

**FINDING OF NO SIGNIFICANT IMPACT
FOR REVISION OF SPECIAL REGULATION
FOR THE REINTRODUCTION OF GRAY WOLVES
INTO THE CENTRAL IDAHO AND YELLOWSTONE AREAS**

The U.S. Fish and Wildlife Service is proposing to revise the 2005 special regulation governing management of gray wolves (*Canis lupus*) introduced as nonessential experimental populations (NEP) in the Central Idaho and Greater Yellowstone areas of the Northern Rocky Mountains (NRM).

We prepared an environmental assessment (EA) to evaluate the following alternatives:

Alternative A – This no-action alternative would not entail any revisions to the 2005 special regulation for management of the wolf NEPs.

Alternative B – This preferred alternative entails two primary revisions of the 2005 special regulation:

- 1) Revising the definition of “unacceptable impact” to “impact to a wild ungulate population or herd where a State or Tribe with an approved wolf management plan has determined that wolves are one of the major causes of the population or herd not meeting State or Tribal population or herd management goals.” This revision would eliminate the unattainable standard in the 2005 definition inadvertently established by wording that required wolves to be the primary cause of the inability for ungulate populations or herds to meet State or Tribal management objectives. Wolves are never the primary cause of such declines. However, wolves can be significant contributors toward such declines. The revision replaces the “primarily caused by wolves” standard with wolves being “one of the major causes.” The revised definition would eliminate the unattainable standard and allow States and Tribes with approved wolf management plans to lethally remove wolves having major impacts to wild ungulate populations or herds.
- 2) Adding a provision to allow legally present persons to shoot wolves that are in the act of attacking their legally present “stock animals” (horses, mules, donkeys, llamas, and goats used to carry people or their possessions) or dogs on private and public land.

These revisions would be in effect only in the NEP areas in States with Service-approved post-delisting wolf management plans, excluding lands administered by the National Park Service.

Alternative C – This alternative would entail the revision of “unacceptable impact” as described in Alternative B, but would not include the provision to allow people to protect their stock animals or dogs from wolves.

Alternative D – This alternative would include the provision to allow people to protect their stock animals or dogs from wolves, but not the revision of the definition of “unacceptable impact.”

Alternative B is the preferred and selected alternative because it best addresses potential conflicts resulting from a recovered wolf population in the NRM. A full description of these alternatives is found in the EA.

In the EA, we analyzed each alternative's potential effects to environmental components, such as wolf populations, ungulate populations, ecological functions, and socioeconomic factors. Although the preferred alternative would likely result in an increase in human-caused mortality to wolves, no significant impacts to the NRM wolf population would occur primarily because: 1) wolf populations are generally very resilient to human-caused mortality as long as it is regulated and prey is abundant; 2) the NRM wolf population is fully recovered; is characterized by robust size, high productivity, close neighboring packs, and many dispersers; and has abundant prey available; 3) the revised rule's safeguards and requirements would prevent abuse and ensure that wolf removal would be at appropriate and low levels; and 4) the cases where wolf removal would be needed for addressing both ungulate impacts and protection of stock animals and dogs are expected to be relatively few and isolated.

Most ungulate populations and herds would not be affected by the revisions because most do not have wolves as a major cause of declines or inability to meet State or Tribal management objectives. However, the few populations or herds where wolves are one of the major causes are expected to benefit from regulated wolf removal as long as other major causes are addressed.

The anticipated levels of wolf removal under the selected alternative would be too low to result in disruption of ecosystem functions or meaningful impacts on other species that benefit from wolf presence.

In those cases where control of wolves impacting ungulates allow State game and fish agencies to meet their ungulate population objectives, hunters and associated businesses may benefit from increased hunting opportunities, which may also provide additional revenue from hunting license fees to the States for wildlife management and habitat restoration, protection and enhancement. Protection of stock animals and dogs from wolf predation would prevent costs to individuals for replacement and training of such animals. Businesses benefiting from tourism associated with wolf-watching would not be affected because the anticipated levels of wolf removal would be too low to affect wolf-watching opportunities, and the revised rule would not be in effect in Yellowstone National Park where almost all wolf-watching occurs.

A summary of public comments and the Service's responses are in Appendix I of this document, and the final EA is in Appendix II.

Based on my review and evaluation of the enclosed EA and supporting document, I have determined that the revisions to the 2005 NEP special rule is not a major Federal Action which would significantly affect the quality of the human environment within the meaning of section 102(2)(c) of the NEPA of 1969. Accordingly, preparation of an environmental impact statement on the proposed action is not required. Therefore, an environmental impact statement will not be prepared.

A handwritten signature in cursive script, appearing to read "James B. ...", is written over a horizontal line. Below the line, the text "U.S. Fish and Wildlife Service" and "Regional Director" is printed in a bold, sans-serif font.
U.S. Fish and Wildlife Service
Regional Director

1-18-08
Date

APPENDIX I

Public Comments and Responses on the Proposal to Revise the Special Regulations for Nonessential Experimental Populations (NEP) of the Northern Rocky Mountain Gray Wolf and Environmental Assessment

This appendix summarizes and responds to the comments received on the proposal to revise the special regulations for nonessential experimental populations of the NRM gray wolf and draft EA. The 30-day public comment period for the EA and the reopened comment period on the proposed revised rule occurred from September 11, 2007, through October 11, 2007. A previous 30-day public comment period on just the proposed rule occurred from July 6, 2007, through August 6, 2007. We also held public hearings on the proposed revised special rule in Cody, Wyoming, on July 17, 2007; in Helena, Montana, on July 18, 2007; and in Boise, Idaho, on July 19, 2007.

Number and Type of Comments Received

We received about 179 emails and letters directed to addresses we set up specifically for comments on the draft EA. We received over 263,000 comments sent to the address we set up specifically for the proposed revised rule. Thousands of those emails also included a position on which alternative in the EA we should select. Almost all of these did not offer any new information or substantive comments on the EA beyond the stated position.

A team from the Service's Region 6 office and field offices reviewed all comments submitted during the comment periods. Substantive comments and new information received from the public during the comment period have either been addressed in the FONSI or incorporated directly into the EA and/or draft final rule as appropriate. Substantive comments are defined as those that do one or more of the following:

- Question, with reasonable basis, the accuracy of the information in the EA;
- Question, with reasonable basis, the adequacy of the environmental analysis;
- Present reasonable alternatives other than those presented in the EA;
- Provide additional information or data relevant to analyses in the EA;
- Cause revisions to the proposal based on issues raised regarding facts or policy.

Comments simply in favor of or against the preferred alternative or other alternatives, or those that only agree or disagree with policies without supporting information are not considered substantive. Some comments went beyond the scope of the rulemaking, or beyond the authority of the Service or the Act. Since these issues do not relate to the action we proposed, they are not addressed here. Examples of these kinds of comments include support or opposition for future delisting, assertions that wolf reintroduction was illegal and/or usurped States' rights, and that

the wolves that currently occur in Montana, Idaho, and Wyoming are nonnative. Many of these types of comments were discussed in the reclassification rule (68 FR 15804, April 1, 2003). We also received comments expressing support for, and opposition to the proposal (or parts of it) and wolf recovery without further explanation.

We summarize substantive comments, group related ones, and present our responses below.

Comment 1 — *Conclusions regarding occupied wolf habitat from the Oakleaf et al. (2006) study were erroneous. Provide citations additional to the personal communication (Smith 2005) regarding a 26 percent mortality rate in the NRM wolf population.*

Response 1 — The reference year for the Oakleaf et al. (2006) wolf pack home range analysis was 2000. The study indicated that at that time relatively large tracts of suitable wolf habitat remain unoccupied in the NRM (Oakleaf et al. 2006). Since then, the wolf population continued to increase, as the study predicted, to 1,545 wolves in summer 2007 (Service 2007), and most habitat predicted by Oakleaf et al. (2006, Figure 2) as suitable is now occupied (Service et al. 2007, Figure 1). We have corrected the citations and text in the EA and preamble of the revised rule to reflect this information.

The data on wolf survival and mortality in the NRM has not been published yet, but Smith (2007) is currently preparing it for publication. We have determined that the data, although not yet published, constitutes the best scientific data available on wolf survival and mortality in the NRM. This information was gathered and compiled by State, Tribal, and Federal members of the Interagency Wolf Recovery Team and entails data from over 900 radio-collared wolves in the NRM population since 1994.

Comment 2 — *A few commenters expressed confusion over the difference between the 1994 and 2005 rules and the revised rule because we did not include the entire 50 CFR 17.84(n) regulations in the Federal Register notice for the proposed rule. Some thought we would now have four different 10(j) rules in place.*

Response 2 — In 1994 we promulgated special regulations at 50 CFR 17.84(i) for the reintroduction of two NEPs of the wolf in the NRM. In 2005, we modified the NEP special rule, 50 CFR 17.84(n), and we are doing so again in this rule. This approach does not result in multiple sets of these regulations. The regulations in 50 CFR 17.84(i), which apply to States and Tribes without wolf management plans, will remain the same, and the revised regulations in 50 CFR 17.84(n), which apply to States and Tribes with wolf management plans, will supersede 50 CFR 17.84(n). We included additional explanation in the EA and preamble of the revised rule to ensure clarity of the changes. In addition, we included the 2005 regulations and the revised regulations in the appendices of the EA.

Comment 3 — *The claim that the literature indicates that wolf populations could sustain an annual human-caused mortality of 30 percent or more is not accurate. The absence of an upper bound on mortality rate could be misleading. Such a high rate of mortality is not recommended, but the rule's safeguards would preclude this concern.*

Response 3 — We corrected the preamble of the revised rule and EA to reflect that the literature indicates that some wolf populations could remain stable at mortality rates of around 30 to 50 percent.

Comment 4 — *The proposed revisions are unnecessary because the 2005 special regulation already allows for control of wolves because of ungulate impacts. Biology and current ungulate herd and population numbers do not justify a need for increasing flexibility for wolf control. Increasing flexibility to control wolves to protect stock animals is not necessary because the current special regulations already allow wolf control to protect livestock or because there is no evidence that wolves attack stock animals.*

Response 4 — As explained in the 2.0 Need for Action section in the EA and preamble of the revised rule, the 2005 NEP special regulations did not provide States and Tribes the intended flexibility to control wolves causing unacceptable impacts to ungulate herds or populations because such impacts have never been shown and are unlikely to be “primarily caused by wolf predation.” Thus, the wording in the definition of “unacceptable impact” to a wild ungulate population or herd in the 2005 special regulation set an unattainable standard for approval of wolf control and no State or Tribe was able to use the special rule for that purpose. The revision of the definition of “unacceptable impact” to include wolves as “one of the major causes” would provide the intended flexibility for wolf management by States and Tribes. See the expanded 2.0 Need for Action section in the EA for further clarification.

The terms “livestock” and “stock animals” were confusing to some commenters who thought the revision to increase wolf control flexibility for the latter is unnecessary. Although the animals listed in “livestock” overlap with some “stock animals” (e.g., horse, mule, donkey, llama), the latter refers to animals used for transport of people or their possessions. The proposed revision would not supplant the definition of livestock with that of stock animals. For a better understanding of the proposed changes from the 2005 special rule, we have included a copy of the 2005 special regulations and the revised regulations in appendices of the EA.

Comment 5 — *The revisions to the 2005 NEP special rule would allow States and Tribes to kill wolves in large numbers, reduce populations to the minimum recovery numbers, or even reduce them below recovery levels. The safety margin of 20 breeding pairs and 200 wolves per State is/is not adequate based on population viability analysis theories. The revised rule would allow wolf control in a State that has 20 breeding pairs and 200 wolves even if the other States have no wolves. Constraints in the rule on wolf control are not adequate to prevent abuse of the increased management flexibility and that wolves could be killed for reasons other than those described. The wolf population explosion has decimated elk and moose populations, thus as many wolves as possible should be killed by any means necessary.*

Response 5 — The minimum numerical and distributional recovery goal for the NRM wolf population is at least 10 breeding pairs and at least 100 wolves in each of the States of Idaho, Montana, and Wyoming (62 FR 151804). Under this modified special rule, a State cannot be authorized to control wolves for ungulate population impacts if such control would contribute to reducing wolves to below 20 breeding pairs and 200 wolves in that State or impede recovery. These numbers are twice the minimum recovery goals. Furthermore, because each of the three

States has committed in their wolf management plans to manage for at least 15 breeding pairs and at least 150 wolves, any scenario where one State would have no wolves or even where minimum recovery numbers are not met is highly unlikely. Therefore, this NEP special rule should not result in the reduction of the NRM wolf population to minimum recovery numbers.

This NEP special rule's restriction preventing wolf control below 20 breeding pairs and 200 wolves does not mean that States and Tribes will be allowed to eliminate all wolves above those levels. As explained in section 5.2.2 Impacts to Wolves of the EA, the set of criteria required for approval of wolf control and the constraints in the revised special rule would restrict control to the number and duration warranted for addressing the unacceptable ungulate impacts in the localized areas where they are occurring. The 2.0 Need for Action and 5.0 Environmental Consequences sections explain that the instances where wolves are one of the major causes of ungulates not meeting management objectives are few and localized. Thus, we anticipate that approval of wolf control proposals would result in a relatively small level of take that would not impact wolf recovery. Furthermore, as explained in section 5.2.2 Impacts to Wolves, based on records of wolf threats or attacks on dogs and stock animals, the number of incidents in which wolves might be taken under the modified special rule for these purposes is expected to be very small.

Most peer reviewers noted that the proposed revised rule's safeguards and safety margins were adequate to prevent abuse and that the proposed revisions would result in little impact to the recovered wolf population. No peer reviewer expressed concern that the revisions would result in significant impacts to the recovered NRM wolf population or that the rule's safety margin is inadequate. Two peer reviewers questioned the necessity of the additional safety margin of 20 breeding pairs and 200 wolves in consideration of the resilience of wolves to take and the current recovery level safety margin of 15 breeding pairs required by the States' Service-approved wolf management plans. The additional safety margin of 5 breeding pairs above the 15 breeding pairs the States will manage for is the same size of the safety margin over the 10 breeding pairs necessary for delisting. This buffer is intended to prevent the compromise of State wolf management objectives from unforeseen events that may cause wolf declines in combination with the additional mortality from wolf control.

The standards in this NEP special rule for approving a wolf control proposal would not allow wolves to be killed for just any reason. In their proposal, the State or Tribe must describe impacts from wolves on the ungulate herd or populations and demonstrate that wolf control is warranted for relieving unacceptable impacts to ungulate herds or populations. If effects to ungulates by wolves are not among the major causes of the inability to achieve management objectives, wolf control would not be appropriate.

Evidence does not support the belief that wolves are decimating ungulate populations in the NRM. Currently many elk populations are at or above management objectives in Idaho, Montana, and Wyoming. The need for wolf control to help restore ungulate herds or populations to State or Tribal management objectives is not pervasive, and uncontrolled removal of wolves is not necessary, appropriate, or allowable under this NEP special rule.

Comment 6 — *The term “major causes” in the proposed revised definition of “unacceptable impacts” should be further defined. One of the peer reviewers suggested some criteria to consider. Long-term studies would be necessary to show that wolves are one of the major causes of ungulate declines.*

Response 6 — Consideration of whether wolves are one of the major causes of ungulate population declines would require comparing the significance of the wolf impact with that of the other causes. Because the relationship between wolf predation and ungulate populations is very complex (Mech and Peterson 2003) and because a host of other interconnected local factors can influence how it might affect ungulate populations (Garrott et al. 2005), we could not predict all the specifics in each way wolves could be one of the major causes of ungulate impacts. If we attempted to develop a specific list of required criteria, we may unintentionally exclude other valid conditions. Furthermore, even the suggested criteria from the peer reviewer included some level of subjectivity (e.g., “high proportion,” “strong evidence,” “excessive”) that would require further definition. Therefore, we believe that the validity of a State’s claim that wolves are a major cause of ungulate impacts would be better determined on a case-by-case basis, where such a determination will depend upon the adequacy of the data and science describing the conditions, and their relative importance, contributing to ungulate herd or population declines. We would rely on professional evaluation and judgment inherent in the required peer reviews and our approval process to ensure that such determinations are appropriate.

Due to the complexity of wolf–ungulate interactions, unequivocally proving that wolves are one of the major causes of ungulate decline would be difficult. However, reasonable inferences can sometimes be made by comparing ungulate herds or populations with similar environmental conditions where wolves are absent, are present in much smaller numbers, and are present in similar or larger numbers. We would consider this information along with other data required by the NEP special rule and the soundness of the science presented in the proposal.

Comment 7 — *The rule requires the States or Tribes to merely to describe the other major causes of unacceptable ungulate impacts in their proposals. The States should be required to demonstrate that they are addressing other major causes of ungulate herd or population declines in concert with wolf control. A State may not have control over all other major causes, such as climate change.*

Response 7 — Our intent was that States or Tribes would need to demonstrate that they have attempted to address other major causes or that they are committed to do so in concert with wolf control. We have refined the wording in the revised rule so that it more clearly expresses that intent. We would not disapprove a wolf control proposal merely because the State or Tribe has no power to address certain other causes of ungulate declines. However, we would expect the proposal to describe why the State or Tribe does not have control over those issues and how they otherwise might be addressed.

Comment 8 — *Social effects to wolf packs from killing alpha males and females (i.e., breeders) were not considered, nor were effects to pack structure and productivity from killing subadults and pups. Removing entire packs would fragment populations and prevent genetic exchange.*

Response 8 — We have expanded our analysis of potential impacts to wolves under Alternative B in the EA to address these issues (see section 5.2.2 Impacts to Wolves).

Comment 9 — *Localized wolf control would create population sinks that deplete nearby source populations. Wolf control to relieve unacceptable ungulate impacts would be futile because wolves would constantly fill in vacancies created by control actions.*

Response 9 — We have expanded our analysis of potential impacts to wolves under Alternative B in the EA to address these issues (see section 5.2.2 Impacts to Wolves).

Comment 10 — *The revisions to the NEP special rule are inappropriate because: (1) wolves keep ungulate herds healthy by culling the sick and weak; (2) it allows killing of wolves for preying on their natural prey; (3) wolves are keystone predators that play an important role in the ecosystem; and (4) wolves decrease impacts of ungulate herds on riparian vegetation. More research is needed to understand the relationship between wolves and ecosystem effects. Reduced numbers from wolf control under the revised rule would preclude the opportunity to conduct such research.*

Response 10 — We have expanded our analysis of potential environmental consequences in the EA to address these issues (see corresponding sections on Impacts to Ungulate Herds and Populations, Impacts to Wolves, and Ecological Impacts for Alternatives A and B in section 5.0 Environmental Consequences). As explained in these sections, we expect that the level of wolf removal under the revised rule to be too small to have any meaningful ecological effects. Currently, most observations of cascading ecological effects from the presence of wolves are in the most pristine and wildest areas of the NRM, such as Yellowstone National Park where the revised rule is not applicable. We agree that continued research in these and potentially other areas could enhance a general understanding of such effects, but is not necessary for our conclusion in the EA. For the same reasons we do not expect wolf control under the revised rule to result in meaningful ecological effects, such actions should not preclude further opportunities to study the role of wolves in ecosystem functions.

Comment 11 — *Wolf control would prevent wolves from re-establishing in neighboring States that do not currently have wolf populations.*

Response 11— We have expanded our analysis of potential impacts to wolves under Alternative B in the EA to address this issue (see section 5.2.2 Impacts to Wolves).

Comment 12 — *An analysis was not provided for the adequacy of core refugia in the NRM wolf population to compensate for increased mortality from wolf control actions.*

Response 12 — We have expanded our analysis of potential impacts to wolves under Alternative B in the EA to address this issue (see section 5.2.2 Impacts to Wolves).

Comment 13 — *Economic, political, or other factors were not properly analyzed. Economic impacts to the tourist industry in the Yellowstone area were not addressed. Wolf predation on ungulates has negatively affected local economies by reducing clients for outfitters and guides*

and causing elk to move from feed grounds into areas where they cause damage and transmit disease to livestock. We were influenced by special interests and State politicians, or we favored environmental interests and the public outside the affected region.

Response 13 — The Act prohibits us from economic considerations when considering whether to list species as threatened or endangered. However, the Act does not prohibit us from economic considerations when developing a regulation under section 10(j). The Administrative Procedure Act prohibits Federal agencies from providing special interest groups any special access to the rulemaking process and we have complied with this prohibition. However, we address benefits and costs of the proposed rulemaking as required by the Regulatory Flexibility Act and the Small Business Regulatory Enforcement Fairness Act (SBREFA). The SBREFA requires that we address annual effects on the economy of \$100 million or more. We also expanded our analysis of these issues in the corresponding sections on Socioeconomic Impacts for Alternatives A and B in section 5.0 Environmental Consequences in the EA.

Comment 14 — *Killing predators will not make a difference in addressing ungulate declines until habitat issues are addressed.*

Response 14 — We added a requirement to the revised rule that a State proposal to control wolves demonstrate that the State has attempted to address or is committed to address other major causes of ungulate population or herd declines. Furthermore, the revised rule requires that a State proposal demonstrate that wolf control is warranted. Therefore, a proposal would not be approved in a situation where wolf control would not effectively remedy ungulate declines because unaddressed habitat issues or other factors would continue to cause unmet management objectives.

Comment 15 — *Allowing killing of wolves for natural predation would promote public intolerance of wolves. No basis exists for potential increase in public tolerance and decrease in illegal take from the increased flexibility in the revised rule. The EA does not provide evidence that illegal take of wolves would rise if people could not defend stock animals and dogs under the no-action alternative. Public education should be used to reduce anti-wolf sentiments instead of controlling wolves.*

Response 15 — Because wolves are currently at population levels much higher than recovery goals, we believe that providing increased management flexibility to address conflicts between wolves and human uses is appropriate. It is not unreasonable to assume that incentives for illegal take of wolves would be diminished by providing a legal and responsible mechanism for addressing those issues that are part of the basis for intolerance of wolves. However, because data are not available to support or disclaim this premise, we have removed this claim from the EA.

Although we indicated in the EA that some illegal take may occur under the no-action alternative (section 5.1.2 Impacts to Wolves), we did not state that such take would increase. In fact, we said that such illegal take would be rare and would not affect wolf populations.

State and Federal agencies, such as the National Park Service (NPS), and numerous conservation organizations continue to provide the public extensive information about wolf biology, ecology, and behavior.

Comment 16 — *Determining that a killed wolf had been chasing or harassing a dog or stock animal would be difficult, which would invite abuse because such activities would not result in physical signs on the subject of the attack.*

Response 16 — Making such a determination may be difficult in some cases, especially if the incident is not reported quickly because such evidence is generally temporary in nature. The requirement for reporting within 24 hours of take of the wolf would help ensure that the evidence is available upon investigation. If no actual biting, wounding, grasping, or killing has occurred, evidence must be available that a reasonable person would have believed that it was likely to occur at any moment. In such cases, we expect that the wolf carcass would be in very close proximity to the stock animal or dog or evidence that the stock animal or dog was chased, molested, or harassed by wolves. Evidence to indicate this activity may include photographs of stock animals or dogs, pickets, temporary livestock corrals or camps, the wolf carcass, and the surrounding area immediately following the taking of the wolf, and/or tracks of the stock animal or dog and wolf, hairs, damaged vegetation, or trampled ground. Since the 2005 special rule went into effect, 27 wolves were killed while in the act of attacking livestock and, based on the evidence, investigations resulted in determinations that most of these were chasing, molesting, or harassing livestock. In two additional incidents where wolves were killed, one person was charged and prosecuted for violating the law and the second is under investigation because evidence did not indicate that wolves were in the act of attacking livestock. Thus, staff from State and Federal agencies involved with livestock depredations have gained expertise in determining wolf activities from field evidence and in most cases can make a reasonable determination whether that evidence indicates that a wolf was in the act of attacking the stock animal or dog.

