of divider

STATE OF COLORADO

Bill Owens, Governor
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF WILDLIFE
AN EQUAL OPPORTUNITY EMPLOYER

Bruce McCloskey, Director
8060 Broadway
Denver, Colorado 80216
Telephone: (303) 297-1192



July 4, 2006

Vaughn Baker, Superintendent
Rocky Mountain National Park
Estes Park, CO

Dear Vaughn,

The Colorado Division of Wildlife appreciates the opportunity to comment on the Draft Environmental Impact Statement for the Rocky Mountain National Park Elk and Vegetation Management Plan. We commend the National Park Service for undertaking this daunting, but necessary process, and appreciate the opportunity to have been involved as an advisory agency throughout the process. We recognize the need for our two agencies to cooperate in the management of wildlife that are found both inside and outside the boundaries of the National Park.

Of the alternatives listed in the Draft EIS, we agree that the preferred alternative, Alternative 2, offers the most efficient and predictable approach to reach the Plan's stated goals within the National Park while at the same time allowing the best environment for the Division to reach elk management objectives and minimize human-elk conflicts outside the National Park. As you are aware, the Division has begun our Big Game Herd Management Planning Process in Game Management Unit 20 which contains most of the winter range for the elk herd addressed in the Draft EIS. Through this process, the population objective for the unit 20 elk herd will be reevaluated based on habitat carrying capacity and input from interested publics and other agencies. Certainly, the final outcome of the EIS process will affect the Division's ability to meet goals established through our Big Game Herd Management Planning Process.

Again, thank you for the opportunity to comment on this very important process. Please call if you have any questions.

Sincerely,

Scott Hoover
Regional Manager
Colorado Division of Wildlife

DEPARTMENT OF NATURAL RESOURCES, Russell George, Executive Director
WILDLIFE COMMISSION, Jeffrey Crawford, Chair • Tom Burke, Vice Chair • Claire O'Neal, Secretary
Members, Robert Bray • Brad Coors • Rick Enstrom • Richard Ray • James McAnally • Ken Torres
Ex Officio Members, Russell George and Don Arment

Jul 4 2006 11:46pm P002/002 Fax:303-291-7114 DOW N.E.R.S.C.



COLORADO FARM BUREAU

9177 East Mineral Circle • Centennial, Colorado 80112 • (303) 749-7500 • FAX (303) 749-7703
Mailing Address: P.O. Box 5647, Denver, Colorado 80217
www.colofb.com

June 26, 2006

Vaughn Baker, Superintendent
Rocky Mountain National Park
Attn: Elk and Vegetation Management Plan
Estes Park, Colorado 80517

RE: Elk and Vegetation Management Plan

Dear Mr. Baker:

The Colorado Farm Bureau is pleased to offer these comments regarding the Rocky Mountain National Park Elk and Vegetation Management Plan.

The Colorado Farm Bureau has been aware of the escalating elk population in Rocky Mountain National Park (RMNP) and understands the problems associated with the herd size. The over-population of elk within RMNP has been a problem for several years, causing negative impacts to the range.

Colorado Farm Bureau believes the elk management plan should reflect the following:

1. The need for significant population control so that herd numbers will return to manageable levels. Colorado Farm Bureau does not believe culling a few elk at a time will accomplish this goal.
2. Colorado Farm Bureau strongly believes public hunting should be pursued as the primary option. Establishing a wildlife preserve in or on the outskirts of RMNP would allow hunters to control the elk population through controlled hunting. Unlike proposed alternatives to use "sharpshooters," hunters would willingly pay for the opportunity to hunt elk in RMNP. An added benefit to this concept is that the use of public hunters will decrease the loss and waste of elk meat and hides.

In recent years, there has been increased pressure on both public and private lands in Colorado in regards to big-game hunting.

Sterilization and other non-lethal control methods will not accomplish adequate population control. Lethal control of a significant number of animals by public hunters will better achieve this goal.

