

**APPENDIX D: RESPONSES TO PUBLIC COMMENTS ON THE
PROPOSED RULE AND DRAFT ENVIRONMENTAL IMPACT
STATEMENT**



Colorado Gray Wolf 10(j) Final Rule and Final Environmental Impact Statement

Public Comment Analysis Report on the Draft Rule and Draft Environmental Impact Statement

July 2023

[This page intentionally left blank.]

CONTENTS

Introduction.....	1
Public Comment for the Colorado Gray Wolf 10(j) Rulemaking.....	1
Definition of Terms.....	2
Comment Analysis Methodology	2
Guide to the Concern/Response Report	3
How Will My Comment Be Used?.....	3
Concern Report	4
Public Scoping Comment Summary	22
<i>Boundary</i>	22
<i>Endangered Species Act</i>	27
<i>Ungulate Provision</i>	29
<i>Take</i>	31
<i>Illegal Take</i>	64
<i>National Environmental Policy Act (NEPA)</i>	66
<i>Consultation</i>	70
<i>Socioeconomics</i>	72
<i>New Alternatives</i>	77
<i>Ecosystems</i>	82
<i>Environmental Justice</i>	83
<i>Tribal Resources</i>	85
<i>Special Status Species</i>	86
<i>Gray Wolf Impacts</i>	87
<i>Mexican Wolf Impacts</i>	91
<i>Other Wildlife</i>	94
<i>Impact Topics</i>	96
<i>Cumulative Impacts</i>	99
<i>Other</i>	100
<i>Paperwork Reduction Act</i>	104
<i>Essential or Nonessential</i>	104
<i>Requests for Extension</i>	106
References.....	106

LIST OF TABLES

Table 1. Code, Corresponding Concern ID, and Corresponding Concern Statement.....	4
---	---

[This page intentionally left blank.]

INTRODUCTION

The U.S. Fish and Wildlife Service (Service) held a public comment period for the Colorado Gray Wolf 10(j) rule and draft environmental impact statement (DEIS) from February 17, 2023, to April 18, 2023. During the public comment period, four in-person open house meetings were held in Grand Junction, Craig, Walden, and Golden, Colorado, on March 14, March 15, March 16, and March 28, 2023, respectively. A virtual public meeting was held on March 22, 2023. Members of the public were encouraged to submit comments online through <https://www.regulations.gov> (following instructions to submit comments to Docket No. FWS-R6-ES-2022-0100). Written comments were also accepted by mail. Approximately 4,290 pieces of correspondence were received during the public comment period for the rule and DEIS, with 1 correspondence having 16,233 signatures. Additional detail is provided in this report. This report describes the public comment process for the rule and DEIS and presents the analysis and summary of public comments received.

PUBLIC COMMENT FOR THE COLORADO GRAY WOLF 10(j) RULEMAKING

The public comment period was open for 60 days between February 17, 2023, and April 18, 2023. The Service issued a press release to local media outlets and published the press release on the Colorado Ecological Services Field Office website on February 15, 2023, announcing the dates, times, and places of the public meetings. The Service opened the public comment period on February 17, 2023. Notifications were sent to Tribes, states, County Commissions, and Congressional offices notifying them of the public scoping meetings and offering to brief them on the process, and the webpage for Docket No. FWS-R6-ES-2022-0100 on <https://www.regulations.gov/> was activated for the public to submit comments. The Notice of Intent was published in the *Federal Register* on February 17, 2023. Four in-person public meetings were held during the comment period at the following locations:

- March 14, 2023: Grand Junction Convention Center, Grand Junction, Colorado
- March 15, 2023: Moffat County Pavilion, Craig, Colorado
- March 16, 2023: Wattenberg Center, Walden, Colorado
- March 28, 2023: Denver Marriott West, Golden, Colorado

Additionally, the Service held a virtual public meeting on March 22, 2023.