Comment 17 — *Based on new information from some reports of wolves killing pet, herding, and guarding dogs with humans nearby, the implication that dogs are safe from wolf attack if they are near humans is not accurate.*

Response 17 — Although wolf attacks on dogs in the presence of humans are extremely rare, we acknowledge that the possibility exists. Hence, the proposed revision to the NEP special rule to provide individuals the additional flexibility to defend their dogs against wolf attacks. We have added the information on reported attacks (USDA 2007) in the preamble of the revised rule and section 2.0 Need for Action in the EA.

Comment 18 — *Wolves would be killed when attracted to dogs used for hunting, or when protecting pups.*

Response 18 — In section 5.2.2 Impacts to Wolves in the EA, we explain that the revised rule prohibits killing of wolves with the use of intentional baiting, feeding, or deliberate attractants of wolves.

Comment 19 — *Clarify what take the NEP special rule would be allowed in National Parks and what the “legally present” requirement means.*

Response 19 — We modified the regulation language to more specifically state that the rule would not authorize any take of wolves on lands administered by the National Park Service. We also added a definition of “legally present” to the revised rule.

Comment 20 — *Goats should be added to the definition of stock animals in the revised NEP special rule, because they are used as pack animals in areas of the NRM where wolves could be a threat.*

Response 20 — We revised the definition of stock animals to add goats to the list.

Comment 21 — *Approvals of proposals to control wolves could not be scientifically based, as required by the NEP special rule, should State or Tribal management objectives for ungulate populations or herds have no biological basis. Management objectives would be deliberately inflated as an excuse to kill wolves. Management objectives may be set on carrying capacity for ungulates without consideration of the presence of wolves and thus unattainable with wolves in the system. Ungulate populations at high densities relative to available resources will have low productivity regardless of wolf predation, therefore we should provide a list of potential morphological indices of population vigor related to resource availability (such as antler size, hind leg length, and newborn calf weight) that States and Tribes could consider in the development of management objectives.*

Response 21 — We agree that determining the scientific validity of a proposal to control wolves to restore ungulate herd or population management objectives would be difficult without a clear picture of the basis of those objectives. However, because the States and Tribes are experts in management of their ungulate populations, and management objectives may need to be determined by a number of complex factors and can change depending on conditions, we have elected not to direct specific factors the States and Tribes should consider in the establishment of their management objectives. Instead, we added a requirement to the revised rule that the basis of the State or Tribal management objectives for the affected ungulate herd or population be described in the proposals for wolf control.

The revisions to the NEP special rule also require any proposal for wolf control to include a description of the data indicating that the ungulate herd or population is below management objectives and why wolf control is a warranted solution to restore the herd or population to management objective levels. If management objectives are not being met because ungulate productivity is affected by its population density, it would be incumbent upon the State or Tribe to demonstrate in the proposal that the removal of wolves would help restore the ungulate herd or population to management objectives because wolves are a major factor in the decline of the herd or population. We believe that inclusion of such information in the State’s or Tribe’s proposal, combined with the required peer review and public comment processes, will enable us to make a sound science-based determination on whether the proposed wolf control is appropriate.

Comment 22 — *The rule should include a trigger to allow wolf control when calf/cow ratios in elk populations drop below 30 calves per 100 cows.*

Response 22 — As explained in Response 21, we will rely on the States and Tribes to provide in their proposals specific information indicating that ungulate herd or population objectives cannot be met. If the situation warrants, the proposal would need to demonstrate that a specific calf/cow ratio indicates that the herd or population will be unable to meet the established management objectives and that wolf control would resolve this problem.

Comment 23 — *The definition of unacceptable impacts should include effects caused by wolves at key ungulate feeding areas or feed grounds. Wolf control should not be allowed for merely causing ungulate herds or populations to move from normal feeding areas.*

Response 23 — As explained in Response 21, we are not proposing to specify factors that the State or Tribe must consider in the establishment of their ungulate management objectives. See sections 3.2.3 Include Wolf-Ungulate Conflicts at State Feed Grounds in the Wording of the Definition of “Unacceptable Impact” and 3.2.4 Prohibit Lethal Control of Wolves Causing Unacceptable Impacts on Wild Ungulates at State Feed Grounds in the EA for a full explanation.

Comment 24 — *The Service, rather than the State or Tribe, should select peer reviewers or at a minimum have the option to reject peer reviews of proposals to control wolves for unacceptable ungulate impacts. We should drop the requirement for peer and public review altogether so that wolf control actions would not be delayed when critically needed.*

Response 24 — Independent peer review plays an important role in maximizing the quality, objectivity, utility, and integrity of the information upon which we will base our decisions. Peer review will help ensure that such information is the best scientific and commercial information available. Because the relationships between ungulate populations and wolves and other factors affecting such populations are highly complex, peer review from those with expertise in these relationships is even more critical in evaluating whether proposed wolf control is appropriate. Through their extensive level of experience with ungulate conservation, State and Tribal game and fish agencies have access to experts on predator–prey relationships in the academic and scientific communities. Delegating the responsibility to conduct peer reviews to each State and Tribe proposing to control wolves will result in a more efficient process.

We have modified the proposed revisions to the rule to clarify that the States and Tribes would be required to follow the OMB Final Information Quality Bulletin for Peer Review (70 FR 2664, January 14, 2005), which provides the same professional standards that the Service uses in soliciting peer review from independent experts who have demonstrated expertise and specialized knowledge on the relevant issues. We also added details to the proposed revisions to clarify the requirements for peer review of wolf control proposals.

Wolf predation significantly impacting ungulate populations is known to occur only in combination with a number of other causes of population declines. The relationships between these other factors, wolves, and prey populations are very complex and rarely result in a sudden precipitous decline requiring response in less than the normal time to conduct peer reviews and a public comment process.

Comment 25 — *State or Tribal programmatic proposals for wolf control should not be approved because such an approach would allow the States or Tribes to rely on claims of broad-based ungulate impacts rather than providing evidence of localized impacts to a particular herd or population. Peer reviewers would not be able to predict the significance of the role of wolf predation in future ungulate impacts given the complex nature of interrelated factors affecting ungulate populations. Programmatic proposals would limit the ability of the public to comment on issues related to local conditions and specific actions that would not be evident at the time of public review of the programmatic proposal. What enforcement exists for when a control project is not consistent with an approved programmatic proposal? Programmatic proposals should be approved because such an approach would allow States and Tribes to expeditiously address wolf impacts without delay associated with peer and public review on each individual control action.*

Response 25 — The revised NEP special rule does not discuss programmatic proposals per se. A programmatic proposal could be approved if it adequately addresses all the criteria required by the proposed revised NEP special rule to show that the science supports the need for the proposed wolf control and has undergone all the procedural requirements for submission to the Service. We would expect a programmatic proposal to clearly delineate specific conditions that would warrant wolf control for the period of time and geographic area covered by the proposal. Furthermore, before we could approve a programmatic proposal, we would have to be able to determine that control under such a proposal would not contribute to reducing the wolf population in the State below 20 breeding pairs and 200 wolves or impede recovery.

A programmatic proposal must undergo the same peer and public review processes as would a specific proposal. As stated above, a programmatic proposal would need to contain enough details to show that the required criteria for approving wolf control have been met. During review, peer reviewers and the public would have the opportunity to provide input on whether the details are sufficient or appropriate in such a programmatic proposal.

If a specific control action is not consistent with the approved programmatic plan, it would be subject to enforcement of the Act's existing regulations governing NEPs of the gray wolf.

Because all requirements for individual control actions would apply for any approval of a programmatic proposal, the overall effects for a programmatic proposal would be the same as the effects of the combination of individual control actions.

As explained in our response to Comment 24, typical times for peer review and public comment processes are not expected to affect the timeliness of control actions.

Comment 26 — *The regulations should include and describe an appeal process for the approval or disapproval of a proposal to control wolves for ungulate impacts. The regulations should require specific means for public review of proposals, such as posting proposals on the Internet and providing 60-day comment periods. What mechanisms would be used to rescind an approval if a State or Tribe continued to control wolves if the State’s population dropped below the special rule’s safety margin of 20 breeding pairs and 200 wolves?*

Response 26 — We would encourage States and Tribes to work closely with us while developing their wolf control proposals to ensure that all the required criteria in the revised regulations will be met. Based on expected coordination with the States and Tribes, we do not believe an appeal process for disapproved proposals is necessary. We believe that transparency of the peer review and public comment processes, the NEP special rule’s criteria for an approvable proposal, and our standards for the use of the best scientific and commercial information available would preclude the need for an appeal process. Furthermore, should we disapprove a proposal, we would explain the reasons for the disapproval, and the State or Tribe may revise the proposal and resubmit it for further consideration.

In the NEP special rule, we intend to allow for a transparent process for review of wolf control proposals by requiring the State or Tribe to implement peer reviews and a public comment period. The methods and processes for providing adequate and reasonable public review and input would be determined by the State or Tribe submitting a wolf control proposal.

Monitoring of wolf populations (see Response 29) would provide a feedback loop that would inform the State or Tribe if the control actions are no longer appropriate or in danger of noncompliance with the regulations. If a State or Tribe continued to take wolves after the State’s wolf population dropped below the proposed rule’s safety margin, the State or Tribe would be in violation of the law and an investigation by the Service’s Division of Law Enforcement would be required.

Comment 27 — *We should prohibit aerial gunning as part of wolf control actions. The proposed revisions to the NEP special rule would violate the Airborne Hunting Act. We should prohibit a variety of methods, including but not limited to hunting, trapping, poisoning, and killing with motorized vehicles. Hunting and trapping over aerial gunning and poisoning will gain more public acceptance of control measures. Trapping and poisoning should not be allowed on public property. Nonlethal control should be used before resorting to killing wolves.*

Response 27 — The revised NEP special rule would not authorize open public hunting nor would it allow States or Tribes to use public hunting as a method for controlling wolves causing unacceptable impacts to ungulates. A State or Tribe may choose to enlist persons as designated agents of that agency to conduct highly controlled damage hunts on private property for controlling wolves, but this method would need to be included in their proposal and subject to all the NEP special rule’s criteria and procedural requirements for our approval. As further discussed in section 5.2.2 Impacts to Wolves in the EA, we believe that, based on the experience and expertise of State agency staff, the States should be allowed the flexibility to determine the appropriate methods of control within the confines of existing laws and regulations.

We and our partners in wolf recovery continue to investigate and implement a variety of nonlethal methods of wolf management. While preventative and nonlethal control methods can be useful in some situations, they are not consistently reliable, so lethal control will remain a primary tool for managing wolves affecting ungulate populations, livestock, and domestic animals.

Comment 28 — *The EA did not consider the effects to wolves from legal and increased illegal hunting.*

Response 28 — See Response 27 regarding the use of legal hunting under the revised rule. We do not believe any aspect of the revised rule would cause increases in illegal hunting of wolves because the revisions would allow States to appropriately address ungulate-wolf conflicts and individuals to protect their stock animals and dogs.

Comment 29 — *The rule should include a requirement for monitoring to determine effectiveness of wolf control actions and a process for adaptive management. We need to discuss how monitoring by the States or Tribes would be funded. We need to provide such funding.*

Response 29 — In the revised rule's requirement for wolf control proposals to include a description of how ungulate population responses to wolf removal would be measured, we are now specifying that the proposals must describe how control actions would be adjusted for effectiveness (see section 3.1.2. Alternative B – Proposed Action in the EA). While the wolf is listed, Idaho and Montana receive Federal funding to conduct wolf population monitoring, and we provide staff to conduct monitoring in Wyoming. Wolf control for livestock depredation is reported informally on a weekly basis and officially in annual reports. The annual reports include comprehensive information on control actions, wolf population status, and analyses of effectiveness of wolf control for livestock depredation. This reporting mechanism would be used for wolf control actions for unacceptable ungulate impacts under the revised rule. We would expect the annual reports to include an evaluation of the effectiveness of wolf control and other measures in relieving unacceptable impacts to ungulate herds or populations just as is done for wolf control for livestock depredation. An adaptive management framework for wolf control for unacceptable ungulate impacts may entail slight modifications to the approved control actions. However, any necessary changes that would increase level and duration of take of wolves or impacts to wolf populations that were not considered for the approval of the control actions would require submission of a new proposal and must comply with the revised rule's criteria and procedures for approval. The Idaho Department of Fish and Game's proposal for wolf control, submitted in 2006 (Idaho Department of Fish and Game 2006), provides an example of the type of information on proposed monitoring that should be included.

Wolf populations in the NRM have been and will continue to be intensively monitored. This monitoring is conducted by the Service, NPS, Nez Perce Tribe, and the States of Idaho, Montana, and Wyoming and will help provide information on any effects to wolf populations from wolf control actions. Currently, Idaho and Montana receive Federal funding for wolf management and monitoring. Such funding is likely to continue at least until the wolf is delisted.

While the wolf is listed, the Service provides funding and staff to conduct wolf management and monitoring in Wyoming outside the national parks. The NPS covers funding for monitoring in the national parks, but wolf control under this proposed rule would not occur there.

Comment 30 — *The proposed rule is arbitrary and capricious because (1) the post-delisting wolf management plans, required for a State or Tribe to be eligible to use the NEP special rule, would be implemented only after delisting, yet we could approve wolf control before then, and (2) the Act provides no basis for allowing wolf control before delisting based on how a State or Tribe might manage wolves after delisting.*

Response 30 — The requirement for approved post-delisting management plans for a State or Tribe to be eligible to apply the revised NEP special rule is not based on the specifics of wolf management after delisting, when the NEP special rule would no longer exist. Development of a wolf management plan demonstrates that the State or Tribe has undertaken a formal process that commits them to a management strategy for sustaining wolf recovery. This commitment assures that any proposal to remove wolves would be in alignment with long-term wolf conservation and not based solely on a goal to benefit ungulate populations. In addition, adoption of the wolf management plan would demonstrate that the wildlife agency has received the necessary local political and administrative support within the State or Tribe for implementing the plan and approved wolf control.

Comment 31 — *The required reporting period after a wolf is killed should be increased from 24 to 72 hours to accommodate instances where the take occurred in remote areas.*

Response 31 — In recognition of the need for a greater reporting time in certain situations, 50 CFR 17.84(n)(6) already allows for reasonable additional time for reporting if access to a site is limited. Therefore, the requested modification is unnecessary.

Comment 32 — *The NEP special rule should specifically prohibit trapping of wolves in primary conservation areas for grizzly bears. The EA should address effects to non-target species.*

Response 32 — We have added a discussion of methods for wolf control and any effects to non-target species in section 5.2.4 Ecological Impacts in the EA.

Comment 33 — *We did not provide adequate time for public hearings or advertise the hearings and public comment periods sufficiently. The hearings were not held in major population areas such as Denver, Colorado, or Portland, Oregon.*

Response 33 — We provided a total of 60 days in two separate 30-day periods for public comment. We announced information on the comment period and hearings in the *Federal Register* notice of the proposed rule, our national Web site, and regional Web sites in the two affected regions. We also provided legal notices of the comment period and hearings for publication in 11 major and local newspapers in Idaho, Montana, and Wyoming. We sent out press releases to print and broadcast media; members of Congress; relevant State, Tribal, Federal, and local agencies; and hundreds of interested parties in Idaho, Montana, Wyoming, Utah, Colorado, North Dakota, South Dakota, Nebraska, and Kansas. We also sent information

on the opportunity for public comment to two major national environmental organizations that distributed the information to their membership, on their Web sites, and to other organizations that made similar efforts. Given that we received more than 260,000 comments from throughout the country, we believe sufficient notice and time was provided for widespread public comment. In selecting hearing locations, we believe that we achieved a balance between proximity to the most affected public in the three States where the rule would apply and the public's accessibility to the hearing locations.

Comment 34 — *The proposed revised special rule is not in compliance with section 2 of the Act nor does it conform to the purposes of section 10(j) because it does not further the conservation of the species. The proposed revisions are tantamount to delisting and in violation of Section 4 of the Act by allowing take as if the species was not listed.*

Response 34 — The regulations under the Act for establishment of experimental populations allow for the creation of special rules containing prohibitions and exceptions for those populations (50 CFR 17.82). Under section 10(j), such exceptions are intended to allow management practices to address potential negative impacts or concerns from reintroductions. The 10(j) special regulations of 1994 and 2005 for the NEPs of the gray wolf in the NRM include provisions for managing wolf populations impacting livestock and ungulate populations. Such provisions are necessary for the continued enhancement and conservation of wolf populations because they foster local tolerance of introduced wolves. The modifications to these provisions would not alter the protected status of the gray wolf in the NRM provided under section 4 of the Act.

The reintroduction of the gray wolf into Central Idaho, Southwestern Montana, and Yellowstone National Park under the 10(j) provisions clearly furthered the conservation of the species. Since 1995, when the reintroductions occurred, wolf populations expanded in size and distribution and reached the minimum recovery goals in 2000 and have exceeded those goals every year since then. As described in section 5.2.2 Impacts to Wolves in the EA, the modifications to the provisions of the 2005 special rule would not compromise the continued conservation of these populations in this remarkable recovery success story.

Comment 35 — *An environmental impact statement should be prepared because the rule would allow the killing of 600 to nearly 1,000 wolves, constituting a major Federal action significantly affecting the quality of the human environment. The EA does not analyze the effects from such take levels. The EA does not analyze the full range of scenarios of take of wolves.*

Response 35 — As a result of the analysis in the EA, we made a finding of no significant impact because we concluded, among other reasons, that the likely amount of take of wolves that the revised rule would authorize would be low and would not compromise recovery of the NRM wolf population. As explained in section 5.2.2 Impacts to Wolves, we expect that the annual percentage of wolves taken under the revised rule to be less than the 9 percent average removed for livestock depredation. We confined our analyses in the EA to those levels of take that are likely to occur under the revised special rule. Analyses of unlikely scenarios are not required. After careful analysis of a variety of potential effects, we found that no significant impact to the environment would occur from the proposed revisions under the preferred alternative.

Therefore, preparation of an EIS is not necessary.

Comment 36 — *Analyses of effects should be expanded to the geographic areas adjacent to the NEP areas where wolves in these areas and the NEP areas interact.*

Response 36 — Our analyses in the 5.0 Environmental Consequences section now consider effects beyond the NEP areas.

Comment 37 — *Release of the draft EA well after publication of the revised rule proposal indicates that the Service already made its decision.*

Response 37 — The modification to the rule was still in the proposed stage when the draft EA was released for public comment. We provided another opportunity for the public to review and comment on the proposed revisions in concert with the public comment period for the EA. We reviewed all public comments and considered all relevant information and issues raised before finalizing the EA, determining a finding of no significant impact, and determining whether to proceed with the final revised rule.

Comment 38 — *The NEPA analysis should evaluate and disclose environmental impacts to reduce or eliminate them.*

Response 38 — As discussed in our analyses in section 5.0 Environmental Consequences, the safeguards incorporated into the revised rule under the preferred alternative would minimize impacts while meeting the purpose and need of the action.

Comment 39 — *The EA is not in compliance with NEPA because it did not analyze the full range of possible scenarios of mortality including a reduction of the wolf population by 50 percent. The EA failed to consider alternatives that included: 1) distributional requirements, 2) maintaining specific population levels within each NEP area irrespective of State boundaries, and 3) precluding wolf removal below specific population levels irrespective of the cause of wolf population decline.*

Response 39 — Based on our analysis in section 5.0 Environmental Consequences, we determined that scenarios involving wolf removal under the revised rule approaching 50 percent or more are very unlikely. We believe that analyses of scenarios beyond the realm of possibility would not be meaningful or beneficial.

The revised rule does not alter the requirement for a minimum of 10 breeding pairs and 100 wolves in each State for recovery. The Service-approved post-delisting management plans, required before wolf control can be authorized under the revised rule, commit each State to manage for a minimum of 15 breeding pairs and 150 wolves. Furthermore, because the revised rule requires that wolf control actions do not impede recovery, we would evaluate how a control action would affect wolf distribution before we could approve it. An alternative that included consideration of wolf numbers within the NEPs irrespective of State boundaries is unnecessary. The NEP areas cover all of Wyoming and nearly all of Idaho. Because wolf populations in northwestern Montana outside the NEP areas and those within the NEP areas in Montana

between Yellowstone National Park and Central Idaho will continue to receive dispersers from these nearby core refugia, a scenario where all of Montana's minimum 20 breeding pairs and 200 wolves occur only outside the NEP areas is highly unlikely.

The revised rule states that wolf control could not be authorized if it would *contribute to* reducing the wolf population in the State to below 20 breeding pairs and 200 wolves (emphasis added). This wording is intended to take into consideration mortality from all other causes in combination with wolf control to ensure that this safety margin is not compromised.

Comment 40 — *The map in Figure 1 is unreadable.*

Response 40 — We have improved the map in the final EA.

Comment 41 — *The statement in the EA that nearly all ungulate herds and populations are at "record high levels" is not accurate.*

Response 41 — We have revised the EA to indicate that elk, rather than ungulate, herds in some areas are at record high levels while many others are at or above State management objectives. We also point out that some are below objectives and that some populations of other ungulate species are depressed.

APPENDIX II

**ENVIRONMENTAL ASSESSMENT FOR
PROPOSED REVISION OF SPECIAL REGULATION FOR
THE REINTRODUCTION OF GRAY WOLVES
INTO THE CENTRAL IDAHO AND YELLOWSTONE AREAS**

January 18, 2008

**U. S. Fish and Wildlife Service
Mountain Prairie Regional Office
P.O. Box 25486 DFC
Denver, CO 80225**

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1.0 PURPOSE OF THE PROPOSED ACTION

The U.S. Fish and Wildlife Service (Service) has prepared this final Environmental Assessment (EA) to analyze potential effects to physical and biological resources and social and economic conditions that may result from revisions to the special regulation governing management of gray wolves (*Canis lupus*) introduced as nonessential experimental populations (NEP) in the Central Idaho and Yellowstone areas of the Northern Rocky Mountains (NRM). This draft EA has been prepared pursuant to the requirements of the National Environmental Policy Act of 1969 (NEPA) as implemented by the Council on Environmental Quality regulations (40 CFR §1500, et seq.).

We, the Service, are one of two Federal agencies charged with the administration and implementation of the Endangered Species Act of 1973, as amended (Act). The goal of the Act is the recovery of species listed as threatened or endangered to levels where protection under the Act is no longer necessary. In 1994, as part of the effort to recover the gray wolf, we promulgated two special rules codified at 50 CFR 17.84(i) under section 10(j) of the Act for the reintroduction of two nonessential experimental populations into the NRM which subsequently occurred in 1995 and 1996. These rules also provided management flexibility to address potential negative impacts and concerns regarding wolf reintroduction. In 2005, we promulgated another NEP special rule (50 CFR 17.84(n)) to expand flexibility for managing wolves. We are now revising the 2005 special rule to modify the definition of “Unacceptable impact” to wild ungulate populations so that States and Tribes with Service-approved post-delisting wolf management plans can better address the impacts of a biologically recovered wolf population to ungulate herds. We also are proposing to expand a provision to allow any person, rather than just landowners and Federal permittees, on Tribal reservations or in States with approved post-delisting wolf management plans to take wolves that are in the act of attacking their stock animals or dogs.