3. Reintroducing wolves (Alternative 5) should be taken out of consideration for a number of reasons. First, it does not seem to have the approval of the U.S. Fish &

Wildlife Service, which has responsibility over endangered species. The State of Colorado also is opposed to the reintroduction of wolves anywhere in the state. Further, any introduction would have to be done in accordance with section 10j of the Endangered Species Act, which is a detailed, lengthy process and must include stakeholder input. This would make the desired outcome of a smaller elk population several years from coming to fruition; therefore it is not a viable option.

Again, Colorado Farm Bureau is pleased to offer these comments regarding the Rocky Mountain National Park Elk and Vegetation Management Plan and emphasizes that the ultimate goal of a manageable elk population in Rocky Mountain National Park is best reached through public hunting. We encourage you to consider the establishment of a wildlife preserve where public hunting would be allowed as the primary option to reach this goal.

Sincerely,

A handwritten signature in black ink, appearing to read "Troy Bredekamp". The signature is fluid and cursive, with the first name "Troy" being more prominent and the last name "Bredekamp" following in a similar style.

Troy Bredekamp
Executive Vice President
Colorado Farm Bureau

PETER A. DeFAZIO
4TH DISTRICT, OREGON

TRANSPORTATION AND
INFRASTRUCTURE
SUBCOMMITTEES:
HIGHWAYS, TRANSIT AND
PIPELINES, RANKING
AVIATION
RAILROADS

HOMELAND SECURITY
SUBCOMMITTEE:
ECONOMIC SECURITY, INFRASTRUCTURE
PROTECTION AND CYBERSECURITY

RESOURCES
SUBCOMMITTEE:
FORESTS AND FOREST HEALTH

Vaughn Baker, Superintendent
Rocky Mountain National Park
Attn: Elk and Vegetation Management Plan
Estes Park, CO 80517

Dear Mr. Baker:

My constituent, Gary Stoneking, has concerns about the draft Elk and Vegetation Management Plan for Rocky Mountain National Park. He is convinced the elk herds could be culled by the public and suggests licensing fees for a controlled hunt would generate needed funding for park projects.

Mr. Stoneking is available at 575 South Wasson Street, Coos Bay, Oregon 97420 if you would like to contact him directly.

Sincerely,



PETER DeFAZIO
Member of Congress

PAD:pjw

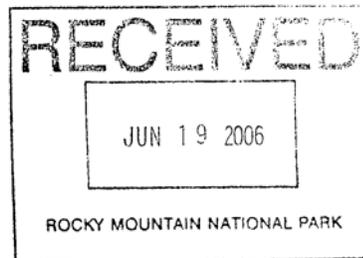


Congress of the United States
House of Representatives

June 8, 2006

PLEASE RESPOND TO:

- 2134 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-3704
(202) 225-6416
- 151 WEST 7TH AVENUE, #400
EUGENE, OR 97401-2649
(541) 465-6732
1-800-944-9603
- 125 CENTRAL AVENUE, #350
COOS BAY, OR 97420
(541) 269-2609
- 612 SE JACKSON STREET, #9
ROSEBURG, OR 97470
(541) 440-3523
- defazio.house.gov



MARK UDALL
2ND DISTRICT, COLORADO

240 CANNON HOB
WASHINGTON, D.C. 20515
(202) 225-2161
(202) 226-7840 (FAX)

8601 TURNPIKE DR., #206
WESTMINSTER, CO 80031
(303) 650-7820
(303) 650-7827 (FAX)

291 MAIN ST.
P.O. BOX 325
MINTURN, CO 81645
(970) 827-4154
(970) 827-4138 (FAX)



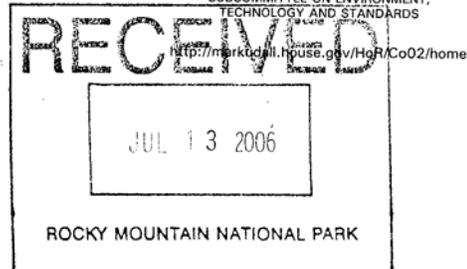
Congress of the United States
House of Representatives
Washington, DC 20515-0602