Approximately 270 people attended the four in-person meetings and virtual meeting (65 people attended the meeting in Grand Junction, 50 people attended the meeting in Craig, 70 people attended the meeting in Walden, 15 people attended the meeting in Golden, and 70 people attended the virtual meeting).

At each meeting, handouts of the public newsletter were available that included information about the background of the proposed 10(j) rule, the proposed purpose and need, alternatives and issues analyzed in the DEIS, and information on how to submit comments online or via mail. This information was also displayed on banners at each in-person meeting venue and presented in a PowerPoint presentation during the virtual meeting. Service personnel, as well as staff from Colorado Parks and Wildlife (at the in-person meetings only), were available to answer questions and provide additional information to meeting attendees.

Interested parties were encouraged to enter their comments directly on <https://www.regulations.gov/>. Hard copy correspondence received by mail were also collected for analysis. All correspondence was entered into a web-based system, DiscoverText, for coding and analysis. DiscoverText is a text analytics software system that supports sorting and analysis of written comments.

DEFINITION OF TERMS

Primary terms used in the document are defined below.

Correspondence: A correspondence is the entire document received from a commenter. This includes letters; written comment forms; comments submitted directly on <https://www.regulations.gov/>; and any other written comments provided either at the public scoping meetings or by mail.

Comment: A comment is a portion of the text within a correspondence that addresses a single subject. It could include such information as an expression of support or opposition for an alternative; additional data regarding existing conditions; or suggestions for resource topics, alternatives, or alternative elements to be considered.

Code: A code is a grouping centered on a common subject. The codes were developed during the scoping process and are used to track major subjects.

Concern: Concerns are statements that summarize the issues identified under each code. Each code was further characterized by concern statements to provide a better focus on the content of comments. Some codes required multiple concern statements, while others did not. In cases where no comments were received on an issue, the code was not identified or discussed in this report.

Quotes: Representative quotes have been taken directly from the text of the comments received from the public and further clarify the concern statements. Some quotes were edited slightly to correct formatting and spelling.

COMMENT ANALYSIS METHODOLOGY

Correspondence was received by hard-copy letter via mail, on comment sheets submitted at the public meetings, or correspondence entered directly into <https://www.regulations.gov/>. Letters received by email or through the U.S. mail are included in the analysis.

Once all the correspondence was entered into DiscoverText, each was read, and specific comments within each unique correspondence were identified. More than 1,900 comments were derived from the unique correspondence received. In addition to unique correspondence, 1,617 form letters were received. When identifying comments, every attempt was made to capture the full breadth of comments submitted. During the public comment period, approximately 250 pieces of correspondence were received that discussed only issues related to the State Plan and the action of wolf reintroduction. Because these correspondences were outside the scope of the analysis, they were categorized as nonsubstantive comments.

To categorize comments, each comment was assigned one or multiple codes to identify the general content of a comment and to group similar comments. Twenty-three codes were used to categorize the comments received. Examples of codes developed for this project are *Consultation*, *Socioeconomics*, and *Special Status Species*. In some cases, the same comment may be categorized under more than one code, reflecting the fact that the comment may address more than one issue or idea.

GUIDE TO THE CONCERN/RESPONSE REPORT

The *Concern/Response Report* is provided in the following section of this document. This report summarizes the comments received during the public comment process. In the report, comments are organized by codes and further organized into concern statements. Representative quotes are provided for each concern statement. The Service's response to each concern statement is provided below the representative quotes for that concern statement. A list of concern statements, in table format, is provided at the beginning of the *Concern Report* section for quick reference (refer to table 1).

HOW WILL MY COMMENT BE USED?

As described above, all comments are categorized into concern statements, such as "Commenters requested that the Bureau of Land Management and U.S. Forest Service be cooperating agencies for the DEIS" and "Commenters requested that the DEIS look at impacts and interactions with the Mexican wolf." These concerns are listed in table 1 in the *Concern Report* section of this document. A response has been provided for each concern. If changes to the DEIS or rule were required based on a concern, the comment response notes that the corresponding change was made in the Final EIS (FEIS) and/or the final rule.