2.0 NEED FOR ACTION

2.1 Addressing Unacceptable Impacts on Wild Ungulate Populations

The 1994 Environment Impact Statement (EIS) for wolf reintroduction (USFWS 1994) and the 1994 NEP special rules addressed the potential impact of wolf restoration on State and Tribal objectives for wild ungulate management. The 1994 NEP special rules allowed, under certain conditions, States and Tribes to translocate wolves causing unacceptable impacts to ungulate populations (50 CFR 17.84(i)).

On January 6, 2005, we published a final special regulation for nonessential experimental populations of the gray wolf (50 CFR 17.84(n)) for States with Service-approved post-delisting wolf management plans. In part, this rule was intended to allow greater flexibility for managing wolves causing unacceptable impacts to wild ungulate populations. The 2005 rule authorized lethal take of wolves because the Service recognized that: 1) most of the suitable wolf habitat in Montana, Idaho, and Wyoming (Oakleaf et al. 2006) was occupied by resident wolf packs (USFWS et al. 2007a, Figure 1); 2) absent high quality unoccupied suitable habitat, wolf

translocations for control purposes were likely to fail (70 FR 1294; Bradley et al. 2005); 3) extra management flexibility was required to address conflicts; and 4) the wolf population had exceeded its recovery goals (Service et al. 2004; 62 FR 151804).

The 2005 rule's definition of "Unacceptable impact" is a "State or Tribally-determined decline in a wild ungulate population or herd, *primarily caused by wolf predation*, so that the population or herd is not meeting established State or Tribal management goals..." (50 CFR 17.84(n)(3)) (emphasis added). This definition set a threshold that has not provided the intended flexibility to allow States and Tribes to resolve conflicts between wolves and ungulate populations. Current information indicates that wolf predation alone is unlikely to be the primary cause of reduction of any ungulate population in Montana, Idaho, or Wyoming (Bangs et al. 2004). No populations of wild ungulates occur in Montana, Idaho, or Wyoming where wolves are the sole predator. Wolf predation is unlikely to substantially impact ungulate population trends unless other factors contribute, such as declines in habitat quality and quantity (National Research Council 1997; Mech and Peterson 2003), other predators (Barber et al. 2005; Smith et al. 2006), high harvest by hunters (Vucetich et al. 2005; White and Garrott 2005; Evans et al. 2006; Hamlin 2006), weather (Mech and Peterson 2003), and other various factors (Pletscher et al. 1991; Garrott et al. 2005; Smith et al. 2006). However, in combination with any of these factors, wolf predation can have a significant impact to some wild ungulate herds (National Research Council 1997; Mech and Peterson 2003; Evans et al. 2006) with the potential of reducing the population below State and Tribal herd management objectives.

In the NRM, the interaction of effects on elk recruitment and population growth from an additional suite of factors, combined with wolf predation, is extremely complex and confounds the ability to generalize effects of wolves on ungulate populations (Mech and Peterson 2003; Garrott et al. 2005). These factors include, but are not limited to snow pack, winter severity, fire, drought, elevation, and forage availability. This complexity has generated considerable debate on when mortality from wolf predation on elk is additive or compensatory (Mech and Peterson 2003, Garrott et al. 2005, White and Garrott 2005, Vucevitch et al. 2005, Wyoming Governor and Wyoming Game and Fish Commission 2005). Garrott et al. (2005) concluded that effects of wolf predation on elk are highly situation-specific and posited that contrasting effects observed in two elk populations in and near Yellowstone National Park might be represented, depending on situational factors, in other wolf-ungulate systems in the NRM. In other words, as in this study, wolf predation may significantly affect some elk populations, but not others. The Idaho Department of Fish and Game (IDFG) (IDFG 2006) and Wyoming Game and Fish Department (Wyoming Governor and Wyoming Game and Fish Commission 2005; WGFD 2007b) each conducted analyses that indicate that wolf predation may be causing declines in some elk herds in their respective States.

In 2006, IDFG prepared a proposal under the 2005 NEP special rule to remove wolves in the Lolo Elk Zone of north central Idaho (IDFG 2006). In their proposal, Idaho presented data indicating that elk numbers in Game Management Units (GMU) 10, 12, and 17 in the Lolo area were below State management objectives due to declining habitat quantity and quality, severe winter weather, past over-hunting, black bear predation on elk calves, mountain lion predation on adults, and wolf predation on adult cows. To address the decline in those GMUs, IDFG initiated programs to improve habitat, reduce mountain lion and black bear populations by increasing

harvests, and reduce legal harvest of female elk. IDFG also conducted elk herd density and composition surveys, and radio-collared both calf and adult elk to measure rates of survival and causes of mortality. They found wolf predation of neonate elk calves to be low, but wolves were a major cause of death among calves 6 months and older and adult cows (IDFG 2006). Although declining habitat quality from seral succession and invasive non-native vegetation suggest that density-dependence may play a role in declining elk numbers, IDFG found that an estimated 50 percent decline in recruitment, despite a decline of 39 percent in population numbers, indicates that density-dependence is not a factor (IDFG 2006) (with density dependence, one would expect recruitment to improve as population numbers continue to decline below carrying capacity). The apparent lack of evidence of malnutrition (as indicated by body fat composition measured in elk in GMUs 10 and 12) lends support that forage availability was not limiting population numbers (IDFG 2006). Based on this information, IDFG concluded that wolf predation was a major contributor to the decline of the herds in these GMUs below management objectives.

Calf/cow ratios are commonly used to gauge annual recruitment in elk herds, which in turn determines whether a surplus of elk is available for hunting (WGFD 2007b). From 1980 through 2005, Wyoming Game and Fish Department (WGFD) documented significant declines in calf/cow ratios in 6 of 8 currently wolf-occupied herds and 5 of 13 herds without wolves in northwestern Wyoming (WGFD 2007b). From 2001 through 2005, four of the six declining wolf-occupied elk herds exhibited a greater rate of decline after wolves were established. Three herds (Clarks Fork, Gooseberry, and Cody) had exhibited declining calf/cow ratios to levels below that needed to sustain elk populations (WGFD 2007b). The calf/cow ratio in a fourth herd (Green River) declined to near the minimum level that would allow the population to sustain moderate public hunting. WGFD discounted grizzly bear (which prey more on calves than adult elk) predation and density dependence in these elk herds as factors in the sudden increased rate of decline, because the grizzly bear population had not increased enough to account for the accelerated decline, and elk pregnancy rates had remained high (WGFD 2007b). Based on this information and their observations that the elk herds with the largest number of wolves present have exhibited the lowest recruitment rates, WGFD concluded that wolves are one of the major contributors to the depression of some elk herds below management objectives (Wyoming Governor and Wyoming Game and Fish Commission 2005; WGFD 2007b).

The unattainable nature of the threshold set by the definition of “Unacceptable impact” in the 2005 NEP special rule became apparent with the submission of IDFG’s proposal to control wolves (IDFG 2006) to the Service. IDFG’s data and peer reviewers clearly concluded that wolf predation was not *primarily* the cause of the elk population’s decline, but was one of the major factors maintaining the elk herd’s status below State management objectives from predation on adult cows (IDFG 2006). After discussions with the Service, Idaho put their proposal on hold because the proposal did not meet the regulatory standard for an ‘Unacceptable impact’ set by the 2005 special rule.

Where herd or population management objectives cannot be met, hunting opportunities may be reduced, which in turn could negatively affect local businesses dependent on the hunting economy. In those instances where additive wolf predation is one of the major causes of herd or population declines, the controlled reduction of wolves would help allow herd or populations to

recover to management objective levels. To meet this need, we are proposing to redefine the term “Unacceptable impact” to achieve the wolf management flexibility originally intended in the 2005 NEP special rule. Specifically, we propose to define “Unacceptable impact” as “Impact to a wild ungulate population or herd where a State or Tribe has determined that wolves are *one of the major causes* of the population or herd not meeting established State or Tribal population or herd management goals” (emphasis added). This definition would allow, in certain circumstances, removal of wolves when they are among the major causes of the inability of ungulate populations or herds to meet established State or Tribal population or herd management goals.

2.2 Addressing Take To Protect Stock Animals and Dogs

The 1994 experimental population rules stated that any livestock producers on their private land may take (including to kill or injure) a wolf in the act of killing, wounding, or biting livestock (cattle, sheep, horses, and mules or as defined in State and Tribal wolf management plans as approved by the Service) (50 CFR 17.84(i)(3)(ii)). Similar provisions applied to producers on public land if they obtained a permit from the Service (50 CFR 17.84(i)(3)(iii)). The 1994 rules also provided the opportunity for the States and Tribes to expand the definition of livestock in their wolf management plans (50 CFR 17.84(i)(3)(i), (ii)).

The 2005 experimental population rule expanded this provision to allow landowners in States with approved post-delisting wolf management plans to also lethally take wolves that were “in the act of attacking” their livestock and any kind of dog on private land (50 CFR 17.84(n)(4)(iii)(A)), where “in the act of attacking” is defined as “the actual biting, wounding, grasping, or killing of livestock or dogs, or chasing, molesting, or harassing by wolves that would indicate to a reasonable person that such biting, wounding, grasping, or killing of livestock or dogs is likely to occur at any moment.” (50 CFR 17.84(n)(3)). The definition of “livestock” was expanded in 50 CFR 17.84(n)(3) as, “Cattle, sheep, horses, mules, goats, domestic bison, and herding and guarding animals (llamas, donkeys, and certain breeds of dogs commonly used for herding or guarding livestock). Livestock excludes dogs that are not being used for livestock guarding or herding.” The 2005 rule also provided Federal land permittees the ability to take wolves in the act of attacking livestock under the expanded definition on active public grazing allotments or special use areas (50 CFR 17.84(n)(4)(iv)).

The 1994 and 2005 NEP special rules did not cover some circumstances for potential damage of private property by wolves. The 2005 special regulation did not allow any person on public land, who was legally present but did not have a land-use permit to graze livestock or operate an outfitter or guiding business, to kill wolves in defense of these animals. For example, an individual using a llama to pack in gear while recreating on public lands for his or her enjoyment was not allowed to lethally take a wolf to protect that llama under the 2005 special regulations. The 2005 rule also did not allow outfitters and guides or the public on public land to take wolves to protect hunting dogs. For instance, landowners could lethally take wolves in the act of attacking dogs on their own private land, but could not do the same when on public lands unless the dogs were certain breeds of dogs being used for herding or guarding livestock and were being used for work on Federal lands under an active permit.

Wolf depredations on stock animals accompanied by their owners have not been documented in the past 12 years, but a few instances of stock animals being spooked by wolves have been reported. Two wolves have been taken by Federal land permittees as wolves chased and harassed horses in corrals or on pickets. These cases indicate that, although rare, a potential exists for stock animals to be attacked by wolves in the NRM. Because replacement and training of stock animals can be costly to the individual owner, such owners have a need to protect their stock animals from wolf depredation. Therefore, to reduce the risk of such loss of private property, the Service is proposing to add a new provision for lethal take of wolves in States with Service-approved post-delisting wolf management plans, except on lands administered by the National Park Service (NPS) to defend “stock animals” (defined as “a horse, mule, donkey, llama, or goat used to transport people or their possessions”) (72 FR 36948, July 6, 2007) when necessary. Since the publication of the proposed rule, we have added goats to the definition of stock animals because some public commenters informed us that they use goats as pack animals in areas of the NRM where wolves could be a threat.

Reports confirm that 101 dogs have been killed by wolves from 1987 to 2007 (USFWS et al. 2007b, Table 5A; USFWS 2007), but no wolves are known to have been killed solely to protect dogs. Wolves have killed at least 35 hunting hounds, primarily on public land. In only a few of those instances, the hounds’ owners were close enough that they might have been able to better protect their dogs by shooting at the wolves involved. However, we are aware of one credible and one unconfirmed report of wolves killing pet dogs while humans have been nearby (USDA 2007). Although we expect that take of wolves involved in conflicts with pet dogs or hunting hounds would be rare, these reports indicate that such instances could occur. The loss of dogs from wolf attack could result in emotional distress to the owner and/or costs to replace and train the lost dogs. Therefore, to address the need to allow protection of dogs from wolf attack not covered in the 2005 NEP special rule, we are proposing to expand the rule to allow any person to lethally control wolves in the act of attacking any type of dog that is legally present on private or public land in those States or Tribes with Service-approved management plans, except on lands administered by the NPS.

To address both these needs, we are proposing to modify the NEP special rule to specifically state that “Any legally present person on private or public land except land administered by the NPS may immediately take a wolf that is in the act of attacking the individual’s stock animal or dog, provided that there is no evidence of intentional baiting, feeding, or deliberate attractants of wolves. The person must be able to provide evidence of stock animals or dogs recently (less than 24 hours) wounded, harassed, molested, or killed by wolves, and we or our designated agents must be able to confirm that the stock animals or dogs were wounded, harassed, molested, or killed by wolves. To preserve evidence that the take of a wolf was conducted according to this rule, the person must not disturb the carcass and the area surrounding it. The take of any wolf without such evidence of a direct and immediate threat may be referred to the appropriate authorities for prosecution.”

2.3 Background

2.3.1 Provisions under Section 10(j) of the Act

Congress made significant changes to the Act in 1982 with the addition of section 10(j), which provides the Service with authority to reintroduce populations into unoccupied portions of a listed species' historical range when doing so would foster the conservation and recovery of the species. Under section 10(j) of the Act, the Secretary of the Interior can designate reintroduced populations established outside the species' current range, but within its historical range as experimental. Section 10(j) is designed to increase management flexibility by generally allowing us to treat experimental populations as threatened, regardless of the species' designation elsewhere in its range. This designation gives the Service more discretion in developing and implementing management programs and special regulations we consider necessary to provide for the conservation of the species. Based on the best available information, we must determine whether an experimental population is essential or nonessential to the continued existence of the species. Regulatory restrictions can be further reduced under a nonessential experimental population designation. Oftentimes local members of the public oppose reintroductions of listed species due to concern over the placement of restrictions and prohibitions on Federal and private activities. Flexibility in section 10(j) to prudently and appropriately adjust restrictions can help foster conservation of the listed species by improving local tolerance of the public to the reintroduction.

2.3.2 Previous Federal Actions on the Northern Rocky Mountain Gray Wolf

The gray wolf was common in the northern Rocky Mountain States prior to 1870. After bison, deer, elk, and other ungulates were decimated by unregulated hunting and human settlement, people tried to exterminate all remaining large predators, primarily because of conflicts with livestock. Persecution caused wolf populations to disappear from the western United States by 1930. In 1973, the Act listed wolves as endangered.

In 1974, four subspecies of gray wolf were listed as endangered including the Northern Rocky Mountain gray wolf (*Canis lupus irremotus*). In 1978, the Service relisted the gray wolf as endangered at the species level (*C. lupus*) throughout the conterminous 48 States and Mexico, except for Minnesota, where it was classified as threatened.

On November 22, 1994, we promulgated two special rules under section 10(j) of the Act to designate unoccupied portions of Idaho, Montana, and Wyoming as two NEP areas for the gray wolf. These rules are codified at 50 CFR 17.84(i). These special rules also provided management flexibility to address potential negative impacts and concerns regarding wolf reintroduction. One NEP area was the Yellowstone experimental population area which included all of Wyoming, and parts of southern Montana and eastern Idaho. The other was the central Idaho experimental population area which included most of Idaho and parts of southwestern Montana. In 1995 and 1996, we reintroduced wolves from southwestern Canada into these areas (Bangs and Fritts 1996; Fritts et al. 1997; Bangs et al. 1998).

This reintroduction and accompanying management programs greatly expanded the numbers and distribution of wolves in the NRM. At the end of 2000, the northern Rocky Mountain population first met its numerical and distributional recovery goal of a minimum of 30 breeding pairs and over 300 wolves, well distributed among Montana, Idaho, and Wyoming (68 FR 15804, April 1, 2003; USFWS et al. 2001, Table 4). This minimum recovery goal was again exceeded every year from 2001 through 2006 (USFWS et al. 2002–2006, Table 4).

On January 6, 2005, we published a revised NEP special rule increasing management flexibility for these recovered populations (50 CFR 17.84(n)). Among a number of revisions, the 2005 special rule included a mechanism for States and Tribes with Service-approved post-delisting wolf management plans to resolve conflicts when wolf predation is the primary cause of unacceptable impacts to ungulate herds or populations or herds.

For the purposes of controlling wolves attacking private property, the 2005 rule expanded the definition of “In the act of attacking” in 50 CFR 17.84(n)(3) to “The actual biting, wounding, grasping, or killing of livestock or dogs, or chasing, molesting, or harassing by wolves that would indicate to a reasonable person that such biting, wounding, grasping, or killing of livestock or dogs is likely to occur at any moment.” It also expanded the definition of livestock on public and private lands to include a larger array of livestock animals, including herding and guarding dogs (50 CFR 17.84(n)(3)). On private lands, the 2005 rule expanded the ability of landowners to take wolves in defense of any kind of dog (50 CFR 17.84(n)(4)(iii)(A)). Provisions for reporting lethal take of wolves within 24 hours and providing physical evidence of an actual or imminent attack on livestock or dogs still applied as in the 1994 rule (50 CFR 17.84(i)). For additional detailed information on previous Federal actions see the 1994 and 2005 special rules (59 FR 60252, November 22, 1994; 59 FR 60266, November 22, 1994; 70 FR 1286, January 6, 2005), the 2003 reclassification rule (68 FR 15804, April 1, 2003), the Advanced Notice of Proposed Rulemaking to designate the NRM gray wolf population as a Distinct Population Segment (DPS) and remove the Act’s protections for this population (71 FR 6634, February 8, 2006) and the 2007 proposal to designate the NRM gray wolf population as a DPS and remove the Act’s protections for this population (i.e., delist) (72 FR 6106, February 8, 2007). These documents can be viewed at: <http://www.fws.gov/mountain-prairie/species/mammals/wolf/>. The relevant Code of Federal Regulations (50 CFR 17.84 (i) and (n)) can be viewed at: <http://www.gpoaccess.gov/index.html>.

2.3.3 Geographic Scope of the Proposed Action

This EA focuses on the geographic areas of the NEPs of the gray wolf, located in Idaho, southern Montana, and Wyoming in the northern Rocky Mountain region. However, although the Act’s 10(j) special rules apply only to the central Idaho and Yellowstone NEPs and excludes lands administered by the NPS, we included adjacent areas where wolf packs and populations occur or could occur, including NPS lands, in our evaluation of alternatives.

The central Idaho NEP area encompasses the portion of Idaho that runs south of Interstate 90 and west of Interstate 15; and the area of Montana which runs south of Interstate 90, west of Interstate 15 and south of Highway 12 west of Missoula (50 CFR 17.84(i)) (Figure 1).

The Yellowstone NEP area includes the portion of Idaho east of Interstate 15; the portion of Montana east of Interstate 15 and south of the Missouri River continuing to the eastern Montana border, and all of Wyoming (50 CFR 17.84(i)) (Figure 1).

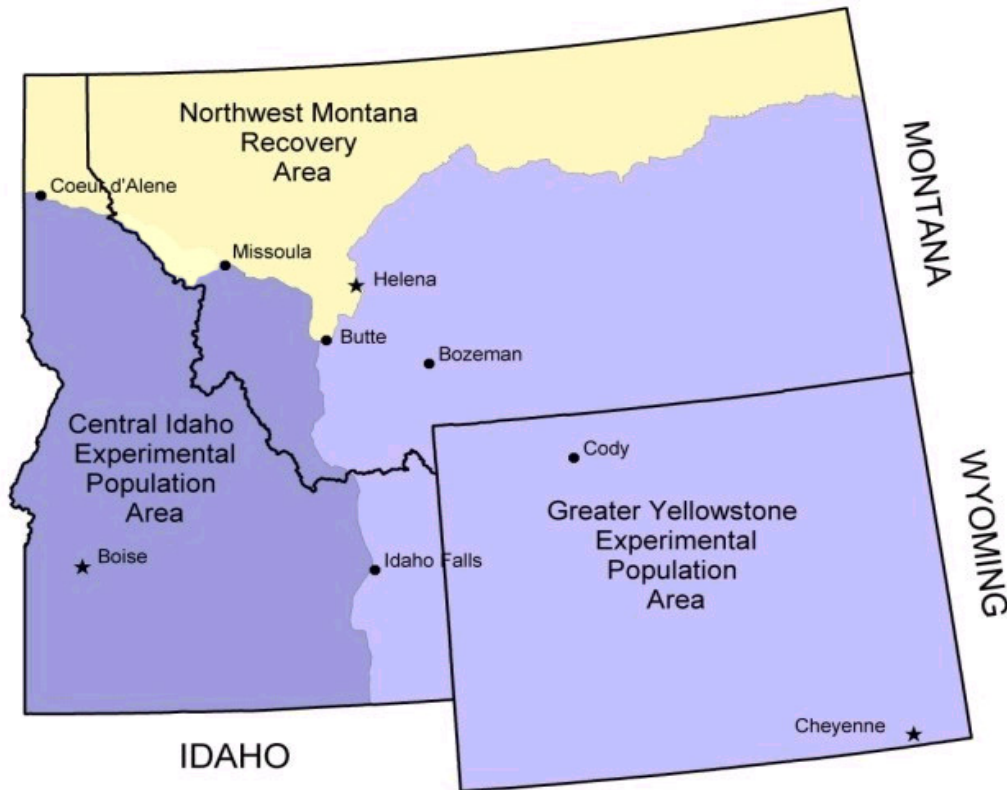


Figure 1. Gray Wolf Nonessential Experimental Population Areas in Central Idaho (South of Interstate 90 and West of Interstate 15) and the Yellowstone Area (South of the Missouri River From the Montana-North Dakota Border to Great Falls and East of Interstate 15).

2.4 Decisions to Be Made

This EA is intended to assist the Service in determining the effects to physical and biological resources and social and economic conditions resulting from the proposed modifications to the NEP special rule. The Service will decide whether or not the environmental consequences of any of the alternatives would be significant and whether or not to prepare a Finding of No Significant Impact (FONSI) or an EIS. If the determination is made that the proposed action does not constitute a major Federal action significantly affecting the quality of the human environment under the meaning of Section 102(2)(c) of NEPA, then an EIS is not required. The analyses in the EA, with the incorporation of any new relevant information and substantive issues provided during the public comment periods on the EA and proposed rule revisions and peer review of the proposed rule revisions, will be considered in determining whether to proceed with the preferred alternative as proposed or with modifications, select another alternative, or select the no-action alternative.

3.0 ALTERNATIVES, INCLUDING THE PROPOSED ACTION

3.1 Alternatives

The alternatives considered include the following: 1) Alternative A (the no-action alternative); 2) Alternative B (the proposed action and preferred alternative) is to modify the 2005 rule, establishing a more flexible definition of “Unacceptable impact” on ungulate populations resulting from wolf activity. Further modification is proposed to allow any person to take wolves that are in the act of attacking their stock animals or dogs; 3) Alternative C is to modify the definition of “Unacceptable impact” as in Alternative B, but not to include the modification regarding with the protection of stock animals and dogs.; 4) Alternative D is to allow any person to take wolves that are in the act of attacking their stock animals or dogs as in Alternative B, but not include the modification establishing a more flexible definition of “Unacceptable impact” on ungulate populations resulting from wolf activity. A section regarding alternatives considered but not analyzed also is included.