COMMITTEE ON ARMED SERVICES
SUBCOMMITTEE ON READINESS
SUBCOMMITTEE ON
MILITARY PERSONNEL

COMMITTEE ON RESOURCES
SUBCOMMITTEE ON WATER
AND POWER
SUBCOMMITTEE ON FORESTS
AND FOREST HEALTH

COMMITTEE ON SCIENCE
RANKING MEMBER
SUBCOMMITTEE ON SPACE
AND AERONAUTICS
SUBCOMMITTEE ON ENVIRONMENT,
TECHNOLOGY AND STANDARDS

July 5, 2006



Vaughn Baker, Superintendent
Rocky Mountain National Park
Estes Park, Colorado 80517

Dear Superintendent Baker:

I have reviewed the alternative proposals for future management of elk within Rocky Mountain National Park discussed in the National Park Service's draft environmental impact statement (DEIS) on that subject. I request your consideration of the following comments.

I am not a biologist, but from observation and discussion with local residents and people with some expertise, I think the DEIS rightly identifies the adverse consequences for aspen trees and other vegetation that would be the result of continued high elk densities in the park. So, I support steps to reduce the park's elk numbers to approximate those that would be expected under natural conditions, and I think alternative 1, the "no action" alternative, should not be adopted.

I also think the DEIS is right to identify the absence of effective predators as a main reason for the park's high numbers of elk. Alternatives 2, 3, and 5 most directly respond to that reality while alternative 4 (using fertility control) would be a less direct response.

I lack the expertise to judge the effectiveness of fertility control, how difficult it would be to implement, or what else it might entail. So, I have no reason to question the reasoning that led to its not being identified as the preferred alternative.

Alternative 5, release of a limited number of gray wolves, would return a natural predator. However, as the DEIS notes, it would involve "numerous uncertainties," including "whether park managers could effectively control wolf behavior and movements and keep wolves in the park," which certainly is a source of valid concern for ranchers and other park neighbors. And, in any case, the DEIS indicates that it would still be necessary for there to be "lethal reduction" – meaning shooting of elk – at least for some time because the small number of wolves would not be enough to accomplish the desired reduction in the number of elk in the park. So, I readily understand why this is not identified as the preferred alternative.

Under the other two alternatives, people would do most or all the work of reducing elk numbers. The two alternatives differ mainly in the rate of lethal reduction: 100 to 200 elk annually over 20 years (alternative 3) or 200 to 700 elk annually for four years and after that 25 to 150 elk annually for 15 years (alternative 2). The DEIS says "adaptive use of wolves" could eventually become part of the alternative 2 approach.

The DEIS identifies alternative 2 as the preferred alternative and, in my opinion, does a good job of providing reasons for that choice. However, I think serious consideration should be given to some changes in implementing such a "lethal reduction" approach.

In particular, I think the NPS should consider exploring ways to increase participation by Colorado sportsmen and sportswomen in the "lethal reduction" program.

The DEIS does note that the NPS reviewed two suggestions of how this could be done: 1) a public hunt on a limited-entry (or "lottery") basis; and 2) use of "members of the public who qualified as marksmen ...under strict guidance and direction of NPS staff."

And the DEIS discusses the legal, policy-based, and efficiency reasons for not further considering the first suggestion. But it does not separately address the idea of using qualified non-NPS marksmen who would be under strict guidance and direction by NPS staff.

I think this idea should be given further consideration for several reasons, including cost.

A DEIS appendix estimates that implementing alternative 2 would cost between about \$16.55 million and \$18.26 million over the next 20 years, depending on the numbers of elk to be shot, with "labor" accounting for between \$6.55 million and \$7.37 million of those totals. Evidently, these "labor" costs would be mostly for compensating people doing the shooting (between 3 and 10 FTEs) with a smaller amount for administration (1.5 FTEs).

I urge the NPS to explore the possibility that those costs could be substantially reduced by offering qualified Colorado hunters an opportunity to take part in the program under the strict guidance and direction of NPS staff, either without compensation or for less compensation than the amounts on which the DEIS estimates are based. This could be done on a trial basis during the first four years of the program, when the estimated labor costs would be the greatest, with the NPS then deciding whether to continue or terminate it based on results during the trial.

And if there are other ways to involve sportsmen and sportswomen, those should be considered. I have not discussed this with officials of the Colorado Division of Wildlife, but I am confident that they will be interested assisting the NPS in implementing such a plan.. I also think many Colorado hunters are interested in assisting the NPS to achieve the objectives of the proposed Elk and Vegetation Management Plan.