CONCERN REPORT

As described above, this report summarizes the comments received during the public comment period for the 10(j) rule and DEIS in support of the State of Colorado's reintroduction of the gray wolf. Table 1 provides a concise list of concern statements by code for quick reference. It is followed by the full concern report, which includes representative quotes.

Table 1. Code, Corresponding Concern ID, and Corresponding Concern Statement

Boundary	
Concern 1	Commenters requested the boundary of the nonessential experimental population be reduced from the entire State of Colorado, with some suggesting it be 50 miles (80 kilometers) around each release site. Commenters noted this would allow gray wolves migrating into Colorado to have full protection under the Endangered Species Act (ESA) rather than be considered threatened, as they would be under the 10(j) rule. Commenters also suggested that specific areas of the State of Colorado be excluded (i.e., North Park, Moffat County, Routt County and Rio Blanco County) because of the existing gray wolves in these areas.
Concern 2	Commenters requested that the boundary for the 10(j) be expanded to be larger than the State of Colorado and include the northwest portion of Utah that falls within the Northern Rocky Mountain Distinct Population Segment and north of the Colorado State border into Wyoming up Interstate 80. They noted this would provide a buffer zone for the wolves and address the wolf dispersal that would likely occur.
Concern 3	Commenters stated opposition to using 10(a)1(A) permits to remove wolves that venture to neighboring states and return them to Colorado. Commenters stated that dispersing wolves should be able to live where they find suitable habitat and that dispersal would help reestablish the population. They also expressed concern regarding potential injuries to wolves during relocation.
Concern 4	Commenters questioned the legality of introducing wolves to areas of Colorado where they are already present, specifically northwest Colorado. They further noted that the reintroduced population would not be wholly separate geographically, and therefore alternative 2 is not a legal alternative. Commenters questioned the Service's definition of a population of gray wolves and the determination that an existing population of gray wolves had not been identified in Colorado at the time of publication of the FEIS.
Concern 5	Commenters questioned what the status of wolves crossing into Colorado from other states would be and asked how the Service could apply section 10(j) regulations to wolves that had dispersed naturally to Colorado. They suggested that since populations must be "wholly separate geographically" that wolves entering Colorado should not be part of the experimental population.
Concern 6	One commenter expressed concern about how the three alternatives in the DEIS would protect wolves from being killed when they cross or are driven across the border into southern Wyoming.
Endangered Species Act	
Concern 7	One commenter noted that because gray wolves are federally listed as endangered under the ESA, the State must obtain approval from the Service to reintroduce the species.