3.1.1 Alternative A (No Action) - The 2005 Special Regulation Remains Unmodified

Definition of “Unacceptable Impact” on Wild Ungulate Populations

The no-action alternative would preserve the 2005 special regulation as it currently stands regarding lethal removal of wolves causing unacceptable impacts to wild ungulate populations. A State or Tribe could lethally remove wolves it has determined to be having an unacceptable impact on wild ungulate populations (deer, elk, moose, bighorn sheep, mountain goats, antelope, or bison) primarily caused by wolf predation. In this alternative, the definition of “Unacceptable impact” in 50 CFR 17.84(n) would remain intact as follows: “State or Tribally-determined decline in a wild ungulate population or herd, primarily caused by wolf predation, so that the population or herd is not meeting established State or Tribal management goal. The State or Tribal determination must be peer-reviewed and reviewed and commented on by the public, prior to a final determination by the Service that an unacceptable impact has occurred, and that wolf removal is not likely to impede wolf recovery.”

Before applying this provision in the current regulation, the States or Tribes must prepare a science-based document that describes what data indicate that the ungulate herd is below management objectives, what data indicate the impact of wolf predation on the ungulate population, why wolf removal is a warranted solution to help restore the ungulate herd to State or Tribal management objectives, the level and duration of wolf removal being proposed, and how ungulate population response to wolf removal will be measured. The document also must identify possible remedies or conservation measures in addition to wolf removal. The State or Tribe also must provide the opportunity for peer review and public comment on its proposal before submitting it to the Service. The Service must determine whether such actions are scientifically based and would not reduce the wolf population below recovery levels before authorizing lethal wolf removal.

Furthermore, under the current 2005 special rule, States and Tribes must have a Service-approved plan for managing a recovered wolf population after delisting. The provisions under the 1994 NEP special rules for non-lethal control of wolves impacting ungulate populations (50 CFR 17.84(i)(3)(iv)) would still apply to States which do not they have approved post-delisting plans in place. These provisions apply to wolves only within the greater Yellowstone or central Idaho NEP areas, excluding lands administered by the NPS.

Protection of Stock Animals and Dogs

The 2005 special rule would not be revised to expand the existing opportunities for individuals to lethally take wolves that are in the act of attacking stock animals and dogs on private and public land. The 2005 special regulation currently allows private landowners on their own land to lethally take wolves that are in the act of attacking livestock or dogs. Any livestock producer or public land permittee legally using public land may lethally take wolves that are in the act of attacking livestock. Such take must be reported within 24 hours and physical evidence of the attack or that would lead a reasonable person to believe an attack was imminent must be present. This provision applies only to States and Tribes with a Service-approved plan for managing a recovered wolf population after delisting.

3.1.2 Alternative B (Proposed Action and Preferred Alternative) - Modify the Definition of “Unacceptable Impact” in the 2005 Special Rule and Allow Lethal Take to Defend Stock Animals and Dogs

Definition of “Unacceptable Impact” on Wild Ungulate Populations

The definition of “Unacceptable impact” to wild ungulate populations would be modified as follows: “Impact to a wild ungulate population or herd where a State or Tribe has determined that wolves are one of the major causes of the population or herd not meeting established State or Tribal population or herd management goals.” It expands the potential impacts for which wolf removal might be warranted beyond direct predation or those causing immediate population declines. Management objectives or their indicators might include population or herd numbers, calf/cow ratios, movements, use of key feeding areas, survival rates, behavior, nutrition, and other biological factors.

Because we anticipated that this change may result in more wolf control than is currently occurring, we also are proposing to establish measures to ensure that wolf control for ungulate management purposes would not undermine wolf recovery goals or the States’ ability to manage for 15 breeding pairs as obligated by their post-delisting wolf management plans (MWMAC 2003; WGFD 2007a; IDFG 2007a). Specifically, before any lethal control of wolf populations can be authorized, we would have to determine that such actions would not reduce the wolf population in the specific State below 20 breeding pairs and 200 wolves. The additional safety margin of 5 breeding pairs above the 15 breeding pairs for which the States will manage for is the same size of the safety margin over the 10 breeding pairs necessary for delisting. This is intended to prevent the compromise of State wolf management objectives from unforeseen

events causing wolf declines in combination with the additional removal from. In addition, we would have to ensure that approval of any control proposal would not impede recovery of the NRM gray wolf.

Based on concerns voiced in public comments that a State or Tribal proposal to control wolves for ungulate impacts had to merely identify possible remedies and conservation measures to address other major causes of ungulate population decline, we are modifying the proposed revisions to clarify our intent that a proposal “Demonstrates that attempts were and are being made to address other identified major causes of ungulate herd or population declines or the State or Tribe commits to implement possible remedies or conservation measures in addition to wolf removal.”

Based on concerns voiced in public comments that we would not be able to determine if a proposal is scientifically based because the proposed revisions required merely a description of data showing that ungulate populations are below management objectives, we are adding a requirement to the proposed revisions that a State or Tribal proposal to control wolves must include a description of the basis of the management objectives.

Based on concerns voiced in public comments that a proposal had to merely describe how ungulate population responses to wolf control would be measured, we are adding to the proposed revisions a requirement that a State or Tribal proposal must also describe how wolf control actions would be adjusted for effectiveness.

Based on questions raised regarding specific process requirements for peer review of a State’s or Tribe’s proposal to control wolves, we are adding to the proposed revision a requirement that the peer review process must be conducted in conformance with the Office of Management and Budget’s Final Information Quality Bulletin for Peer Review (70 FR 2664, January 14, 2005) and include in their proposal an explanation of how the bulletin’s standards were considered and satisfied. The proposal must be reviewed by at least five independent peer reviews from individuals with relevant expertise other than staff employed by a State, Tribal, or Federal agency directly or indirectly involved with predator control or ungulate management in Idaho, Montana, or Wyoming.

All other criteria and procedural requirements for Service approval of proposals for wolf removal would remain the same as in the 2005 special rule and as described in the no-action alternative (Alternative A), including the requirement for a Service-approved post-delisting management. Proposed revisions to the special regulations also can be found in Appendix B.

Protection of Stock Animals and Dogs

We are proposing to add a provision to the 10(j) special rule to allow for lethal take of wolves in States with Service-approved post-delisting wolf management plans when such take is in defense of stock animals or dogs on private or public land. Specifically, the proposed modification would read as follows: “Any legally present person on private or public land except land administered by the NPS may immediately take a wolf that is in the act of attacking the individual’s legally present stock animal or dog, provided there is no evidence of intentional

baiting, feeding, or deliberate attractants of wolves. The person must be able to provide evidence of stock animals or dogs recently (less than 24 hours) wounded, harassed, molested, or killed by wolves, and we or our designated agents must be able to confirm that the stock animals or dogs were wounded, harassed, molested, or killed by wolves. To preserve evidence that the take of a wolf was conducted according to this rule, the person must not disturb the carcass and the area surrounding it. The take of any wolf without such evidence of a direct and immediate threat may be referred to the appropriate authorities for prosecution.”

The proposed action adds a provision for allowing people to lethally take wolves to defend stock animals, defined as “a horse, mule, donkey, llama, or goat used to transport people or their possessions,” on private land, as well as public land, excluding lands administered by the NPS. Since the publication of the proposed rule, we have added goats to the definition of stock animals because some public commenters informed us that they use goats as pack animals in areas of the NRM where wolves could be a threat. This revision also would allow all breeds of dogs to be protected through lethal take of wolves on both private and public lands, excluding lands administered by the NPS.

All other provisions regarding protection of private property, including reporting conditions of all wolf take, would remain the same as in the 2005 special rule as described in the no-action alternative (Alternative A). This proposed provision would apply to only States or Tribes with Service-approved post-delisting wolf management plans and to wolves only within the Yellowstone or central Idaho NEP areas, except lands administered by the NPS.

3.1.3 Alternative C – Only Modify the Definition of “Unacceptable Impact” in the 2005 Special Rule

In this alternative, we would modify the definition of “Unacceptable impact” described in Alternative B. We would not add the provision for protecting stock animals and dogs described in Alternative B.

3.1.4 Alternative D – Only Expand the Provision for Protecting Stock Animals and Dogs in the 2005 Special Rule

In this alternative we would add the provision for protecting stock animals and dogs described in Alternative B. We would not modify the definition of “Unacceptable impact” described in Alternative B.

3.2 Alternatives Considered But Not Analyzed

We considered the following alternatives but determined that developing or analyzing these further was not appropriate or necessary because they do not fulfill the purpose and need of the action.

3.2.1 Expand Lethal Control To States Or Tribes Without Service-Approved Wolf Management Programs

Under this alternative, we would have expanded the potential use of lethal control of wolves to address unacceptable impacts to ungulate herds or populations or herds to States or Tribes that did not have a Service-approved post-delisting wolf management plan.

This alternative was not analyzed further because post-delisting wolf management plans are needed, in part, to demonstrate that the State or Tribe has undertaken a formal process that commits them to a management strategy for sustaining wolf recovery. This commitment assures that any proposal to remove wolves would be in alignment with long-term wolf conservation and not based solely on a goal to benefit ungulate populations. State or Tribal adoption of a post-delisting wolf management plan that fulfills the Act's requirements for delisting would place management responsibilities with the State or Tribal wildlife management agency, which has the in-house professional expertise and experience to blend management of a recovered wolf population with the agency's other wildlife objectives, such as optimizing public harvest. In addition, adoption of the management plan would demonstrate that the wildlife agency has received the necessary local political and administrative support within the State or Tribe for implementing the plan and approved wolf control.

3.2.2 Expand Lethal Control To States Or Tribes Without An Additional Safety Margin

This alternative would have allowed lethal take of wolves as proposed in the preferred alternative (Alternative B) without the requirement that wolf control actions do not contribute to reducing the State's wolf population to below 20 breeding pairs and 200 wolves.

The recovery goal requires that the gray wolf population never drops below 10 breeding pairs and 100 wolves each in Wyoming, Idaho, and Montana for 3 consecutive years. As part of the requirements for delisting the NRM wolf population, each State must manage their wolf populations for no less than 15 breeding pairs and 150 wolves in accordance with their Service-approved post-delisting wolf management plans (MWMAC 2003; WGFD 2007a; IDFG 2007a). These numbers would provide a safety margin to ensure that unforeseen or uncontrollable circumstances do not cause wolf populations to drop below recovery goals. This alternative was not further analyzed because we determined that an additional safety margin is necessary to ensure that unforeseen or uncontrollable circumstances in combination with increased mortality from wolf control for ungulate impacts do not compromise State or Tribal efforts to manage for 15 breeding pairs and 150 wolves.

3.2.3 Include Wolf-Ungulate Conflicts at State Feed Grounds in the Wording of the Definition of an "Unacceptable Impact"

This alternative would have modified the definition of "Unacceptable impact" to specifically state that wolf control would be allowed for wild ungulate-wolf conflicts occurring at or near a State-operated feed ground. The revision would have specified that lethal control

could be used when wolves (a) caused wild ungulates to move from the feed grounds; (b) caused a mixing of livestock and wild ungulates; or (c) caused wild ungulates to pose extraordinary hazards on State public roadways.

States and Tribes have the expertise to determine what constitutes an unacceptable impact to wild ungulates and may identify all such impacts in their respective wolf management plans and proposals for wolf control. Specifically, the 1994 nonessential population special rule allows States and Tribes to determine criteria for unacceptable impacts (including wolf-ungulate conflicts at or near feed grounds) and submit such criteria to the Service for approval for non-lethal control of wolves. Although the definition of “Unacceptable impacts” in the 2005 rule did not provide the intended management flexibility, it still would have allowed States and Tribes to include wolf-ungulate conflicts at feed grounds as part of their determination of unacceptable impacts. The proposed revision to the expanded 2005 rule (Alternative B), as well as all other alternatives analyzed, would not alter the ability for States and Tribes to address wolf-ungulate conflicts at feed grounds, as long as the proposal to remove wolves in such cases satisfies all the criteria and procedural requirements for Service approval. Therefore, this alternative is not necessary and was not considered further.

3.2.4 Prohibit Lethal Control of Wolves Causing Unacceptable Impacts on Wild Ungulates at State Feed Grounds

This alternative would have included a specific provision in the revised definition of “Unacceptable impact” that would have prevented States from lethally controlling wolves causing unacceptable impacts from to wild ungulates occurring at or near a State-operated feed ground, in which wolves (a) caused wild ungulates to move from the feed grounds; (b) caused a mixing of livestock and wild ungulates; or (c) caused wild ungulates to pose extraordinary hazards on State public roadways.

Because a State might need to address its concerns over conflicts at State feed grounds through the proposal process, this alternative is not consistent with the purpose of the proposed action to provide flexibility in management of wolves causing unacceptable impacts to ungulate herds or populations. Therefore, this alternative was not considered further.

3.3 Summary of Actions by Alternatives

Table 1. Summary Of Actions Proposed Under Each Alternative.

	Definition Of “Unacceptable Impact” To Ungulate Populations	Protection Of Stock Animals And Dogs
<u>Alternative A</u> No Action	No change from current 2005 special regulation	No change from current 2005 special regulation
<u>Alternative B</u> Proposed Action	Revise definition in 2005 special regulation	Add provision to protect stock animals and dogs on private and public lands
<u>Alternative C</u>	Same as Alternative B	Same as Alternative A
<u>Alternative D</u>	Same as Alternative A	Same as Alternative B

4.0 AFFECTED ENVIRONMENT

4.1 Greater Yellowstone Area

The affected environment occurs in the areas of the nonessential experimental populations of the gray wolf in the NRM (Figure 1). These two areas (central Idaho and the GYAs) will be described individually. National Parks within the NEP areas are included in the descriptions of the affected environment. However, none of the proposed revisions in alternatives B, C, and D would apply in the National Parks.

4.1.1 Landscape

The Yellowstone Plateau is a geologically young region sitting astride the Continental Divide. Because of repeated eruptions of its 40-by-25-mile caldera, as well as countless smaller volcanic events and extended periods of glaciations, the landscape is characterized by steep, rapidly eroding mountain ranges, most of which trend north and south.

The Gallatin and Absaroka Mountain Ranges dominate the north central portion of the GYA on the west and east sides of the Yellowstone River Valley, respectively. The Gallatin Range, a combination of volcanic and sedimentary formations, extends southward from near Bozeman, Montana, through Gallatin National Forest and into the northwestern portion of Yellowstone National Park, while the Absaroka Range, a result of numerous widespread volcanic episodes, extends southward along the eastern side of Yellowstone.

East of the Absaroka Range, and northeast of Yellowstone, the Beartooth Plateau in Custer National Forest, contains some of the west's most spectacular scenery. West of Yellowstone National Park, the Madison Range parallels the Gallatin Range, while the Centennial Range, partly in Beaverhead National Forest, forms an east-west portion of the Idaho-Montana border.

Southeast of Yellowstone National Park, the Wind River Range extends from Shoshone National Forest into the Wind River Indian Reservation. Directly south of Yellowstone, the dramatic fault-block formation of the Teton Range forms the western side of Grand Teton National Park.

4.1.2 Watersheds

The Continental Divide crosses Yellowstone National Park diagonally, from a few miles south of West Yellowstone, Montana to the southeast corner of the park near the Thorofare region. North and east of the Divide, numerous streams flow from the park areas into the Missouri River drainage. Preeminent among these is the Yellowstone River, which heads just southeast of the park, then flows north and northwest through the park, then north into Montana and northeast to the North Dakota border, where it joins the Missouri River.

The Madison River, formed by the geothermal influenced currents of the Gibbon and Firehole Rivers, flows west from the park, then north to Three Forks, Montana, where it meets the Jefferson, coming in from the west, and the Gallatin, which rises in the Gallatin Mountain Range in northwestern Yellowstone National Park. The three form the Missouri River.

Streams flowing from the south and west parts of the park eventually join the Snake River, which begins just south of the park in Bridger-Teton National Forest, flows into the park, and trends generally south through Grand Teton National Park. The Snake River eventually flows west and north to join the Columbia.

4.1.3 Vegetation

Because of its great variations in elevation, soils, and climate, the region in and around the Yellowstone area is something of a botanical crossroads, with at least seven “distinct floras” present (Despain 1990; Glick et al. 1991), ranging from desert to alpine. About 1,700 species of plants have been identified in the region, but most of the landscape is dominated by only a few species.

Roughly 60 percent of the Federal lands in the GYA are covered by forest, and the majority of that area, especially in the elevations between 7,500 feet (ft) (2,300 meters (m) and 9,000 ft (2,700 m), is dominated by lodgepole pine. Most lower elevation forests are dominated by Douglas fir, juniper, or aspen. Whitebark pine, Englemann spruce, and sub-alpine fir are the most common species at about 9,000 ft (2,700 m), and the upper timberline occurs around 9,500 ft (2,900 m). Below lower timberline between 6,000 ft (1,800m) and 7,000 ft (2,100 m), depending upon conditions, grasslands and shrub steppes once were the native vegetation communities in river valleys, floodplains, and terraces. Cultivation has changed many of the plants species’ distributions. A much smaller set of vegetation communities occur in riparian areas bordering both moving and still waters. These communities are of extreme importance in the ecological setting because they provide high productivity, high biomass, diversity of life forms, and essential cover and erosion protection. Because of its unusual geological character, Yellowstone supports some extremely rare plant communities, perhaps most notably those in and near the park’s thermal areas.

4.1.4 Wildlife

The GYA hosts the largest aggregation of ungulates and other large mammals in the lower 48 States, including more than 120,000 elk (Toman et al. 1997), 87,000 mule deer, 7,000 bighorn sheep, 6,000 moose, 3,000 bison, and smaller numbers of mountain goats and white-tailed deer (GYCC 1987). Currently most wild elk herds in those portions of Montana, Idaho, and Wyoming within the GYA are either at record high levels or at or above State management goals (MWMAC 2003; IDFG 2007b), while a few are not (IDFG 2007b; WGFD 2007c). See section [2.1 Addressing Unacceptable Impacts on Wild Ungulate Populations](#) for details on the status of elk populations in Idaho and Wyoming. Many herds or populations of other ungulates, such as mule deer, big horn sheep, and moose, are below or at management objectives. Disease, poor habitat quality, and population density-dependence factors appear to be the primary causes of declines in some of these populations.

Large predators include more than 3,000 black bears, at least 500 grizzly bears (Interagency Grizzly Bear Study Team 2006), and a smaller number of mountain lions (GYCC 1987). Coyotes are abundant, and fox are common in some areas. Wolverines, bobcats, and lynx are uncommon.

The following information applies throughout the entire range of the NRM wolf population. By middle of 2007, the NRM wolf population was estimated to contain 1,545 wolves in 105 breeding pairs (over 3 times the minimum numeric recovery goal for breeding pairs and more than 5 times the minimum population goal), and will exceed the minimum recovery levels for the 7th consecutive year. Montana had an estimated 394 wolves in 37 breeding pairs, Idaho had 788 wolves in 41 breeding pairs, and Wyoming had 362 wolves in 27 breeding pairs (USFWS 2007).

The NRM wolf population is a metapopulation comprised of three primary population segments: central Idaho, northwest Montana, and the greater Yellowstone area (GYA). These population segments are spatially separated but are not completely isolated from each other. Each population segment is comprised of a varying number of packs and individuals that disperse within segments and to other segments. Exchange of individuals from these segments also occurs with nearby wolf packs in Canada. The population segments in central Idaho, GYA, and to a lesser extent northwestern Montana, include core refugia, which are areas of relatively high concentrations of wolves on protected public lands (National Parks or Wilderness areas) or habitats with very few human-caused impacts. These refugia are primary sources for a continual supply of dispersing wolves. In this document, the term “NRM wolf population” will mean this metapopulation, and the term “wolf population(s)” will mean the segments within the NRM wolf population.

Confirmed livestock losses from wolves from 1987 through 2006 total 415 cattle, 610 sheep, 16 other livestock (10 goats and 6 horses), and 33 dogs. In response 42 wolves were moved and 267 were killed (USFWS et al. 2007b).

4.1.5 Recreation

The GYA is used extensively for wildland recreation by both residents and nonresidents. Millions of people annually participate in camping, hiking, biking, riding, wildlife watching, hunting, fishing, trapping, and boating on public lands in the GYA. Both black bears and mountain lions are hunted and chased with hounds in Idaho. Montana and Wyoming allow mountain lions, but not bears, to be hunted with hounds. Currently, a range of 78,000 to 84,000 hunters participate in Idaho elk hunts throughout Idaho (Zager et al. 2007). In 2001, 11,000 elk hunters, 145,000 deer hunters, and 650 moose hunters used the Montana Fish, Wildlife, and Parks regions where wolves occur (MWMAC 2003). Throughout Wyoming in 2006, there were 50,643 elk hunters, 64,660 mule deer hunters, 730 moose hunters, and 219 bighorn sheep hunters (WGFD 2007c).

Since the successful return of wolves after reintroductions, wolf presence especially in Yellowstone Park has attracted thousands of people to observe them in the wild. One study indicated that the return of wolves to the NRM infused approximately \$35.5 million to local economies from increased tourism to observe wolves in the wild (Duffield et al. 2006).

4.2 Central Idaho Region

4.2.1 Landscape

The northern Rocky Mountain physiographic province includes the mountain ranges of central Idaho. The central Idaho primary analysis area contains three major mountain ranges – the Salmon River Mountains (south of the Salmon River), the Clearwater Mountains which extend from the Salmon River north to the upper Clearwater River drainage, and the Bitterroot Mountains which form the eastern border of the central Idaho recovery area along the Idaho-Montana border. Most of central Idaho is characterized by rugged terrain and steep slopes. Elevations range from about 1,500 ft (460 m) along the Clearwater River in the northern portion of the central Idaho area to 12,662 ft (3,859 m) on Borah Peak in the Challis National Forest near the southeastern portion of the central Idaho area. The area varies from deeply incised canyons formed by rivers cutting through rock to rolling basin lands at higher elevations. Soils throughout the area are characterized predominantly by the Idaho batholith, highly erosive and coarse-grained granite. The central Idaho area also includes numerous smaller mountain ranges in southwest Montana.

4.2.2 Watersheds

The southern half of the central Idaho area provides water to the Salmon and Snake Rivers. The northern half of the central Idaho area drains primarily into the Clearwater River. Both the Salmon and Clearwater Rivers empty into the Snake River along the western border of Idaho before the Snake empties into the Columbia River near Pasco, Washington.

4.2.3 Vegetation

Mountains in the central Idaho primary analysis area are covered by three major vegetation community types. The wide elevation range and accompanying climatic variations result in diverse flora. The grand fir-Douglas-fir, Engelmann spruce, sub-alpine fir habitat type is the most common and occurs throughout central Idaho (IDPR 1989). The western red cedar-western hemlock type is more frequent in the northern portions of the area and the ponderosa pine type exists intermittently throughout the central Idaho primary analysis area. Vegetation varies by terrain, soils, aspect, elevation, and other factors. Below 4,000 ft (1,200 m), open slopes with brome, bluebunch wheatgrass, and Idaho fescue are common. Near 4,000 ft (1,200 m), grass types begin to give way to open ponderosa pine types. Sub-alpine fir and several types of lodgepole pines begin to appear at 5,000 ft (1,500 m) to 6,000 ft (1,800 m). Near-alpine habitat is found in the highest elevation areas.