Thank you for your consideration of these comments and suggestions.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark Udall". The signature is fluid and cursive, with a large initial "M" and "U".

Mark Udall

Rocky Mountain National Park

National Park Service
U.S. Department of the Interior



Public Comment Form

Draft Elk and Vegetation Management Plan and Environmental Impact Statement

DRAFT PLAN / EIS

The Draft Plan / EIS identifies and evaluates a range of alternatives for managing elk and vegetation within Rocky Mountain National Park and provides an assessment of environmental effects. The goal of the comment period is to obtain your thoughts and input on whether the Draft Plan / EIS adequately addresses environmental issues and concerns and if the overall analysis of impacts is accurate and thorough. Comments may be submitted in writing to the address on this mailer, on the internet at <http://parkplanning.nps.gov/romo>, faxed to (970) 586-1397, emailed to romo_superintendent@nps.gov, or hand delivered to the park headquarters.

Comments on the Draft Plan / EIS must be received by July, 4 2006.

The Larimer County Farm Bureau met in May, 2006 to discuss the Draft Environmental Impact Statement. We had recommended public hunting as our preference and submitted a letter to RMNP with our recommendations.

However, the County Board agreed on Alternative 2, the preferred alternative selected, as appropriate and to be supported by the Larimer County Farm Bureau.

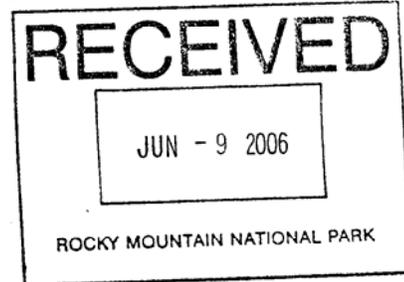
Alternatives 4 and 5 are the least preferred by the Farm Bureau Board of Directors as they conflict with our Farm Bureau policy.

We appreciate the opportunity to participate in the process.

Thomas G. Bender
 THOMAS G. BENDER
 [Redacted]
 LARIMER COUNTY FARM BUREAU
 STATE & LOCAL LEGISLATIVE AFFAIRS
 CHAIRMAN

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY****REGION 8****999 18TH STREET- SUITE 200****DENVER, CO 80202-2466****Phone 800-227-8917****<http://www.epa.gov/region08>**

June 7, 2006



Ref: EPR-N

Mr. Vaughn L. Baker, Superintendent
U.S. Department of the Interior
Rocky Mountain National Park
Estes Park, Colorado 80517

RE: Draft EIS for the Elk and Vegetation
Management Plan, Rocky Mountain
National Park (CEQ #2006016)

Dear Mr. Baker:

In accordance with our responsibilities under the National Environmental Policy Act (NEPA), 42 U.S. C Section 4321, et. seq., and Section 309 of the Clean Air Act, the Region 8 Office of the Environmental Protection Agency (EPA) has reviewed the referenced Draft Environmental Impact Statement (DEIS) for the Elk and Vegetation Management Plan, Rocky Mountain National Park.

The purpose and need of the DEIS is to guide management actions in Rocky Mountain National Park to achieve specified desired conditions by reducing the impacts of elk on vegetation and by restoring, to the extent possible, the natural range of variability in the elk population and affected plant communities. Five alternatives were developed and analyzed for potential implementation in the EIS, including a no action alternative.

It is EPA's responsibility to provide an independent review and evaluation of the potential environmental impacts of the project. The DEIS has been rated based on the lead agency's preferred alternative, Alternative 2 which proposes removal of the elk by lethal means to reach a population target range at the lower end of the natural variation. Alternative 2 also incorporates redistribution techniques and limited aspen fencing to meet vegetation objectives. EPA is rating this DEIS as Lack of Objections (LO). Our review has not identified any potential environmental impacts requiring substantive changes to the preferred alternative. A full description of EPA's EIS rating system is enclosed.