Table 1. Code, Corresponding Concern ID, and Corresponding Concern Statement

Concern 8	Commenters requested that the 10(j) rule state that the Service will propose to delist the nonessential experimental population from the ESA as soon as possible after Colorado removes wolves from the state list. Some commenters noted that reintroduction of wolves in Colorado should support delisting the species under the ESA or not affect the Service's decision to delist the species in the lower 44 states. They further noted if the Service determines that the currently listed entity no longer meets the standards for an ESA listing, it must delist the species (including any wolves in Colorado), regardless of the status of Colorado's wolf reintroduction.
Concern 9	Commenters recommended that the Service retain authority over the State of Colorado in implementing measures to promote the recovery of the gray wolf in the state and meet requirements under section 7(a)(1) of the ESA.
Concern 10	Commenters noted that the rule may violate the ESA by not addressing threats to the species or supporting recovery and conservation of the species in Colorado. One commenter suggested the Service should complete section 7 consultation to assess the impacts of lethal take on the species.
Concern 11	One commenter noted that the requirement for federal agencies to consult with the Service on any federal activities that may impact gray wolves would delay fuel reduction and wildfire mitigation projects on federal lands in Colorado and increase the risk of catastrophic wildfires.
Ungulate Provision	
Concern 12	Commenters expressed opposition to adding a provision to the rule to manage gray wolves that are impacting ungulate populations. Some commenters reasoned that the provision would be unnecessary because of scientific research indicating that wolves do not tend to markedly reduce ungulate populations, especially on larger scales. A commenter said that elk populations have increased in Idaho, Montana, and Wyoming even with wolves present and asserted that lethal control of wolves would rarely be justifiable. Another commenter cited research from Alberta, Canada, and Alaska that indicated removing predators did not necessarily increase ungulate populations or reduce hunter harvest of elk. Commenters noted that the lethal take of wolves permitted in the northern Rocky Mountains nonessential experimental population has led to unsustainable wolf hunting practices. Commenters said that managing wolf populations to benefit ungulates and the hunting industry would be contrary to the goals of the reintroduction. They also indicated that allowing lethal take of a federally listed species to provide recreational opportunities like hunting would be inappropriate. A commenter argued that lethal take of wolves to benefit hunters would be immoral and unfair because thriving wolf populations confer ecological benefits to all people. Commenters noted that wolves tend to predate on weak and diseased ungulates, leading to a stronger and healthier ungulate population and reducing chronic wasting disease. One commenter specifically requested that wolves not be killed in response to decreases in nonnative mountain goat populations.

Table 1. Code, Corresponding Concern ID, and Corresponding Concern Statement

Concern 13	Commenters expressed support for adding a provision to the rule to manage gray wolves that are having an impact on ungulate populations. Commenters requested that the provision mirror the guidelines in the 2005 final rule that established a northern Rocky Mountains gray wolf nonessential experimental population. Commenters argued that the ungulate provision in the northern Rocky Mountains nonessential experimental population rule gave managers the tools to mitigate effects on ungulates, and they indicated that ungulate populations would be at risk without the provision. Commenters noted that a reduction of ungulate populations could have economic impacts, particularly in the form of reduced revenues from hunting and decreased funding for CPW via ungulate hunting license sales. Commenters also worried that if wolves are allowed to severely depopulate ungulates, they may seek out livestock as an alternate food source, increasing impacts on livestock. Some commenters were specifically concerned about wolf impacts to the recovering moose population without the ungulate provision in place. A few commenters worried about high levels of predation on ungulates during the winter because wolves can travel on snow while ungulates typically do not. One commenter said that because wolves reproduce in litters with multiple pups, they have an advantage over other species that produce a single offspring annually, so the ungulate provision should be included to counteract that advantage.
Take	
Concern 14	Commenters expressed disapproval for the lethal take permitted in the rule. Some commenters said that all lethal take of wolves, except in immediate defense of life, should be illegal. Commenters asked that people who lethally take wolves face felony criminal penalties, at least two years in prison, and fines.
Concern 15	Commenters cited scientific research that has proven the effectiveness of nonlethal approaches at reducing livestock conflicts over lethal approaches. Some commenters noted that legalized lethal take of wolves can lead to less public respect and tolerance of wolves and may encourage more poaching. Commenters were specifically opposed to private individuals being permitted to lethally take wolves. One commenter noted that even when individual problem wolves are targeted for lethal take, mistakes have occurred, and the incorrect wolf was killed as a result. The commenter gave an example from southeast Washington. Commenters requested that wolves in Colorado be considered endangered with full ESA protections and noted that previous extirpations of wolves have been because of liberal lethal take. Other commenters asked for the rule to specifically ban lethal take of pups and breeding pairs. Commenters urged the Service to require nonlethal prevention measures before allowing any lethal take. Proposed methods for conflict avoidance included fladry, conditioned taste aversion, strobe lights, low stress stockmanship, range riders, fox lights, guard animals, removing livestock carcasses and bone piles, increasing human supervision, and adjusting calving time and location. Commenters cited studies and examples from the northern Rocky Mountains and Great Lakes region that document nonlethal conflict prevention's effectiveness. One commenter suggested additional management strategies, such as using avoidance collars on wolves so that they avoid coming close to livestock and making wolves' first encounter with livestock negative, so they learn to avoid livestock. Another commenter asked for more management flexibility to address expanding gray wolf populations. The commenter also asked for new technology measures to be considered such as "LED lights attached to ears of livestock, electric fences, shock collars put on wolves, or deterrents such as the radio-activated guard (RAG) box, a device which keeps wolves away by emitting strobe lights and sounds when triggered by a signal from radio collars." Another commenter asked the Service to allow use of less than lethal munitions to opportunistically harass wolves.