4.2.4 Wildlife

Central Idaho contains a wide variety of habitats and wildlife species. Approximately 400 species of mammals, birds, amphibians, and reptiles inhabit the Idaho experimental area. IDFG is responsible for managing wildlife populations within the State. The Statewide estimate of elk in Idaho for 2006 was a little over 100,000. Black bears and mountain lions also are abundant throughout central Idaho (IDFG 2007b). Coyotes, bobcats, lynx, fishers, martens, wolverines, and river otters are other predators present. Small numbers of grizzly bears and mountain caribou occur in the Idaho panhandle just north of the Idaho experimental population area (USFWS 1994).

See section 4.1.4 Wildlife for discussions of wolf and ungulate populations applicable to both the GYA and Central Idaho area.

4.2.5 Recreation

Like the GYA, the central Idaho area is extensively used for wildland recreation by both residents and nonresidents. Thousands of people annually participate in camping, hiking, biking, riding, wildlife watching, hunting, fishing, trapping, and boating on public lands in the central Idaho area annually. Information on hunting is not broken down by the GYA and Central Idaho area. See the discussion in section 4.1.5. Recreation, which covers broader areas of Idaho, Montana, and Wyoming.

5.0 ENVIRONMENTAL CONSEQUENCES

This section provides an analysis of the potential direct and indirect environmental consequences that could result from the implementation of Alternative A (no action alternative), Alternative B (proposed action and preferred alternative), Alternative C, or Alternative D.

Direct impacts are defined as effects that are caused by the action and occur at the same time and/or place (40 CFR 1508.81a). Indirect impacts are effects caused by the action, but occur later in time and/or place. The potential direct and indirect impacts from the no-action Alternative A, the proposed-action Alternative B, Alternative C, and Alternative D are discussed below.

5.1 Alternative A (No Action): The 2005 Special Regulation Remains Unmodified

5.1.1 Impacts to Ungulate Herds or Populations

Under the no-action alternative, the 2005 special regulation would be unmodified, and the standard of proving that wolf predation is primarily causing impacts to ungulate herds or populations would remain intact per the 2005 definition of “Unacceptable impact.” Consequently, States and Tribes would not be able to lethally control wolves if they are one of the causes, but not the primary cause, of unacceptable impacts to ungulate herds or populations.

While it is widely agreed that predation, including that by wolves, influence prey populations, the impact of wolf predation on ungulate populations is difficult to generalize (Mech and Peterson 2003), partly because a host of other interconnected local factors can influence how it might affect ungulate populations (Garrott et al. 2005). Furthermore, it can be nearly impossible to separate and assess effects of wolf predation apart from the host of other factors affecting ungulate population dynamics without implementing a sophisticated experimental design (National Research Council 1997).

One of the more detailed analyses of the subject of wolf control to benefit ungulate populations was completed by the National Academy of Sciences (1997) in response to the Alaska Governor's request for a review of Alaska's predator control and management program to increase prey populations for human harvest. The study's major results from predator-prey models most relevant to wolves and bears and their prey were: 1) the removal of predators from a plant-herbivore-predator interaction systems can either stabilize or destabilize herbivore population dynamics; 2) two alternative stable states may exist in predator prey systems: one lower level held below habitat carrying capacity by predation and the other higher level determined primarily by habitat carrying capacity; 3) if a regression analysis is used to determine what controls prey populations in a predator-prey system, the factor that explains the greatest proportion of the variance in prey population growth rates depends largely on where 'noise' enters the system, and not on what actually controls the dynamics (e.g., the true factors regulating population growth are masked by natural variability within the ungulate population's vital rates, such as births, deaths, immigration, emigration); 4) correlative studies have limited value in inferring causation; 5) the interactions between prey and their plant resources need to be understood; and 6) the task of identifying which model describes a particular situation is technically challenging. While the Alaska study area has a much simpler and largely natural system compared to anything present in Montana, Idaho, or Wyoming, the National Academy of Sciences work does offer some insight into the complexity involved in estimating the impact of predation on ungulate population dynamics. In essence, predation always impacts prey populations, but its extent and specific effects are very difficult to generalize.

Currently, a few ungulate herds in the NRM may be declining or below State management objectives with wolves as one of the major causes. Wolf predation on adult elk females in the Lolo zone of Idaho is one of a variety of factors affecting the ability to meet State management objectives for Game Management Units 10, 12, and 17 (IDFG 2006). In northwestern Wyoming, three herds (Clarks Fork, Gooseberry, and Cody) are exhibiting declining calf/cow ratios to levels below that needed to sustain elk populations (WGFD 2007b). The calf/cow ratio in a fourth herd (Green River) declined to near the minimum level that would allow the population to sustain moderate public hunting of cow elk (see section [2.0 Need for Action](#) for details for both Idaho and Wyoming). Because lethal control would not be available to States and Tribes as a remedy under the no-action alternative, these impacts may continue. Elk numbers and calf/cow ratios of these herds may not be able to meet management objectives unless one or more of the other major factors affecting these herds is reduced.

On the other hand, several elk herds in Idaho (IDFG 2007b), Wyoming (WGFD 2007b), and Montana (MWMAC 2003) do not show signs of decline yet despite the presence of established wolf packs, while other herds where wolves are not present have declined. Because

the status of ungulate populations is usually affected by a complex interaction of a variety of factors, the mere presence of established wolves does not mean that they will always impact ungulate populations. Furthermore, because nearly all identified suitable wolf habitat (Oakleaf et al. 2006, Figure 2) is now occupied (Bradley et al. 2005; Service et al. 2007, Figure 1), the wolf population in the NEP areas is not likely to expand outwardly from its current distribution. Therefore, wolves are unlikely to impact ungulate populations outside the current overall distribution of the wolf population. Therefore, we expect the need for wolf control generally to be confined to existing areas of ungulate impacts, although the need for control in those areas may increase somewhat if wolf density increases in those areas.

On the whole, the no-action alternative is unlikely to negatively affect most elk populations in the NEP areas because wolves, in combination with other factors, are affecting only a relatively small number of elk herds and the number of herds that may be impacted by wolves is not expected increase substantially.

Some populations of other ungulates, such as mule deer, bighorn sheep, and moose are depressed in some areas within the NEP areas, but this is mostly due to causes other than wolf predation, such as disease, poor habitat quality, and population density-dependence factors. For instance, low pregnancy rates in moose in Wyoming may be thought to be due to poor habitat quality from fire suppression (Wyoming Governor and Wyoming Game and Fish Commission 2005). Therefore, the lack of flexibility to control wolves under the no-action alternative is not likely result in significant effects to these populations. However, if wolf predation is additive in some declining populations then such populations may not be able to meet management objectives under the no-action alternative.

5.1.2 Impacts to Wolves

Because the special rules governing lethal take of wolves would remain the same, no new impacts to wolf populations are likely to occur. Under the 2005 NEP special rule, States or Tribes must demonstrate that wolf predation is the primary cause of unacceptable impacts to ungulate herds or populations to be able to lethally control wolves in conflict with ungulates. No State or Tribe has been able to demonstrate this because current information does not indicate that wolf predation alone is likely to be the primary cause of a reduction of any ungulate population in Montana, Idaho, or Wyoming (Bangs et al. 2004). Therefore, no wolves are likely to be lethally controlled to protect ungulate populations or herds in these States under the 2005 special rule.

Illegal take might occur if a person felt compelled to defend their stock animals or dogs from a wolf attack. However, incidents of wolf depredation on stock animals and dogs have been relatively few. Since 1995, only 60 wolves (about 9 percent of the 672 wolves legally removed in agency-authorized control actions) have been legally killed by persons in defense of their private property in the NRM. Wolf depredations on stock animals accompanied by their owners have not been documented in the past 12 years, but a few instances of stock animals being spooked by wolves have been reported. Two wolves have been taken by Federal land permittees as wolves chased and harassed horses in corrals or on pickets. Reports confirm that 101 dogs have been killed by wolves from 1987 to 2007 (USFWS et al. 2007b, Table 5A;

USFWS 2007), but no wolves are known to have been killed solely to protect dogs. We know of only one credible and one unconfirmed report of wolves killing pet dogs while humans have been nearby (USDA 2007). Wolves have killed at least 35 hunting hounds, primarily on public land. In only a few of those instances, the hounds' owners were close enough that they might have been able to better protect their dogs by shooting at the wolves involved. Therefore, under the no-action alternative, we expect that illegal take of wolves involved in conflicts with pet dogs or hunting hounds would be rare. Such low levels of illegal take are not likely to meaningfully affect the stability of wolf populations or their recovery.

5.1.3 Socioeconomic Impacts

To date most ungulate herds and species appear to be at or over State and Tribal management objectives. However, under the no-action alternative, States would be unable to remove wolves causing impacts to ungulate herds or populations in those cases where wolves are one of the major causes of ungulate population declines. In such cases, hunters and associated businesses, including guides, outfitters, and the hunting retail industry, may be negatively affected from a decrease in hunting opportunities. A decline in hunting opportunities may result in decreased State revenues from hunting license fees, used for wildlife management and habitat restoration, protection, and enhancement. This may ultimately result in some diminishment of the quality of hunting and recreational experiences for the public.

As described above, levels of take of stock animals and dogs by wolves is very low, and the dog or stock losses that the owner might have prevented by shooting an attacking wolf would be relatively rare. Regardless, socioeconomic impacts under the no-action alternative would be at the individual level. Individuals who lose stock animals or dogs to wolf predation would incur the costs of replacing and training animals, as well as potential emotional distress.

5.1.4 Ecological Impacts

No substantial ecological impacts are foreseen from the no-action alternative. As stated previously most elk herds are at or above State and Tribal management objectives, and wolf predation or presence alone does not appear to be substantially impacting most herds at this time. However, wolves may be among the causes of a few herd declines, and such declines may continue under the no-action alternative. Declines in or maintenance of low ungulate populations for extended periods of time can lead to lower densities in wolf and other predator and scavenger populations due to decreased prey availability. However, such impacts are unlikely to occur at a meaningful level under the no-action alternative because so few herds or populations are declining due to wolf impacts.

Ungulate browsing pressure on aspen and riparian plant communities can result in reduced habitat quality, which in turn can negatively affect dependent species and reduce species diversity and result in other cascading biotic and abiotic effects (Ripple and Beschta 2004). Suppression of natural fires and a shift to a warmer, dryer climate also are thought to have contributed to a decline in aspen and riparian vegetation (willow, cottonwood) communities in the northern Yellowstone range (Smith et al. 2003). Some studies suggest that presence of wolves can reverse some of these effects, although consensus does not exist and the magnitude

of cascading ecological effects from wolves is under some debate (Ripple and Beschta 2004; Smith et al. 2003). Both direct predation that results in decline in ungulate numbers and changes in ungulate behavior (shift to less risky foraging areas) due to the presence of wolves are thought to relieve browsing pressure on aspens and riparian vegetation (Ripple and Beschta 2004). However, others (Smith et al. 2003) believe that other biotic and abiotic factors occurring in conjunction with wolf reintroduction cannot be factored out in the observed improvement of woody browse in some areas. Furthermore, those areas in the northern Yellowstone range where willow and aspen appear to be increasing since wolves were introduced are considered very rare (approximately 1 percent is riparian habitat) and such effects outside Yellowstone National Park have not been observed.

Currently, information is not available on the condition of woody browse in those areas where elk are not meeting State management objectives and wolves are one of the major causes. Under the no-action alternative, any effects to elk numbers and foraging patterns due to the presence of wolves and subsequent effects to woody browse would continue.

5.2 Alternative B (Proposed Action and Preferred Alternative) - Modifying the Definition of “Unacceptable Impact” and Adding a Provision for Lethal Take in Defense of Stock Animals and Dogs

5.2.1 Impacts to Ungulate Herds or Populations

As explained in sections 5.1.1 Impacts to Ungulate Herds or Populations (under Alternative A) and 2.0 Need for Action, wolves may be one of the major causes of impacts to a few elk herds in the Lolo zone of Idaho and in portions of northwestern Wyoming. The relationship between wolf predation and ungulate populations is very complex (Mech and Peterson 2003) and a host of other interconnected local factors can influence how that relationship might affect ungulate populations (Garrott et al. 2005). As discussed in section 5.1.1 Impacts to Ungulate Herds or Populations, wolves are known to influence prey populations, but characterizing the level of effects from just wolves is difficult to tease apart from the numerous other factors that play important roles in ungulate population dynamics. Under the preferred alternative, States proposing to control wolves impacting ungulate herds would be expected to address these other factors over which they have control.

Although wolves often prey on the less fit individuals of a prey population, they can also kill healthy animals, resulting in additive mortality that can contribute to failure to sustain State or Tribal ungulate management objectives. As explained in section 2.1 Addressing Unacceptable Impacts on Wild Ungulate Populations, most elk herds in Idaho, Montana, and Wyoming are at or above State management objectives, but Idaho and Wyoming have identified a few that are below objectives or have declining calf/cow ratios that indicate management objectives would not be met. Where wolves are one of the major causes of these declines, approved wolf control under this alternative is expected to remove additive mortality. Wolf control, in combination with conservation efforts to remedy other major causes, is expected to stop or slow declines in elk numbers or calf/cow ratios in those affected herds or those few herds

that may experience similar declines due to wolves in the future. On the whole, this alternative is unlikely to affect most ungulate populations in the NEP areas of the gray wolf because control measures would be focused on only a small number of elk herds.

5.2.2 Impacts to Wolves

Definition of “Unacceptable Impact” on Wild Ungulate Herds or Populations

The safeguards in this alternative would ensure that wolf control for ungulate management purposes would not undermine the objectives in the States’ wolf management plans or recovery of the NRM gray wolf. Specifically, before any lethal control of wolves can be authorized under this NEP special rule, we must determine that such actions will not contribute to reducing the wolf population in the State below 20 breeding pairs and 200 wolves or impede recovery. This safety margin would provide a buffer against unforeseen mortality events that might occur after such removal, and would ensure that each State’s ability to manage for 15 breeding pairs, in accordance with the State’s Service-approved post-delisting management plan, would not be compromised.

The requirement preventing wolf control below 20 breeding pairs and 200 wolves does not mean that States and Tribes will be allowed to eliminate all wolves above those levels. This safety margin is only one of several prerequisites for approval of a wolf control action (as described in section 3.1.2 Alternative B – Proposed Action). The combination of all the requirements for approval of a wolf control action under the proposed revisions to the rule would result in the removal of an appropriate and limited number of wolves for a limited duration warranted for addressing the identified unacceptable impacts to the ungulate population or herd.

As described in section 2.1 Addressing Unacceptable Impacts on Wild Ungulate Populations, many ungulate herds and populations in Idaho, Montana, and Wyoming are at or above State management objectives and most of those below management objectives are most affected by factors other than wolves. Therefore, wolf control actions are expected to be few and localized (see discussion in section 5.2.1 Impacts to Ungulate Herds or Populations). Furthermore, the average annual mortality rate from agency removal of wolves for livestock depredation is about 9 percent of the overall NRM wolf population (USFWS et al. 2007b, Table 5A). Because the instances where wolves are one of the major causes of ungulate declines are fewer than those of livestock depredation, we expect the annual percentage of wolves removed under this alternative would be below 9 percent.

Wolf biology allows for rapid recovery from even severe disruptions. After severe declines, wolf populations can more than double in just 2 years if mortality is subsequently reduced and adequate food is available (Fuller et al. 2003). Increases of nearly 100 percent per year have been documented in low-density suitable habitat (USFWS et al. 2007a, Table 4). The literature suggests that in some situations wolf populations can remain stable despite annual human-caused mortality rates ranging from about 30 to 50 percent (Keith 1983; Fuller et al. 2003). Ultimately, the population’s productivity in terms of recruitment and immigration is what allows it to persist under human harvest (Fuller et al. 2003). Given abundant prey availability, wolf populations can sustain such high levels of human-caused mortality due to their high

reproductive potential and replacement of losses by dispersing wolves from nearby populations (Fuller et al. 2003). Wolf populations and packs within the NRM wolf population are expected to be quite resilient to regulated mortality because adequate food supplies are available and core refugia provide a constant source of dispersers to replenish breeding vacancies in packs.

Total mortality of adults in the NRM wolf population was nearly 26 percent per year from 1994 to 2006, and the human-caused mortality was about 20 percent per year (Smith 2007). Yet, the NRM wolf population continued to increase at about 24 percent annually (USFWS et al. 2007a, Table 4). These data indicate that the current annual human-caused mortality rate of about 20 percent in the adult portion of the NRM wolf population could be increased to some extent without causing the NRM wolf population to decline. We expect the increased mortality from wolf control under this alternative to be well under the rate that would impact the NRM wolf population.

Wolf populations in the NRM where this rule applies are characterized by robust size, high productivity, closely neighboring packs, and many dispersers (USFWS et al. 2007a, Figure 1; Jimenez et al. in prep.). Wolf populations now occupy most of the suitable wolf habitat in the NRM (USFWS et al. 2007a, Figure 1). These populations are unlikely to expand their current distributions outwardly because little unoccupied suitable habitat is available (Bradley et al. 2005; USFWS et al. 2007a, Figure 1). Because suitable habitat is nearly saturated, core refugia within these populations will continue to produce a large number of 'surplus' wolves which will either fill in social vacancies within the core refugia, die, or disperse out of the core refugia. Therefore, the core refugia would have an abundant supply of wolves ready to fill any vacancies caused by agency control for unacceptable ungulate impacts. Even when entire packs are removed, new packs are likely to form. During wolf control for livestock depredation in Wyoming, the Daniel, Green River, Carter Mountain, and Owl Creek packs all reformed after they were entirely or almost entirely removed (Jimenez et al. 2007b).

Bradley et al. (in prep.) found that, following the removal of wolves for livestock depredation in the NRM wolf population, the breeding status of packs was not greatly affected, regardless of the breeding status of individuals or proportion of a pack removed. Population size, proximity of other wolf packs, and the number of dispersing wolves influence the frequency with which alpha males and females will be replaced (Brainerd et al. in press). Social vacancies, whether from loss of breeders or nonbreeders, are likely to be quickly filled by dispersing wolves or other wolves within the pack. Often subadults and pups are the first to be removed in wolf control programs because they tend to be naïve and, therefore, more vulnerable to take. Vacancies from loss of subadults and pups, like other age-class vacancies, are likely to be readily filled by dispersers or new offspring, given the ready supply of dispersers from core refugia in the NRM.

Because agency control of wolves for unacceptable ungulate impacts would be likely to occur in only a few discrete areas, most dispersal between packs and populations would not be disrupted because core refugia would continue to supply dispersers, as explained above. Therefore, gaps that could fragment populations and disrupt connectivity and genetic exchange are not likely to occur in the NRM wolf population from wolf control under this alternative. For

the same reasons, wolf control actions under this alternative is not likely to reduce wolf numbers enough to cause a meaningful reduction in the probability of dispersers reaching the States adjacent to the NEP areas.

In the NRM, filling of vacancies created by agency control under this alternative is not likely to constitute a population sink that would deplete or affect stability of source populations (core refugia). Wolves disperse from their natal packs regardless of human-caused mortality elsewhere. Wolf populations and packs routinely turn over members (Mech 2007). Vacancies created by wolf control are most likely to be filled by young adult dispersers that leave their packs because they are unable to breed or as an evolutionary strategy to avoid inbreeding (VonHoldt et al. 2007), because they are attempting to increase access to food (Mech and Boitani 2003), or due to social tensions in their natal pack (Mech and Boitani 2003). Such individuals would not have directly contributed, through breeding, to the productivity of the packs they left. Although some of these dispersers may have filled other vacancies within the source population and had the potential to breed there, those vacancies will be quickly filled by other dispersing wolves or wolves within those packs (Fuller et al. 2003). As described in section 4.1.4 Wildlife, core refugia in the NRM wolf population provide a constant source of dispersers. While removing a pack may draw another pack into that area, approved wolf removal under this alternative will not be at a rate and level that would create a void large and long enough in the core refugia to impact the stability of the wolf populations in the NRM.

While vacancies created by wolf control are likely to be eventually filled, wolf density in the control area could be temporarily lowered to the extent that would allow the ungulate herd or population to respond, depending on the proposed level and duration of control. For example, control on an annual basis for 3 to 5 years may decrease predation and relieve impacts to the herd or population enough to allow the population to return to management objective levels. As long as other major causes of ungulate population impacts have been addressed, the lowered post-control wolf density should allow the ungulate herd or population to remain at management objectives.

Wolf removal as envisioned under this alternative is limited in time until the ungulate herd meets its management objectives or until it is evident that wolf removal is not having a positive effect on the herd's status. If the required monitoring under this alternative shows that the desired results are not achieved under the terms of the approved proposal, we would expect the State or Tribe to reevaluate whether continued control is warranted. If wolf densities and ungulate depredation return to levels that cause the ungulate herd or population to decline below management objectives again, the State or Tribe would need to submit another proposal under the processes required by this alternative.

The States will likely use shooting from the ground and air as the primary method of control of wolves for ungulate impacts under this alternative. These methods are considered the most efficient and humane of those available. Based on the experience and expertise of State game and fish agency staff, States would be allowed the flexibility to determine the appropriate methods of control within the confines of existing laws and regulations. The revisions under this alternative would not supersede or invalidate any other Federal, State, or Tribal laws and regulations, including the Airborne Hunting Act. All management activities under this

alternative must be conducted in compliance with all other applicable laws and regulations. Furthermore, if control methods result in take of wolves exceeding the level in an approved proposal under this alternative, the control actions must cease and would be subject to enforcement under the Act.

Wolf populations in the NRM have been and will continue to be intensively monitored regardless of which alternative is implemented. This monitoring is conducted by the Service, NPS, Nez Perce Tribe, and the States of Idaho, Montana, and Wyoming and will help provide information on any effects to wolf populations from wolf control actions.

Based on the current recovered status of the NRM wolf population, resilience of wolf populations in general, and safeguards in the proposed rule, and because wolf control actions are expected to be few and localized, we conclude that the likely level of wolf removal under this alternative would not significantly impact the NRM wolf population or compromise its recovery.

Protection of Stock Animals and Dogs

As described in section 5.1.2 Impacts to Wolves, very few instances of wolves attacking stock animals or dogs while owners were close enough to have protected them have been reported. While this alternative would provide additional opportunity for individuals to lethally take wolves to protect their private property, we expect the number of instances where such control is necessary to be extremely few.

This alternative would prohibit killing of wolves with the use of intentional baiting, feeding, or deliberate attractants. For example, it would be unlawful to knowingly approach a wolf den or rendezvous site with a dog and then attempt to shoot those wolves. Anyone who uses dogs to deliberately attract wolves to kill them while in the guise of hunting would also be in violation of the law.

We expect that the need to kill more than one wolf in each incident of attack on stock animals or dogs to be very rare. When one wolf out of an attacking group is shot, the rest of the wolves almost invariably flee. Fleeing wolves could no longer be “in the act of attacking” and take of such wolves would be in violation of the law.

This alternative would retain the requirement in the 2005 NEP special rule (50 CFR 17.84(n)(4)(iii)(A)) that each incident of wolf take must be reported to the Service within 24 hours and evidence of the wolf being in the act of attacking must be preserved.

Based on these requirements and wolf behavior discussed above, we fully expect that abuse of the law and taking of more than one wolf during each incident to be unlikely. In combination with the rare occasion that wolves attack stock animals and dogs, the overall take of wolves for this purpose under this alternative is expected to be very small. Based on this and the status and resilience of the NRM wolf population, the level of wolf take for protection of stock animals and dogs would be too low to cause any meaningful effects to the NRM wolf population and its recovery.