EPA commends the National Park Service for its thorough review and analysis of the issues, affected environment, and proposed alternatives. The vegetation restoration resulting from the preferred alternative will improve stream bank stability, water quality and water temperature. Subsequent beaver re-colonization will stabilize summer stream flows, increase habitat diversity, and support wetlands. For these reasons, EPA supports the purpose and need for this project and alternatives that maximize these ecological benefits.

EPA appreciates and recognizes the tremendous efforts by the National Park Service to develop this EIS. If you have any questions regarding the NEPA process or this rating, please contact Joyel Dhieux at 303-312-6647 or me at 303-312-6004.

Sincerely,



Larry Svoboda
Director, NEPA Program
Ecosystems Protection and Remediation

Enclosure





United States Department of the Interior

FISH AND WILDLIFE SERVICE
 Ecological Services
 Colorado Field Office
 P.O. Box 25486, DFC (65412)
 Denver, Colorado 80225-0486

IN REPLY REFER TO:
 ES/CO: NPS/RMNP
 Mail Stop 65412

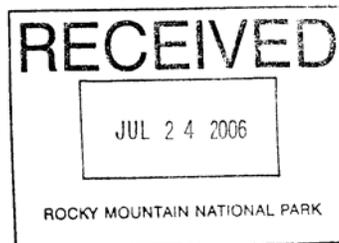
JUL 2 1 2006

Mr. Vaughn Baker
 Superintendent
 Rocky Mountain National Park
 Estes Park, Colorado 80517

Dear Mr. Baker:

This responds to your letter and biological assessment dated May 12, 2006, regarding the proposed **Draft Elk and Vegetation Management Plan in Rocky Mountain National Park, Colorado**. You requested concurrence with your determination that the proposed project "may affect, but is not likely to adversely affect" the greenback cutthroat trout (*Oncorhynchus clarki stomias*), bald eagle (*Haliaeetus leucocephalus*), Canada lynx (*Lynx canadensis*), and the gray wolf (*Canis lupus*). You also requested concurrence with your determination that the proposed project will have no effect on the bonytail chub (*Gila elegans*), Colorado pikeminnow (*Ptychocheilus lucius*), humpback chub (*Gila cypha*), pallid sturgeon (*Scaphirhynchus albus*), razorback sucker (*Xyrauchen texanus*), least tern (*Sterna antillarum*), Mexican spotted owl (*Strix occidentalis lucida*), piping plover (*Charadrius melodus*), whooping crane (*Grus americana*), yellow-billed cuckoo (*Coccyzus americanus*), Preble's meadow jumping mouse (*Zapus hudsonius preblei*), Colorado butterfly plant (*Gaura neomexicana* var. *coloradensis*), and the Ute ladies' tresses orchid (*Spiranthes diluvialis*). The United States Fish and Wildlife Service (Service) is concerned about the protection of threatened and endangered species, as well as species that are candidates or proposed for official listing as threatened or endangered (Federal Register, Vol. 69, No. 62, March 31, 2004). These comments have been prepared under the provisions of the Endangered Species Act of 1973 (ESA), as amended (16 U.S.C. 1531 et. seq.).

Based on the information provided in the biological assessment, the Service concurs that the proposed project may affect but is not likely to adversely affect the greenback cutthroat trout, bald eagle, Canada lynx, and the gray wolf. The Service concurs that the proposed project will have no effect on the bonytail chub, Colorado pikeminnow, humpback chub, pallid sturgeon, razorback sucker, least tern, Mexican spotted owl, piping plover, whooping crane, yellow-billed cuckoo, Preble's meadow jumping mouse, Colorado butterfly plant, and the Ute ladies' tresses orchid.



Page 2

The Service understands that the biological assessment does not evaluate the effects of releasing wolves into the park and that if wolves are released inside the park as an adaptive management action in the future, additional section 7 consultation will occur with the Service for that action.

If any additional species that are Federally-listed, proposed for Federal listing, or candidate for Federal listing are found in the project area, if critical habitat is designated in the project area, or if project plans change, this office should be contacted to determine if further consultation will be required. If you require additional information, please contact Leslie Ellwood of this office at (303) 236-4747.

Sincerely,



Susan C. Linner
Colorado Field Supervisor

Ref: Projects\NPS\RMNP\Eik\MngtPlan_FW\Concur