Table 1. Code, Corresponding Concern ID, and Corresponding Concern Statement

Concern 16	Commenters asked for wolf population recovery to be at the center of the Service's action. Commenters proposed that ranchers should not be allowed to take wolves until there is a self-sustaining population established in the state. Commenters also asked the Service to consider the intrinsic value of each individual wolf and the overall health of the population in addition to establishing numerical population goals. Commenters requested that the Service clarify how lethal take allowances would benefit the reintroduced wolf population and aid in their recovery. One commenter said the Service should prioritize the protection of gray wolves over other topics discussed in the rule and FEIS. The commenter noted that human-caused mortality was the main driver of gray wolf population decline in both the past and the present. The commenter urged the Service to consider that lethal take of wolves has weakened the metapopulation formed by wolves in central Idaho, northwest Montana, and the Yellowstone region.
Concern 17	Commenters expressed support for lethal take allowances in the rule and in the FEIS and said that lethal take is a necessary management strategy to have available. Commenters were in favor of the management flexibility provided in the rule and under alternative 1 of the FEIS. Commenters noted that the previous reintroductions in the northern Rocky Mountains have succeeded with the management flexibility of a 10(j) rule. Commenters noted that lethal take is necessary to protect the livestock industry and other wildlife and requested that the permitting process for lethal take be liberal and streamlined to prevent livestock losses. Some commenters were specifically supportive of take provisions for wolves caught in the act of predating on pets and working dogs. Commenters said that lethal take would be important to prevent extreme growth of wolf populations in Colorado and impacts on livestock, big game, and other wildlife species. Some commenters said they appreciated the greater flexibility allowed in the Service's rule compared to the State Plan, specifically in relation to taking wolves "in the act of attacking" and the reporting requirements. Commenters said that lethal take would be the only feasible option in many cases and asserted that nonlethal measures like relocation and livestock guardian dogs are ineffective.
Concern 18	A commenter said reporting of lethal take or harassment should be permitted through a phone call or website in addition to mail or email.
Concern 19	Commenters asked the Service to fine livestock operators who do not remove carcasses promptly.
Concern 20	Commenters asked that each pack of wolves be consistently monitored to give livestock operators a chance to take steps to protect their animals and prevent lethal take from occurring as a result of depredations.
Concern 21	Several commenters requested a limit to the overall numbers of wolves that can be lethally taken.
Concern 22	Commenters asked the Service to work collaboratively with livestock operators and require proof of use of conflict prevention measures before lethal take is considered. Commenters noted that immediately allowing lethal take would disincentivize use of nonlethal management as a first step. Commenters said that the onus should be on livestock operators to manage their livestock to avoid conflicts rather than managing wolves to avoid conflicts. A commenter said that determinations regarding causes of livestock deaths should be made publicly available prior to any lethal take and should include summaries of livestock losses, investigation reports, maps of areas with known wolf activity and depredations, and conflict deterrence plans specific to the area. They also requested that take authorizations should end after the wolf is killed, the wolf leaves the area, or after 14 days. Commenters also suggested that wolves that chronically depredate on livestock could be translocated rather than lethally taken. Commenters asked the Service to ensure that the rule does not unintentionally incentivize lethal take over nonlethal take.