5.2.3 Socioeconomic Impacts

In those cases where lethal control of wolves impacting ungulates allow State game and fish agencies to meet their ungulate population objectives, hunters and associated businesses, including guides, outfitters, and the hunting retail industry, may benefit from increased hunting opportunities. Increased hunting opportunities would also provide additional revenue from hunting license fees to the States for wildlife management and habitat restoration, protection and enhancement.

Allowing lethal take of wolves in the act of attacking stock animals or dogs, under this alternative, has the potential to prevent the need for individuals to replace and train stock animals and dogs killed by wolves, as well as the emotional distress that could be caused by the loss of such animals.

We do not expect recreational and tourist industries currently benefiting from wolf-watching by the public to be adversely affected because the additional wolf take likely to occur under this alternative would not affect wolf numbers and distribution in a manner that would alter the opportunities for the public to observe and enjoy wolves in the wild. Almost all wolf-watching occurs in Yellowstone National Park where the revisions under this alternative would not apply. The expected level of wolf take that would occur outside the Park under this alternative would not affect wolf-viewing opportunities in the Park.

States and Tribes that choose to propose control actions for unacceptable impacts to ungulates would incur costs associated with development and public and peer review of the proposal, as well as implementation and monitoring of approved control actions. However, this alternative provides increased flexibility of the current NEP special regulations and does not impose any requirement on States or Tribes to control wolves.

5.2.4 Ecological Impacts

Declines in or maintenance of low wild ungulate populations for extended periods of time can lead to lower densities in wolf and other predator and scavenger populations due to decreased prey availability. Theoretically, wolf control implemented to stop or reduce ungulate declines and allow maintenance of State or Tribal management objective levels could benefit wolves and other predators and scavengers through increased prey availability. However, because so few herds or populations are declining due to wolf impacts, such benefits to predators and scavengers are not likely to be realized from wolf control under this alternative.

Wild ungulates are part of wolves' natural prey base and wolves can play an important role in ecosystem function, as do other large predators that are subject to human harvest, such as black bears and mountain lions. Potential cascading ecological effects from the presence of wolves is discussed in section [5.1.4 Ecological Impacts](#). Based on observations in Yellowstone National Park and depending on a variety of conditions, removal of wolves to meet State or Tribal ungulate management objectives for a particular herd or population could result in increased browsing pressure in those localized areas of wolf control. However, such effects are expected to occur only if ungulate numbers increase to relatively high levels and those herds are

foraging in areas with plant communities that are vulnerable to browsing pressure. Furthermore, the management of ungulate populations and ecosystem components outside Federal lands is under the purview of State and Tribal natural resource agencies. We expect the States and Tribes to continue to use their expertise and policies to maintain a balance between these management needs. The anticipated levels of wolf removal under this alternative would not result in disruption of ecosystem functions or meaningful impacts on other species that benefit from wolf presence.

Under this alternative, ecological impacts of the anticipated increase in take of wolves in defense of stock animals and dogs are unlikely. Reducing the risk of depredation on such animals is not likely to result in an expansion of their numbers or their use on public or private lands that would have any ecosystem effects. The number of wolves likely to be taken in defense of stock animals and dogs is expected to be far too low to have any potential impact on wolf populations or their ecological effects.

Shooting is likely to be the primary method of control of wolves for ungulate impacts and any risk of effects to non-target species would be minimal. Trapping may be used occasionally only to obtain information on new wolves or packs in the area before control is implemented. Only two grizzly bears have been accidentally trapped since trapping wolves for monitoring and livestock control purposes began in 1986. The type of trap in one incident is now used by State or Federal agency staff only when grizzly bears are hibernating. In the other incident in Glacier National Park, a trapped bear was killed by another bear. Currently, several measures are implemented to minimize accidental trapping and safety issues for non-target species and agency staff. Some of these measures include the use of transmitters on traps to detect sprung traps, careful placement of traps, and use of less odorous bait to minimize attracting bears. If a bear is accidentally trapped, agency staff dart and release it. Therefore, wolf control that would be authorized by the proposed NEP special rule is highly unlikely to compromise grizzly bear conservation.

5.3 ALTERNATIVE C - Only Modifying the Definition of “Unacceptable Impact”

This alternative includes the modification of the definition of “Unacceptable impact” to ungulates as described in Alternative B. It does not include the addition of a provision for take of wolves in defense of stock animals and dogs.

5.3.1 Impacts to Ungulate Herds or Populations

The impacts to ungulate herds or populations under this alternative would be the same as those associated with the revision of “Unacceptable impact” described in Alternative B (proposed action).

The impacts associated with not including the provision for take of wolves in defense of stock animals and dogs would be the same as described in Alternative A (no action).

5.3.2 Impacts to Wolves

The impacts to wolf populations associated with revising “Unacceptable impact” under this alternative would be the same as those described in Alternative B (proposed action).

The impacts associated with not including the provision for take of wolves in defense of stock animals and dogs would be the same as described in Alternative A (no action).

5.3.3 Socioeconomic Impacts

The socioeconomic impacts associated with revising the definition of “Unacceptable impact” in this alternative would be the same as those described in Alternative B (proposed action).

The impacts associated with not including the provision for take of wolves in defense of stock animals and dogs would be the same as described in Alternative A (no action).

5.3.4 Ecological Impacts

The ecological impacts associated with revising the definition of “Unacceptable impact” in this alternative would be the same as those described in Alternative B (proposed action).

The impacts associated with not including the provision for take of wolves in defense of stock animals and dogs would be the same as described in Alternative A (no action).

5.4 ALTERNATIVE D - Only Adding Provision for Take of Wolves to Protect Animals Stock and Dogs

This alternative includes the addition of a provision for take of wolves in defense of stock animals and dogs as described in Alternative B. It does not include the modification of the definition of “Unacceptable impacts.”

5.4.1 Impacts to Ungulate Herds or Populations

The impacts to ungulate herds or populations under this alternative would be the same as those associated with the revision of “Unacceptable impact” described in Alternative A.

The impacts associated with not including the provision for take of wolves in defense of stock animals and dogs would be the same as described in Alternative B.

5.4.2 Impacts to Wolves

The impacts to wolf populations under this alternative would be the same as those associated with “Unacceptable impact” described in Alternative A.

The impacts associated with including the provision for take of wolves in defense of stock animals and dogs would be the same as described in Alternative B.

5.4.3 Socioeconomic Impacts

The socioeconomic impacts under this alternative would be the same as those associated with “Unacceptable impact” described in Alternative A.

The impacts associated with including the provision for take of wolves in defense of stock animals and dogs would be the same as described in Alternative B.

5.4.4 Ecological Impacts

The ecological impacts under this alternative would be the same as those associated with “Unacceptable impact” described in Alternative A.

The impacts associated with including the provision for take of wolves in defense of stock animals and dogs would be the same as described in Alternative B.

5.5 Summary of Environmental Consequences by the Alternatives

Table 2. Comparison of Potential Environmental Impacts of the Alternative Actions.

	Impact to Ungulates	Impact to Wolves	Impact to Socioeconomic Levels	Impact to Ecological Community
Alternative A No Action	<u>Some Potential Negative Impact</u> : a few isolated herds that may be declining due to wolves may continue to decline	<u>No to Little Potential Negative Impact</u> : slight chance of illegal take to defend stock animal or dog from attack	<u>Some Potential Negative Impact</u> : potential localized decrease in hunting opportunities, related business, and State revenues from license fees; small risk of cost to individuals for replacing stock animals/dogs	<u>Unknown or No Impact</u> : ungulate declines too few and isolated to cause ecological effects
Alternative B Proposed Action	<u>Some Potential Positive Impact</u> : a few isolated herds may stop declining or increase	<u>Little Potential Negative Impact</u> : potential increased take of wolves, but impacts to populations and recovered status not expected due to resilience and safeguards	<u>Some Potential Positive Impact</u> : hunting industry and State game agencies may benefit from increased hunting opportunities; decreases small risk of cost to individuals for replacing stock animals/dogs	<u>Unknown or No Impact</u> : wolf take levels too low to cause ecological effects
Alternative C Only modifying the definition of "Unacceptable impact"	<u>Some Potential Positive Impact</u> : a few isolated herds may stop declining or increase	<u>Little Potential Negative Impact</u> : potential increased take of wolves, but resilience and safeguards would prevent meaningful impacts to populations and recovered status	<u>Some Potential Positive Impact</u> : hunting industry and State game agencies may benefit from increased hunting opportunities <u>Some Potential Negative Impact</u> : small risk of cost to individuals for replacing stock animals/dogs	<u>Unknown or No Impact</u> : ungulate declines too few and isolated and wolf take levels too low to cause ecological effects
Alternative D Only adding provision to protect stock animals and dogs	<u>Some Potential Negative Impact</u> : a few isolated herds that may be declining due to wolves may continue to decline	<u>Little Potential Negative Impact</u> : potential increased take of wolves, but too small to have meaningful impacts to populations and recovered status	<u>Some Potential Positive Impact</u> : potential localized decrease in hunting opportunities, related business, and State revenues from license fees; decreases small risk of cost to individuals for replacing stock animals/dogs	<u>Unknown or No Impact</u> : ungulate declines too few and isolated to cause ecological effects

5.6 Cumulative Effects

Cumulative effects are those effects from other projects or activities that are not part of this proposed action and may have an additive effect when combined with the effects expected from the proposed action.

Any removal of wolves that are a major factor in preventing the States from meeting their ungulate management goals will be in addition to agency control of wolves that depredate livestock, illegal killing, and other human-caused and natural forms of mortality. In total these other mortality factors remove about 26 percent of the adult-sized wolves in the NEP areas

annually. However, it is highly unlikely that the addition of the level of wolf mortality expected as a result of the proposed revisions would have a significant impact on the NRM wolf populations. In addition, the current safeguards in the special regulations and those proposed as part of the proposed revisions would prevent the compromise of wolf recovery and ability for the States to manage for 15 breeding pairs and 150 wolves, as explained in section 5.2.2 Impacts to Wolves.

6.0 COMPLIANCE, CONSULTATION, AND COORDINATION WITH OTHERS

6.1 Environmental Justice

Environmental justice is achieved when everyone, regardless of race, culture or income, enjoys the same degree of protection from environmental and health hazards and equal access to a healthy environment. None of the alternatives would have an impact upon women, minority groups, or civil rights of any citizen of the United States (Executive Order 12898).

6.2 Public Review and Comment

The proposed revision of the 10(j) rule that the draft EA analyzed was published on July 6, 2007 (72 FR 36942) and the first public comment period on it occurred from that date through August 6, 2007. The Service made the draft EA available for public review and comment for 30 days, from September 11, 2007, through October 11, 2007. The Service reopened the public comment period on the proposed rule to allow for another 30 days of public review and comment that coincided with that of the draft EA. A Notice of Availability announcing details on these two public comment periods for the draft EA and proposed revisions to the rule was published on September 11, 2007 (72 FR 51770).

We received about 179 emails and letters directed to addresses we set up specifically for comments on the draft EA. However, we also received thousands of emails that were sent to the address we set up specifically for the proposed rule and that stated a position on which alternative in the EA should be selected. Almost all of these did not offer any new information or substantive comments on the EA beyond a stated position. Substantive comments and new information received from the public during the comment period have either been addressed in the FONSI or incorporated directly into the EA and/or draft final rule as appropriate.

7.0 LIST OF PREPARERS

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APPENDIX A

2005 SPECIAL REGULATION FOR THE REINTRODUCTION OF GRAY WOLVES INTO THE CENTRAL IDAHO AND YELLOWSTONE AREAS

Code of Federal Regulations 50 Part 17.84(n)

(n) Gray wolf (*Canis lupus*). (1) The gray wolves (wolf) identified in paragraphs (n)(9)(i) and (ii) of this section are nonessential experimental populations. These wolves will be managed in accordance with the respective provisions of this paragraph (n) in the boundaries of the nonessential experimental population (NEP) areas within any State or Tribal reservation that has a wolf management plan that has been approved by the Service, as further provided in this paragraph (n). Furthermore, any State or Tribe that has a wolf management plan approved by the Service can petition the Secretary of the Department of the Interior (DOI) to assume the lead authority for wolf management under this rule within the borders of the NEP areas in their respective State or reservation.

(2) The Service finds that management of nonessential experimental gray wolves, as defined in this paragraph (n), will further the conservation of the species.

(3) Definitions of terms used in paragraph (n) of this section follow:

Active den site—A den or a specific above-ground site that is being used on a daily basis by wolves to raise newborn pups during the period April 1 to June 30.

Breeding pair—An adult male and an adult female wolf that, during the previous breeding season, produced at least two pups that survived until December 31 of the year of their birth.

Designated agent—Includes Federal agencies authorized or directed by the Service, and States or Tribes with a wolf management plan approved by the Director of the Service and with established cooperative agreements with us or Memoranda of Agreement (MOAs) approved by the Secretary of the DOI. Federal agencies, States, or Tribes may become “designated agents” through cooperative agreements with the Service whereby they agree to assist the Service to implement some portions of this rule. If a State or Tribe becomes a “designated agent” through a cooperative agreement, the Service will help coordinate their activities and retain authority for program direction, oversight, and guidance. States and Tribes with approved plans also may become “designated agents” by submitting a petition to the Secretary to establish an MOA under this rule. Once accepted by the Secretary, the MOA may allow the State or Tribe to assume lead authority for wolf management and to implement the portions of their State or Tribal plans that are consistent with this rule. The Service oversight (aside from Service law enforcement investigations) under an MOA is limited to monitoring compliance with this rule, issuing written authorizations for wolf take on reservations without approved wolf management plans, and an annual review of the State or Tribal program to ensure the wolf population is being maintained above recovery levels.

Domestic animals—Animals that have been selectively bred over many generations to enhance specific traits for their use by humans, including use as pets. This includes livestock (as defined below) and dogs.

Intentional harassment—The deliberate and pre-planned harassment of wolves, including by less-than-lethal munitions (such as 12-gauge shotgun rubber-bullets and bean-bag shells), that are designed to cause physical discomfort and temporary physical injury but not death. The wolf may have been tracked, waited for, chased, or searched out and then harassed.

In the act of attacking—The actual biting, wounding, grasping, or killing of livestock or dogs, or chasing, molesting, or harassing by wolves that would indicate to a reasonable person that such biting, wounding, grasping, or killing of livestock or dogs is likely to occur at any moment.

Landowner—An owner of private land, or his/her immediate family members, or the owner's employees who are currently employed to actively work on that private land. In addition, the owner(s) (or his/her employees) of livestock that are currently and legally grazed on that private land and other lease-holders on that private land (such as outfitters or guides who lease hunting rights from private landowners), are considered landowners on that private land for the purposes of this regulation. Private land, under this regulation, also includes all non-Federal land and land within Tribal reservations. Individuals legally using Tribal lands in States with approved plans are considered landowners for the purposes of this rule. "Landowner" in this regulation includes legal grazing permittees or their current employees on State, county, or city public or Tribal grazing lands.

Livestock—Cattle, sheep, horses, mules, goats, domestic bison, and herding and guarding animals (llamas, donkeys, and certain breeds of dogs commonly used for herding or guarding livestock). Livestock excludes dogs that are not being used for livestock guarding or herding.

Non injurious—Does not cause either temporary or permanent physical damage or death.

Opportunistic harassment—Harassment without the conduct of prior purposeful actions to attract, track, wait for, or search out the wolf.

Private land—All land other than that under Federal Government ownership and administration and including Tribal reservations.

Problem wolves—Wolves that have been confirmed by the Service or our designated agent(s) to have attacked or been in the act of attacking livestock or dogs on private land or livestock on public land within the past 45 days. Wolves that we or our designated agent(s) confirm to have attacked any other domestic animals on private land twice within a calendar year are considered problem wolves for purposes of agency wolf control actions.

Public land—Federal land such as that administered by the National Park Service, Service, Bureau of Land Management, USDA Forest Service, Bureau of Reclamation, Department of Defense, or other agencies with the Federal Government.

Public land permittee—A person or that person’s employee who has an active, valid Federal land-use permit to use specific Federal lands to graze livestock, or operate an outfitter or guiding business that uses livestock. This definition does not include private individuals or organizations who have Federal permits for other activities on public land such as collecting firewood, mushrooms, antlers, Christmas trees, or logging, mining, oil or gas development, or other uses that do not require livestock. In recognition of the special and unique authorities of Tribes and their relationship with the U.S. Government, for the purposes of this rule, the definition includes Tribal members who legally graze their livestock on ceded public lands under recognized Tribal treaty rights.

Remove—Place in captivity, relocate to another location, or kill.

Research—Scientific studies resulting in data that will lend to enhancement of the survival of the gray wolf.

Rule—Federal regulations—“This rule” or “this regulation” refers to this final NEP regulation; “1994 rules” refers to the 1994 NEP rules (50 CFR 17.84(i)); and “4(d) rule” refers to the 2003 special 4(d) regulations for threatened wolves in the Western DPS (50 CFR 17.40(n)), outside of the experimental population areas.

Unacceptable impact—State or Tribally-determined decline in a wild ungulate population or herd, primarily caused by wolf predation, so that the population or herd is not meeting established State or Tribal management goals. The State or Tribal determination must be peer-reviewed and reviewed and commented on by the public, prior to a final determination by the Service that an unacceptable impact has occurred, and that wolf removal is not likely to impede wolf recovery.

Wounded—Exhibiting scraped or torn hide or flesh, bleeding, or other evidence of physical damage caused by a wolf bite.

(4) *Allowable forms of take of gray wolves.* The following activities, only in the specific circumstances described under this paragraph (n)(4), are allowed: opportunistic harassment; intentional harassment; take on private land; take on public land; take in response to impacts on wild ungulate populations; take in defense of human life; take to protect human safety; take by designated agents to remove problem wolves; incidental take; take under permits; take per authorizations for employees of designated agents; and take for research purposes. Other than as expressly provided in this rule, all other forms of take are considered a violation of section 9 of the Act. Any wolf or wolf part taken legally must be turned over to the Service unless otherwise specified in this paragraph (n). Any take of wolves must be reported as outlined in paragraph (n)(6) of this section.

(i) *Opportunistic harassment.* Anyone may conduct opportunistic harassment of any gray wolf in a non-injurious manner at any time. Opportunistic harassment must be reported to the Service or our designated agent(s) within 7 days as outlined in paragraph (n)(6) of this section.

(ii) *Intentional harassment.* After we or our designated agent(s) have confirmed wolf activity on private land, on a public land grazing allotment, or on a Tribal reservation, we or our designated agent(s) may issue written take authorization valid for not longer than 1 year, with appropriate conditions, to any landowner or public land permittee to intentionally harass wolves. The harassment must occur in the area and under the conditions as specifically identified in the written take authorization.

(iii) *Take by landowners on their private land.* Landowners may take wolves on their private land in the following two additional circumstances:

(A) Any landowner may immediately take a gray wolf in the act of attacking livestock or dogs on their private land, provided the landowner provides evidence of livestock or dogs recently (less than 24 hours) wounded, harassed, molested, or killed by wolves, and we or our designated agent(s) are able to confirm that the livestock or dogs were wounded, harassed, molested, or killed by wolves. The carcass of any wolf taken and the area surrounding it should not be disturbed in order to preserve physical evidence that the take was conducted according to this rule. The take of any wolf without such evidence of a direct and immediate threat may be referred to the appropriate authorities for prosecution.

(B) A landowner may take wolves on his/her private land if we or our designated agent issued a “shoot-on-sight” written take authorization of limited duration (45 days or less), and if:

(1) This landowner’s property has had at least one depredation by wolves on livestock or dogs that has been confirmed by us or our designated agent(s) within the past 30 days; and

(2) We or our designated agent(s) have determined that problem wolves are routinely present on that private property and present a significant risk to the health and safety of other livestock or dogs; and

(3) We or our designated agent(s) have authorized agency lethal removal of problem wolves from that same property. The landowner must conduct the take in compliance with the written take authorization issued by the Service or our designated agent(s).

(iv) *Take on public land.* Any livestock producer and public land permittee (*see* definitions in paragraph (n)(3) of this section) who is legally using public land under a valid Federal land-use permit may immediately take a gray wolf in the act of attacking his/her livestock on his/her allotment or other area authorized for his/her use without prior written authorization, provided that producer or permittee provides evidence of livestock recently (less than 24 hours) wounded, harassed, molested, or killed by wolves, and we or our designated agent(s) are able to confirm that the livestock were wounded, harassed, molested, or killed by wolves. The carcass of any wolf taken and the area surrounding it should not be disturbed, in order to preserve physical evidence that the take was conducted according to this rule. The take of any wolf without such evidence may be referred to the appropriate authorities for prosecution.

(A) At our or our designated agent(s)' discretion, we or our designated agent(s) also may issue a shoot-on-sight written take authorization of limited duration (45 days or less) to a public land grazing permittee to take problem wolves on that permittee's active livestock grazing allotment if:

(1) The grazing allotment has had at least one depredation by wolves on livestock that has been confirmed by us or our designated agent(s) within the past 30 days; and

(2) We or our designated agent(s) have determined that problem wolves are routinely present on that allotment and present a significant risk to the health and safety of livestock; and

(3) We or our designated agent(s) have authorized agency lethal removal of problem wolves from that same allotment.

(B) The permittee must conduct the take in compliance with the written take authorization issued by the Service or our designated agent(s).

(v) *Take in response to wild ungulate impacts.* If wolf predation is having an unacceptable impact on wild ungulate populations (deer, elk, moose, bighorn sheep, mountain goats, antelope, or bison) as determined by the respective State or Tribe, a State or Tribe may lethally remove the wolves in question.

(A) In order for this provision to apply, the States or Tribes must prepare a science-based document that:

(1) Describes what data indicate that ungulate herd is below management objectives, what data indicate the impact by wolf predation on the ungulate population, why wolf removal is a warranted solution to help restore the ungulate herd to State or Tribal management objectives, the level and duration of wolf removal being proposed, and how ungulate population response to wolf removal will be measured;

(2) Identifies possible remedies or conservation measures in addition to wolf removal; and

(3) Provides an opportunity for peer review and public comment on their proposal prior to submitting it to the Service for written concurrence.

(B) We must determine that such actions are scientifically-based and will not reduce the wolf population below recovery levels before we authorize lethal wolf removal.

(vi) *Take in defense of human life.* Any person may take a gray wolf in defense of the individual's life or the life of another person. The unauthorized taking of a wolf without demonstration of an immediate and direct threat to human life may be referred to the appropriate authorities for prosecution.

(vii) *Take to protect human safety.* We or our designated agent(s) may promptly remove any wolf that we or our designated agent(s) determines to be a threat to human life or safety.

(viii) *Take of problem wolves by Service personnel or our designated agent(s).* We or our designated agent(s) may carry out harassment, non lethal control measures, relocation, placement in captivity, or lethal control of problem wolves. To determine the presence of problem wolves, we or our designated agent(s) will consider all of the following:

(A) Evidence of wounded livestock, dogs, or other domestic animals, or remains of livestock, dogs, or domestic animals that show that the injury or death was caused by wolves, or evidence that wolves were in the act of attacking livestock, dogs, or domestic animals;

(B) The likelihood that additional wolf-caused losses or attacks may occur if no control action is taken;

(C) Evidence of unusual attractants or artificial or intentional feeding of wolves; and

(D) Evidence that animal husbandry practices recommended in approved allotment plans and annual operating plans were followed.

(ix) *Incidental take.* Take of a gray wolf is allowed if the take is accidental and incidental to an otherwise lawful activity and if reasonable due care was practiced to avoid such take, and such take is reported within 24 hours. Incidental take is not allowed if the take is not accidental or if reasonable due care was not practiced to avoid such take, or it was not reported within 24 hours (we may allow additional time if access to the site of the take is limited), and we may refer such taking to the appropriate authorities for prosecution. Shooters have the responsibility to identify their target before shooting. Shooting a wolf as a result of mistaking it for another species is not considered accidental and may be referred to the appropriate authorities for prosecution.

(x) *Take under permits.* Any person with a valid permit issued by the Service under §17.32, or our designated agent(s), may take wolves in the wild, pursuant to terms of the permit.

(xi) *Additional take authorization for agency employees.* When acting in the course of official duties, any employee of the Service or our designated agent(s) may take a wolf or wolf-like canid for the following purposes:

(A) Scientific purposes;

(B) To avoid conflict with human activities;

(C) To further wolf survival and recovery;

(D) To aid or euthanize sick, injured, or orphaned wolves;

(E) To dispose of a dead specimen;

(F) To salvage a dead specimen that may be used for scientific study;

(G) To aid in law enforcement investigations involving wolves; or

(H) To prevent wolves or wolf-like canids with abnormal physical or behavioral characteristics, as determined by the Service or our designated agent(s), from passing on or teaching those traits to other wolves.

(I) Such take must be reported to the Service within 7 days as outlined in paragraph (n)(6) of this section, and specimens are to be retained or disposed of only in accordance with directions from the Service.

(xii) *Take for research purposes.* We may issue permits under §17.32, or our designated agent(s) may issue written authorization, for individuals to take wolves in the wild pursuant to approved scientific study proposals. Scientific studies should be reasonably expected to result in data that will lend to development of sound management of the gray wolf, and lend to enhancement of its survival as a species.

(5) *Federal land use.* Restrictions on the use of any Federal lands may be put in place to prevent the take of wolves at active den sites between April 1 and June 30. Otherwise, no additional land-use restrictions on Federal lands, except for National Parks or National Wildlife Refuges, may be necessary to reduce or prevent take of wolves solely to benefit gray wolf recovery under the Act. This prohibition does not preclude restricting land use when necessary to reduce negative impacts of wolf restoration efforts on other endangered or threatened species.

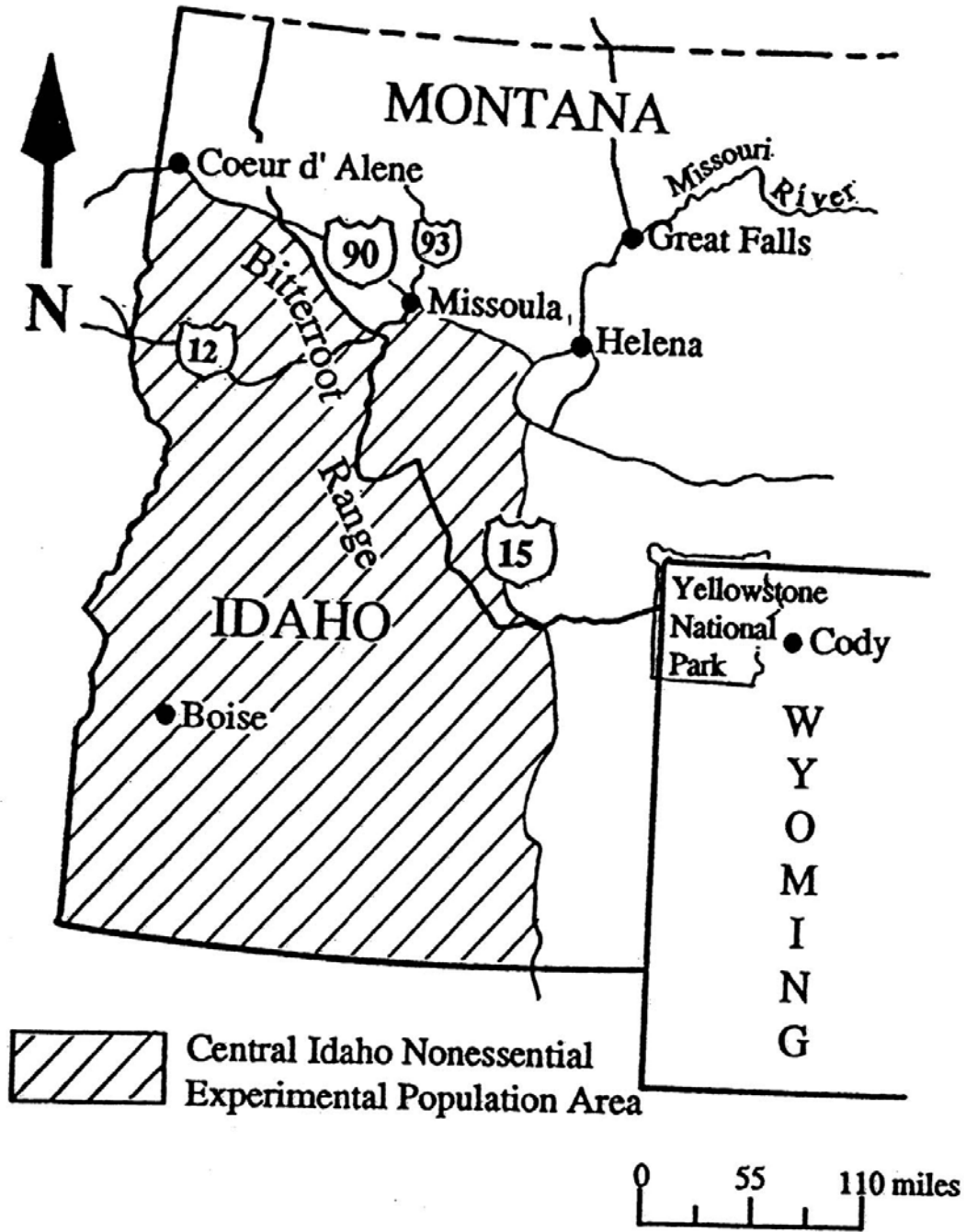
(6) *Reporting requirements.* Except as otherwise specified in paragraph (n) of this section or in a permit, any take of a gray wolf must be reported to the Service or our designated agent(s) within 24 hours. We will allow additional reasonable time if access to the site is limited. Report any take of wolves, including opportunistic harassment, to U.S. Fish and Wildlife Service, Western Gray Wolf Recovery Coordinator (100 North Park, Suite 320, Helena, Montana 59601, 406–449–5225 extension 204; facsimile 406–449–5339), or a Service-designated agent of another Federal, State, or Tribal agency. Unless otherwise specified in paragraph (n) of this section, any wolf or wolf part taken legally must be turned over to the Service, which will determine the disposition of any live or dead wolves.

(7) No person shall possess, sell, deliver, carry, transport, ship, import, or export by any means whatsoever, any wolf or part thereof from the experimental populations taken in violation of the regulations in paragraph (n) of this section or in violation of applicable State or Tribal fish and wildlife laws or regulations or the Act.

(8) It is unlawful for any person to attempt to commit, solicit another to commit, or cause to be committed any offense defined in this section.

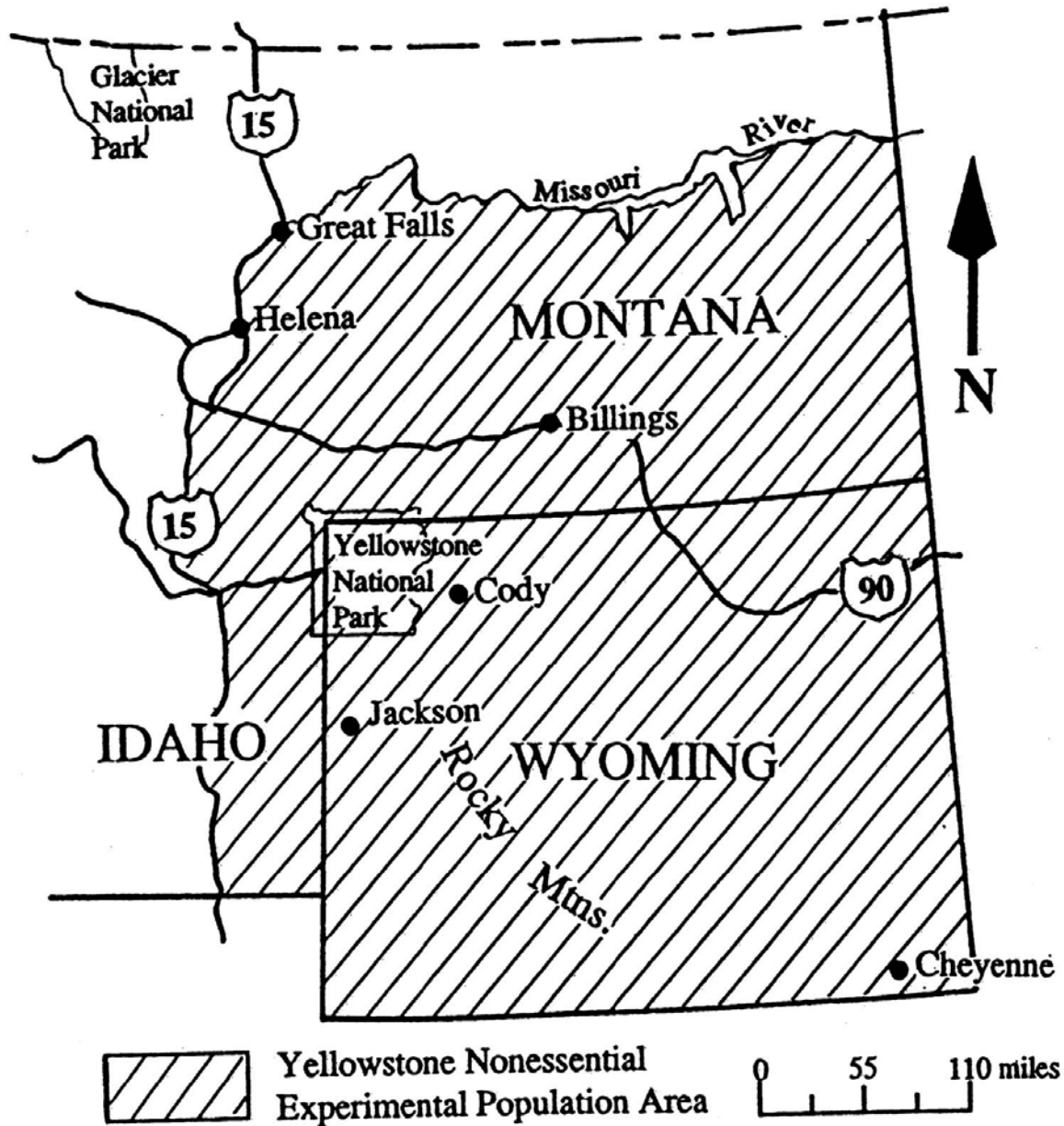
(9) The sites for these experimental populations are within the historic range of the species as designated in §17.84(i)(7):

(i) The central Idaho NEP area is shown on Map 1. The boundaries of the NEP area are those portions of Idaho that are south of Interstate Highway 90 and west of Interstate 15, and those portions of Montana south of Interstate 90, Highways 93 and 12 from Missoula, Montana, west of Interstate 15.



Map 1

(ii) The Yellowstone NEP is shown on Map 2. The boundaries of the NEP area are that portion of Idaho that is east of Interstate Highway 15; that portion of Montana that is east of Interstate Highway 15 and south of the Missouri River from Great Falls, Montana, to the eastern Montana border; and all of Wyoming.



Map 2

(iii) All wolves found in the wild within the boundaries of these experimental areas are considered nonessential experimental animals. In the Western Gray Wolf Distinct Population Segment (Washington, Oregon, California, Nevada, Montana, Idaho, Wyoming, and Utah and Colorado north of Highway 50 and Interstate 70), any wolf that is outside an experimental area is considered threatened. Disposition of wolves outside the NEP areas may take any of the following courses:

(A) Any wolf dispersing from the experimental population areas into other parts of the Western DPS will be managed under the special 4(d) rule for threatened wolves in the Western DPS (50 CFR 17.40(n)).

(B) Any wolf originating from the experimental population areas and dispersing beyond the borders of the Western DPS may be managed by the wolf management regulations established for that area, or may be returned to the experimental population areas if it has not been involved in conflicts with people, or may be removed if it has been involved with conflicts with people.

(10) Wolves in the experimental population areas will be monitored by radio-telemetry or other standard wolf population monitoring techniques as appropriate. Any animal that is sick, injured, or otherwise in need of special care may be captured by authorized personnel of the Service or our designated agent(s) and given appropriate care. Such an animal will be released back into its respective area as soon as possible, unless physical or behavioral problems make it necessary to return the animal to captivity or euthanize it.

(11) *Memoranda of Agreement (MOAs)*. Any State or Tribe with gray wolves, subject to the terms of this paragraph (n), may petition the Secretary for an MOA to take over lead management responsibility and authority to implement this rule by managing the nonessential experimental gray wolves in that State or on that Tribal reservation, and implement all parts of their approved State or Tribal plan that are consistent with this rule, provided that the State or Tribe has a wolf management plan approved by the Secretary.

(i) A State or Tribal petition for wolf management under an MOA must show:

(A) That authority and management capability resides in the State or Tribe to conserve the gray wolf throughout the geographical range of all experimental populations within the State or within the Tribal reservation.

(B) That the State or Tribe has an acceptable conservation program for the gray wolf, throughout all of the NEP areas within the State or Tribal reservation, including the requisite authority and capacity to carry out that conservation program.

(C) A description of exactly what parts of the approved State or Tribal plan the State or Tribe intends to implement within the framework of this rule.

(D) A description of the State or Tribal management progress will be reported to the Service on at least an annual basis so the Service can determine if State or Tribal management has maintained the wolf population above recovery levels and was conducted in full compliance with this rule.

(ii) The Secretary will approve such a petition upon a finding that the applicable criteria are met and that approval is not likely to jeopardize the continued existence of the gray wolf in the Western DPS, as defined in §17.11(h).

(iii) If the Secretary approves the petition, the Secretary will enter into an MOA with the Governor of that State or appropriate Tribal representative.

(iv) An MOA for State or Tribal management as provided in this section may allow a State or Tribe to become designated agents and lead management of nonessential experimental gray wolf populations within the borders of their jurisdictions in accordance with the State's or Tribe's wolf management plan approved by the Service, except that:

(A) The MOA may not provide for any form of management inconsistent with the protection provided to the species under this rule, without further opportunity for appropriate public comment and review and amendment of this rule;

(B) The MOA cannot vest the State or Tribe with any authority over matters concerning section 4 of the Act (determining whether a species warrants listing);

(C) The MOA may not provide for public hunting or trapping absent a finding by the Secretary of an extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved; and

(D) In the absence of a Tribal wolf management plan or cooperative agreement, the MOA cannot vest a State with the authority to issue written authorizations for wolf take on reservations. The Service will retain the authority to issue these written authorizations until a Tribal wolf management plan is approved.

(v) The MOA for State or Tribal wolf management must provide for joint law enforcement responsibilities to ensure that the Service also has the authority to enforce the State or Tribal management program prohibitions on take.

(vi) The MOA may not authorize wolf take beyond that stated in the experimental population rules but may be more restrictive.

(vii) The MOA will expressly provide that the results of implementing the MOA may be the basis upon which State or Tribal regulatory measures will be judged for delisting purposes.

(viii) The authority for the MOA will be the Act, the Fish and Wildlife Act of 1956 (16 U.S.C. 742a–742j), and the Fish and Wildlife Coordination Act (16 U.S.C. 661–667e), and any applicable treaty.

(ix) In order for the MOA to remain in effect, the Secretary must find, on an annual basis, that the management under the MOA is not jeopardizing the continued existence of the gray wolf in the Western DPS. The Secretary or State or Tribe may terminate the MOA upon 90 days notice if:

(A) Management under the MOA is likely to jeopardize the continued existence of the gray wolf in the Western DPS; or

(B) The State or Tribe has failed materially to comply with this rule, the MOA, or any relevant provision of the State or Tribal wolf management plan; or

(C) The Service determines that biological circumstances within the range of the gray wolf indicate that delisting the species is not warranted; or

(D) The States or Tribes determine that they no longer want the wolf management authority vested in them by the Secretary in the MOA.

APPENDIX B

PROPOSED REVISED SPECIAL REGULATION FOR THE REINTRODUCTION OF GRAY WOLVES INTO THE CENTRAL IDAHO AND YELLOWSTONE AREAS

Code of Federal Regulations 50 Part 17.84(n)
(proposed revisions are in red font)

(n) Gray wolf (*Canis lupus*). (1) The gray wolves (wolf) identified in paragraphs (n)(9)(i) and (ii) of this section are nonessential experimental populations. These wolves will be managed in accordance with the respective provisions of this paragraph (n) in the boundaries of the nonessential experimental population (NEP) areas within any State or Tribal reservation that has a wolf management plan that has been approved by the Service, as further provided in this paragraph (n). Furthermore, any State or Tribe that has a wolf management plan approved by the Service can petition the Secretary of the Department of the Interior (DOI) to assume the lead authority for wolf management under this rule within the borders of the NEP areas in their respective State or reservation.

(2) The Service finds that management of nonessential experimental gray wolves, as defined in this paragraph (n), will further the conservation of the species.

(3) Definitions of terms used in paragraph (n) of this section follow:

Active den site —A den or a specific above-ground site that is being used on a daily basis by wolves to raise newborn pups during the period April 1 to June 30.

Breeding pair —An adult male and an adult female wolf that, during the previous breeding season, produced at least two pups that survived until December 31 of the year of their birth.

Designated agent —Includes Federal agencies authorized or directed by the Service, and States or Tribes with a wolf management plan approved by the Director of the Service and with established cooperative agreements with us or Memoranda of Agreement (MOAs) approved by the Secretary of the DOI. Federal agencies, States, or Tribes may become “designated agents” through cooperative agreements with the Service whereby they agree to assist the Service to implement some portions of this rule. If a State or Tribe becomes a “designated agent” through a cooperative agreement, the Service will help coordinate their activities and retain authority for program direction, oversight, and guidance. States and Tribes with approved plans also may become “designated agents” by submitting a petition to the Secretary to establish an MOA under this rule. Once accepted by the Secretary, the MOA may allow the State or Tribe to assume lead authority for wolf management and to implement the portions of their State or Tribal plans that are consistent with this rule. The Service oversight (aside from Service law enforcement investigations) under an MOA is limited to monitoring compliance with this rule, issuing written authorizations for wolf take on reservations without approved wolf management plans, and an annual review of the State or Tribal program to ensure the wolf population is being maintained above recovery levels.

Domestic animals —Animals that have been selectively bred over many generations to enhance specific traits for their use by humans, including use as pets. This includes livestock (as defined below) and dogs.

Intentional harassment —The deliberate and pre-planned harassment of wolves, including by less-than-lethal munitions (such as 12-gauge shotgun rubber-bullets and bean-bag shells), that are designed to cause physical discomfort and temporary physical injury but not death. The wolf may have been tracked, waited for, chased, or searched out and then harassed.

In the act of attacking —The actual biting, wounding, grasping, or killing of livestock or dogs, or chasing, molesting, or harassing by wolves that would indicate to a reasonable person that such biting, wounding, grasping, or killing of livestock or dogs is likely to occur at any moment.

Legally present—Person is (1) on their own property, (2) not trespassing and has the landowner’s permission to bring their stock animal or dog on the property, or (3) abiding by regulations governing legal presence on public lands.

Landowner —An owner of private land, or his/her immediate family members, or the owner's employees who are currently employed to actively work on that private land. In addition, the owner(s) (or his/her employees) of livestock that are currently and legally grazed on that private land and other lease-holders on that private land (such as outfitters or guides who lease hunting rights from private landowners), are considered landowners on that private land for the purposes of this regulation. Private land, under this regulation, also includes all non-Federal land and land within Tribal reservations. Individuals legally using Tribal lands in States with approved plans are considered landowners for the purposes of this rule. “Landowner” in this regulation includes legal grazing permittees or their current employees on State, county, or city public or Tribal grazing lands.

Livestock —Cattle, sheep, horses, mules, goats, domestic bison, and herding and guarding animals (llamas, donkeys, and certain breeds of dogs commonly used for herding or guarding livestock). Livestock excludes dogs that are not being used for livestock guarding or herding.

Non injurious —Does not cause either temporary or permanent physical damage or death.

Opportunistic harassment —Harassment without the conduct of prior purposeful actions to attract, track, wait for, or search out the wolf.

Private land —All land other than that under Federal Government ownership and administration and including Tribal reservations.

Problem wolves —Wolves that have been confirmed by the Service or our designated agent(s) to have attacked or been in the act of attacking livestock or dogs on private land or livestock on public land within the past 45 days. Wolves that we or our designated agent(s) confirm to have attacked any other domestic animals on private land twice within a calendar year are considered problem wolves for purposes of agency wolf control actions.

Public land —Federal land such as that administered by the National Park Service, Service, Bureau of Land Management, USDA Forest Service, Bureau of Reclamation, Department of Defense, or other agencies with the Federal Government.

Public land permittee —A person or that person's employee who has an active, valid Federal land-use permit to use specific Federal lands to graze livestock, or operate an outfitter or guiding business that uses livestock. This definition does not include private individuals or organizations who have Federal permits for other activities on public land such as collecting firewood, mushrooms, antlers, Christmas trees, or logging, mining, oil or gas development, or other uses that do not require livestock. In recognition of the special and unique authorities of Tribes and their relationship with the U.S. Government, for the purposes of this rule, the definition includes Tribal members who legally graze their livestock on ceded public lands under recognized Tribal treaty rights.

Remove —Place in captivity, relocate to another location, or kill.

Research —Scientific studies resulting in data that will lend to enhancement of the survival of the gray wolf.

Rule—Federal regulations —“This rule” or “this regulation” refers to this final NEP regulation; “1994 rules” refers to the 1994 NEP rules (50 CFR 17.84(i)); and “4(d) rule” refers to the 2003 special 4(d) regulations for threatened wolves in the Western DPS (50 CFR 17.40(n)), outside of the experimental population areas.

Stock animal—A horse, mule, donkey, llama, or goat used to transport people or their possessions.

Unacceptable impact — Impact to a wild ungulate population or herd where a State or Tribe has determined that wolves are one of the major causes of the population or herd not meeting established State or Tribal management goals.

Ungulate population or herd—An assemblage of wild ungulates living in a given area.

Wounded —Exhibiting scraped or torn hide or flesh, bleeding, or other evidence of physical damage caused by a wolf bite.

(4) *Allowable forms of take of gray wolves.* The following activities, only in the specific circumstances described under this paragraph (n)(4), are allowed: opportunistic harassment; intentional harassment; take on private land; take on public land **except land administered by National Parks**; take in response to impacts on wild ungulate populations; take in defense of human life; take to protect human safety; take by designated agents to remove problem wolves; incidental take; take under permits; take per authorizations for employees of designated agents; take for research purposes; and **take to protect stock animals and dogs**. Other than as expressly provided in this rule, all other forms of take are considered a violation of section 9 of the Act.

Any wolf or wolf part taken legally must be turned over to the Service unless otherwise specified in this paragraph (n). Any take of wolves must be reported as outlined in paragraph (n)(6) of this section.

(i) *Opportunistic harassment.* Anyone may conduct opportunistic harassment of any gray wolf in a non-injurious manner at any time. Opportunistic harassment must be reported to the Service or our designated agent(s) within 7 days as outlined in paragraph (n)(6) of this section.

(ii) *Intentional harassment.* After we or our designated agent(s) have confirmed wolf activity on private land, on a public land grazing allotment, or on a Tribal reservation, we or our designated agent(s) may issue written take authorization valid for not longer than 1 year, with appropriate conditions, to any landowner or public land permittee to intentionally harass wolves. The harassment must occur in the area and under the conditions as specifically identified in the written take authorization.

(iii) *Take by landowners on their private land.* Landowners may take wolves on their private land in the following two additional circumstances:

(A) Any landowner may immediately take a gray wolf in the act of attacking livestock or dogs on their private land, provided the landowner provides evidence of livestock or dogs recently (less than 24 hours) wounded, harassed, molested, or killed by wolves, and we or our designated agent(s) are able to confirm that the livestock or dogs were wounded, harassed, molested, or killed by wolves. The carcass of any wolf taken and the area surrounding it should not be disturbed in order to preserve physical evidence that the take was conducted according to this rule. The take of any wolf without such evidence of a direct and immediate threat may be referred to the appropriate authorities for prosecution.

(B) A landowner may take wolves on his/her private land if we or our designated agent issued a “shoot-on-sight” written take authorization of limited duration (45 days or less), and if:

(1) This landowner's property has had at least one depredation by wolves on livestock or dogs that has been confirmed by us or our designated agent(s) within the past 30 days; and

(2) We or our designated agent(s) have determined that problem wolves are routinely present on that private property and present a significant risk to the health and safety of other livestock or dogs; and

(3) We or our designated agent(s) have authorized agency lethal removal of problem wolves from that same property. The landowner must conduct the take in compliance with the written take authorization issued by the Service or our designated agent(s).

(iv) *Take on public land.* Any livestock producer and public land permittee (see definitions in paragraph (n)(3) of this section) who is legally using public land under a valid Federal land-use permit may immediately take a gray wolf in the act of attacking his/her livestock on his/her allotment or other area authorized for his/her use without prior written authorization, provided that producer or permittee provides evidence of livestock recently (less than 24 hours) wounded,

harassed, molested, or killed by wolves, and we or our designated agent(s) are able to confirm that the livestock were wounded, harassed, molested, or killed by wolves. The carcass of any wolf taken and the area surrounding it should not be disturbed, in order to preserve physical evidence that the take was conducted according to this rule. The take of any wolf without such evidence may be referred to the appropriate authorities for prosecution.

(A) At our or our designated agent(s)' discretion, we or our designated agent(s) also may issue a shoot-on-sight written take authorization of limited duration (45 days or less) to a public land grazing permittee to take problem wolves on that permittee's active livestock grazing allotment if:

(1) The grazing allotment has had at least one depredation by wolves on livestock that has been confirmed by us or our designated agent(s) within the past 30 days; and

(2) We or our designated agent(s) have determined that problem wolves are routinely present on that allotment and present a significant risk to the health and safety of livestock; and

(3) We or our designated agent(s) have authorized agency lethal removal of problem wolves from that same allotment.

(B) The permittee must conduct the take in compliance with the written take authorization issued by the Service or our designated agent(s).

(v) *Take in response to wild ungulate impacts.* If wolf predation is having an unacceptable impact on wild ungulate populations (deer, elk, moose, bighorn sheep, mountain goats, antelope, or bison) as determined by the respective State or Tribe, a State or Tribe may lethally remove the wolves in question.

(A) In order for this provision to apply, the States or Tribes must prepare a science-based document that:

(1) Describes the basis of ungulate population or herd management objectives, what data indicate that the ungulate population or herd is below management objectives, what data indicate that wolves are a major cause of the unacceptable impact to the ungulate population or herd, why wolf removal is a warranted solution to help restore the ungulate population or herd to State or Tribal management objectives, the level and duration of wolf removal being proposed, and how ungulate population or herd response to wolf removal will be measured and control actions adjusted for effectiveness;

(2) Demonstrates that attempts were and are being made to address other identified major causes of ungulate herd or population declines or the State or Tribe commits to implement possible remedies or conservation measures in addition to wolf removal; and

(3) Provides an opportunity for peer review and public comment on their proposal prior to submitting it to the Service for written concurrence. **The State or Tribe must:**

(i) Conduct the peer review process in conformance with the Office of Management and Budget's Final Information Quality Bulletin for Peer Review (70 FR 2664, January 14, 2005) and include in their proposal an explanation of how the bulletin's standards were considered and satisfied; and

(ii) Obtain at least five independent peer reviews from individuals with relevant expertise other than staff employed by a State, Tribal, or Federal agency directly or indirectly involved with predator control or ungulate management in Idaho, Montana, or Wyoming.

(B) Before we authorize lethal removal, we must determine that an unacceptable impact to wild ungulate populations or herds has occurred. We also must determine that the proposed lethal removal is science-based, will not contribute to reducing the wolf population in the State below 20 breeding pairs and 200 wolves, and will not impede wolf recovery.

(vi) *Take in defense of human life.* Any person may take a gray wolf in defense of the individual's life or the life of another person. The unauthorized taking of a wolf without demonstration of an immediate and direct threat to human life may be referred to the appropriate authorities for prosecution.

(vii) *Take to protect human safety.* We or our designated agent(s) may promptly remove any wolf that we or our designated agent(s) determines to be a threat to human life or safety.

(viii) *Take of problem wolves by Service personnel or our designated agent(s).* We or our designated agent(s) may carry out harassment, non lethal control measures, relocation, placement in captivity, or lethal control of problem wolves. To determine the presence of problem wolves, we or our designated agent(s) will consider all of the following:

(A) Evidence of wounded livestock, dogs, or other domestic animals, or remains of livestock, dogs, or domestic animals that show that the injury or death was caused by wolves, or evidence that wolves were in the act of attacking livestock, dogs, or domestic animals;

(B) The likelihood that additional wolf-caused losses or attacks may occur if no control action is taken;

(C) Evidence of unusual attractants or artificial or intentional feeding of wolves; and

(D) Evidence that animal husbandry practices recommended in approved allotment plans and annual operating plans were followed.

(ix) *Incidental take.* Take of a gray wolf is allowed if the take is accidental and incidental to an otherwise lawful activity and if reasonable due care was practiced to avoid such take, and such take is reported within 24 hours. Incidental take is not allowed if the take is not accidental or if reasonable due care was not practiced to avoid such take, or it was not reported within 24 hours (we may allow additional time if access to the site of the take is limited), and we may refer such

taking to the appropriate authorities for prosecution. Shooters have the responsibility to identify their target before shooting. Shooting a wolf as a result of mistaking it for another species is not considered accidental and may be referred to the appropriate authorities for prosecution.

(x) *Take under permits.* Any person with a valid permit issued by the Service under §17.32, or our designated agent(s), may take wolves in the wild, pursuant to terms of the permit.

(xi) *Additional take authorization for agency employees.* When acting in the course of official duties, any employee of the Service or our designated agent(s) may take a wolf or wolf-like canid for the following purposes:

(A) Scientific purposes;

(B) To avoid conflict with human activities;

(C) To further wolf survival and recovery;

(D) To aid or euthanize sick, injured, or orphaned wolves;

(E) To dispose of a dead specimen;

(F) To salvage a dead specimen that may be used for scientific study;

(G) To aid in law enforcement investigations involving wolves; or

(H) To prevent wolves or wolf-like canids with abnormal physical or behavioral characteristics, as determined by the Service or our designated agent(s), from passing on or teaching those traits to other wolves.

(I) Such take must be reported to the Service within 7 days as outlined in paragraph (n)(6) of this section, and specimens are to be retained or disposed of only in accordance with directions from the Service.

(xii) *Take for research purposes.* We may issue permits under §17.32, or our designated agent(s) may issue written authorization, for individuals to take wolves in the wild pursuant to approved scientific study proposals. Scientific studies should be reasonably expected to result in data that will lend to development of sound management of the gray wolf, and lend to enhancement of its survival as a species.

(xiii) Take to protect stock animals and dogs. Any legally present person on private or public land except land administered by the National Park Service may immediately take a wolf that is in the act of attacking the individual's stock animal or dog, provided that there is no evidence of intentional baiting, feeding, or deliberate attractants of wolves. The person must be able to provide evidence of stock animals or dogs recently (less than 24 hours) wounded, harassed, molested, or killed by wolves, and we or our designated agents must be able to confirm that the stock animals or dogs were wounded, harassed, molested, or killed by wolves. To preserve

evidence that the take of a wolf was conducted according to this rule, the person must not disturb the carcass and the area surrounding it. The take of any wolf without such evidence of a direct and immediate threat may be referred to the appropriate authorities for prosecution.

(5) *Federal land use.* Restrictions on the use of any Federal lands may be put in place to prevent the take of wolves at active den sites between April 1 and June 30. Otherwise, no additional land-use restrictions on Federal lands, except for National Parks or National Wildlife Refuges, may be necessary to reduce or prevent take of wolves solely to benefit gray wolf recovery under the Act. This prohibition does not preclude restricting land use when necessary to reduce negative impacts of wolf restoration efforts on other endangered or threatened species.

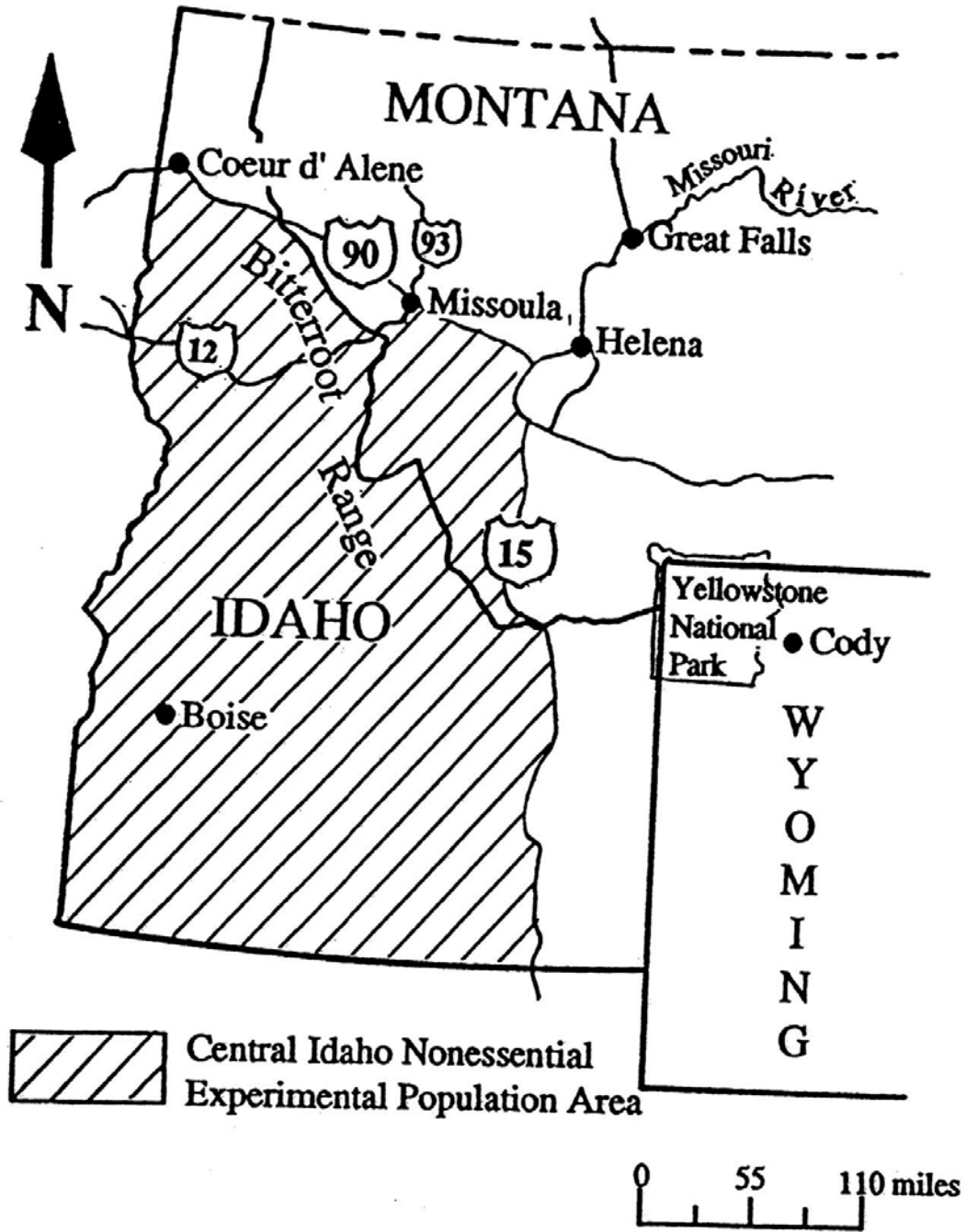
(6) *Reporting requirements.* Except as otherwise specified in paragraph (n) of this section or in a permit, any take of a gray wolf must be reported to the Service or our designated agent(s) within 24 hours. We will allow additional reasonable time if access to the site is limited. Report any take of wolves, including opportunistic harassment, to U.S. Fish and Wildlife Service, Western Gray Wolf Recovery Coordinator (100 North Park, Suite 320, Helena, Montana 59601, 406–449–5225 extension 204; facsimile 406–449–5339), or a Service-designated agent of another Federal, State, or Tribal agency. Unless otherwise specified in paragraph (n) of this section, any wolf or wolf part taken legally must be turned over to the Service, which will determine the disposition of any live or dead wolves.

(7) No person shall possess, sell, deliver, carry, transport, ship, import, or export by any means whatsoever, any wolf or part thereof from the experimental populations taken in violation of the regulations in paragraph (n) of this section or in violation of applicable State or Tribal fish and wildlife laws or regulations or the Act.

(8) It is unlawful for any person to attempt to commit, solicit another to commit, or cause to be committed any offense defined in this section.

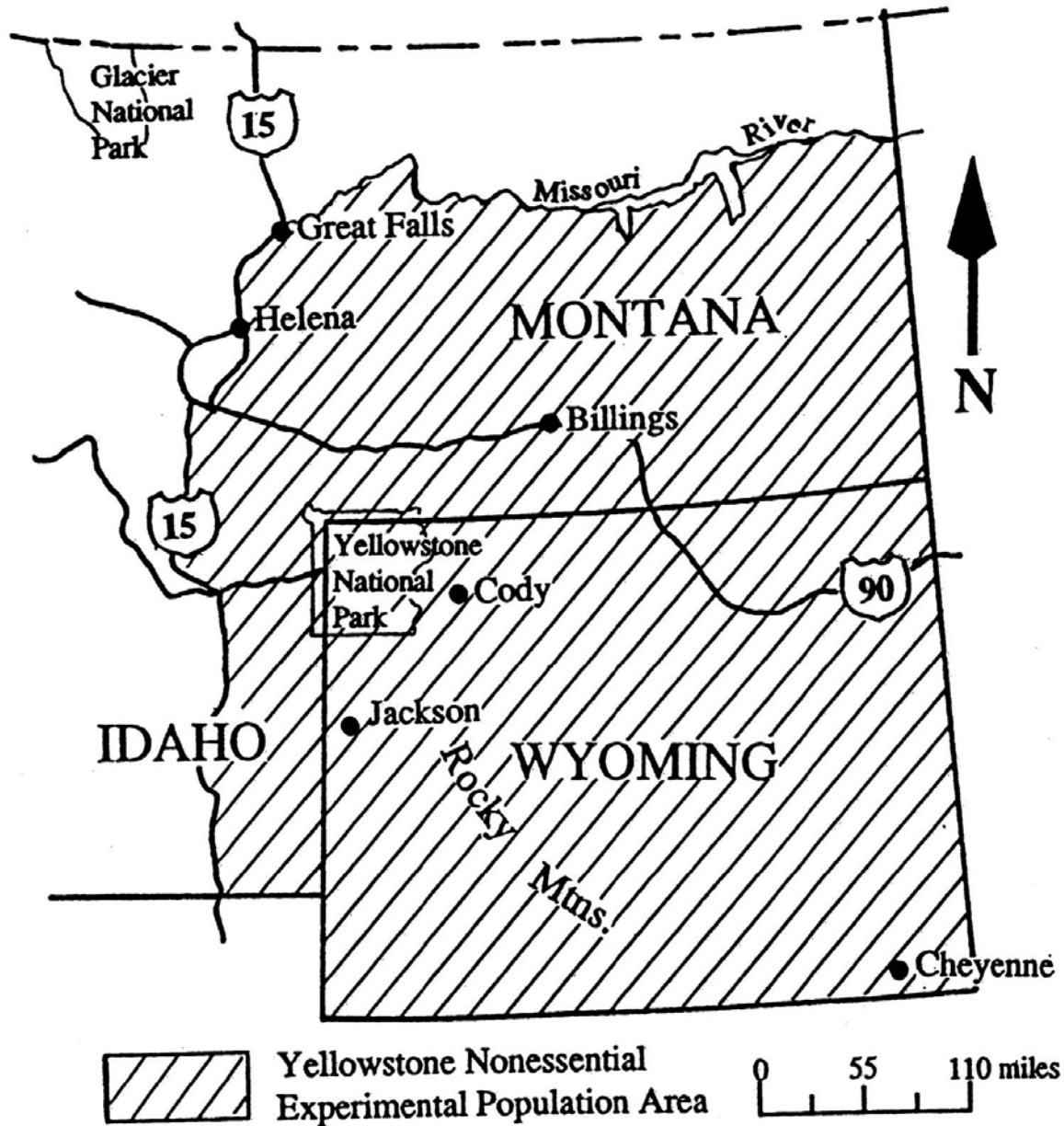
(9) The sites for these experimental populations are within the historic range of the species as designated in §17.84(i)(7):

(i) The central Idaho NEP area is shown on Map 1. The boundaries of the NEP area are those portions of Idaho that are south of Interstate Highway 90 and west of Interstate 15, and those portions of Montana south of Interstate 90, Highways 93 and 12 from Missoula, Montana, west of Interstate 15.



Map 1

(ii) The Yellowstone NEP is shown on Map 2. The boundaries of the NEP area are that portion of Idaho that is east of Interstate Highway 15; that portion of Montana that is east of Interstate Highway 15 and south of the Missouri River from Great Falls, Montana, to the eastern Montana border; and all of Wyoming.



Map 2

(iii) All wolves found in the wild within the boundaries of these experimental areas are considered nonessential experimental animals. In the Western Gray Wolf Distinct Population Segment (Washington, Oregon, California, Nevada, Montana, Idaho, Wyoming, and Utah and Colorado north of Highway 50 and Interstate 70), any wolf that is outside an experimental area is considered threatened. Disposition of wolves outside the NEP areas may take any of the following courses:

(A) Any wolf dispersing from the experimental population areas into other parts of the Western DPS will be managed under the special 4(d) rule for threatened wolves in the Western DPS (50 CFR 17.40(n)).

(B) Any wolf originating from the experimental population areas and dispersing beyond the borders of the Western DPS may be managed by the wolf management regulations established for that area, or may be returned to the experimental population areas if it has not been involved in conflicts with people, or may be removed if it has been involved with conflicts with people.

(10) Wolves in the experimental population areas will be monitored by radio-telemetry or other standard wolf population monitoring techniques as appropriate. Any animal that is sick, injured, or otherwise in need of special care may be captured by authorized personnel of the Service or our designated agent(s) and given appropriate care. Such an animal will be released back into its respective area as soon as possible, unless physical or behavioral problems make it necessary to return the animal to captivity or euthanize it.

(11) *Memoranda of Agreement (MOAs)*. Any State or Tribe with gray wolves, subject to the terms of this paragraph (n), may petition the Secretary for an MOA to take over lead management responsibility and authority to implement this rule by managing the nonessential experimental gray wolves in that State or on that Tribal reservation, and implement all parts of their approved State or Tribal plan that are consistent with this rule, provided that the State or Tribe has a wolf management plan approved by the Secretary.

(i) A State or Tribal petition for wolf management under an MOA must show:

(A) That authority and management capability resides in the State or Tribe to conserve the gray wolf throughout the geographical range of all experimental populations within the State or within the Tribal reservation.

(B) That the State or Tribe has an acceptable conservation program for the gray wolf, throughout all of the NEP areas within the State or Tribal reservation, including the requisite authority and capacity to carry out that conservation program.

(C) A description of exactly what parts of the approved State or Tribal plan the State or Tribe intends to implement within the framework of this rule.

(D) A description of the State or Tribal management progress will be reported to the Service on at least an annual basis so the Service can determine if State or Tribal management has maintained the wolf population above recovery levels and was conducted in full compliance with this rule.

(ii) The Secretary will approve such a petition upon a finding that the applicable criteria are met and that approval is not likely to jeopardize the continued existence of the gray wolf in the Western DPS, as defined in §17.11(h).

(iii) If the Secretary approves the petition, the Secretary will enter into an MOA with the Governor of that State or appropriate Tribal representative.

(iv) An MOA for State or Tribal management as provided in this section may allow a State or Tribe to become designated agents and lead management of nonessential experimental gray wolf populations within the borders of their jurisdictions in accordance with the State's or Tribe's wolf management plan approved by the Service, except that:

(A) The MOA may not provide for any form of management inconsistent with the protection provided to the species under this rule, without further opportunity for appropriate public comment and review and amendment of this rule;

(B) The MOA cannot vest the State or Tribe with any authority over matters concerning section 4 of the Act (determining whether a species warrants listing);

(C) The MOA may not provide for public hunting or trapping absent a finding by the Secretary of an extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved; and

(D) In the absence of a Tribal wolf management plan or cooperative agreement, the MOA cannot vest a State with the authority to issue written authorizations for wolf take on reservations. The Service will retain the authority to issue these written authorizations until a Tribal wolf management plan is approved.

(v) The MOA for State or Tribal wolf management must provide for joint law enforcement responsibilities to ensure that the Service also has the authority to enforce the State or Tribal management program prohibitions on take.

(vi) The MOA may not authorize wolf take beyond that stated in the experimental population rules but may be more restrictive.

(vii) The MOA will expressly provide that the results of implementing the MOA may be the basis upon which State or Tribal regulatory measures will be judged for delisting purposes.

(viii) The authority for the MOA will be the Act, the Fish and Wildlife Act of 1956 (16 U.S.C. 742a–742j), and the Fish and Wildlife Coordination Act (16 U.S.C. 661–667e), and any applicable treaty.

(ix) In order for the MOA to remain in effect, the Secretary must find, on an annual basis, that the management under the MOA is not jeopardizing the continued existence of the gray wolf in the Western DPS. The Secretary or State or Tribe may terminate the MOA upon 90 days notice if:

(A) Management under the MOA is likely to jeopardize the continued existence of the gray wolf in the Western DPS; or

(B) The State or Tribe has failed materially to comply with this rule, the MOA, or any relevant provision of the State or Tribal wolf management plan; or

(C) The Service determines that biological circumstances within the range of the gray wolf indicate that delisting the species is not warranted; or

(D) The States or Tribes determine that they no longer want the wolf management authority vested in them by the Secretary in the MOA.