Table 1. Code, Corresponding Concern ID, and Corresponding Concern Statement

Concern 23	<p>Commenters asked the Service to incorporate additional scientific research into its take provisions. Commenters said the take permitted in the rule favors people who do not support wolf reintroduction and does not rely on the science behind wolf conflict prevention. Commenters asked the Service to incorporate science on minimum viable population sizes in the rule. Commenters noted research with the following findings:</p> <ul style="list-style-type: none">• Keeping wolf mortality as close as possible to natural death rates leads to less depredation by wolves, while higher lethal take leads to more depredation because of social disruption to wolves.• Only targeted lethal removal of known individual depredating wolves can reduce future depredations.• Timing of removal should be less than 7 days after the depredation event for the most effective reduction in conflicts.• Nonlethal tools are more effective than lethal management.• Lethal take of wolves, particularly pack leaders, can lead to pack dispersal. Dispersing wolves are more likely to predate on livestock.
Concern 24	<p>Commenters asked for clarity on whether recreational hikers on public land could take wolves in the act of attacking their dogs.</p>
Concern 25	<p>One commenter said that the Service should not allow wolves to be driven from public to private lands where they could be subjected to take.</p>
Concern 26	<p>Commenters asked for a broadening of the take allowed on public lands, noting that livestock can end up outside their owner's allotments and should still be defensible from wolf attacks.</p>
Concern 27	<p>Commenters were opposed to any take on public land, saying that public lands should be a refuge for wolves. One commenter said that not permitting lethal take on public lands would provide necessary incentives for livestock operators to nonlethally protect their livestock from wolves. Commenters noted that although Colorado Proposition 114 says that Colorado will not impose land use restrictions on private lands for purposes of wolf reintroductions, the Service should impose land use restrictions on public lands and forbid take of wolves on public land. Other commenters said that lethal take on public land should only be permitted if individual problem wolves could be targeted.</p>
Concern 28	<p>Commenters worried that the regulations for shoot-on-sight in the rule are too vague and that key terms like harassing and molesting do not have clear definitions. They asked for more straightforward definitions to avoid confusion.</p>
Concern 29	<p>Commenters expressed opposition to shoot-on-sight take authorizations and for permission to take wolves in the act of attacking. A commenter noted that wolves often chase or test potential prey without the chase resulting in an attack. One commenter noted that the 1994 rule governing wolf reintroduction in the northern Rocky Mountains does not include shoot-on-sight authorizations for private landowners and said that the allowance would not be necessary.</p>
Concern 30	<p>Commenters requested that take authorization permits be extended for a period longer than 45 days. A commenter asked for the shoot-on-sight requirements to be changed to specify that the predation event was confirmed within the last 30 days, rather than the predation event occurring within the last 30 days. The commenter noted that grazing allotments are often large and remote and that it is impractical to expect all depredations to be discovered and confirmed within 30 days.</p>
Concern 31	<p>A commenter asked the Service to forbid attracting wolves in order to harass them. The commenter notes that the term "intentional harassment" is too vague and could include methods of tracking, searching out, and waiting for wolves that lead to attracting wolves to human-dominated areas and livestock, resulting in habituation. The commenter was in favor of including methods like predator calls to deter wolves.</p>

Table 1. Code, Corresponding Concern ID, and Corresponding Concern Statement

Concern 32	<p>Some commenters made suggestions for conditions that should be met prior to the authorization of lethal take. Suggested conditions included:</p> <ul style="list-style-type: none">• Require four or more livestock losses on private land by a single wolf within seven days to lethally take the wolf.• Require the Service to determine that no circumstances attracted wolves to predate on the livestock, including the presence of carrion or unusual odors.• Verify that the livestock operator implemented at least two area-specific conflict minimization techniques.• Verify that further nonlethal prevention would not be effective and that lethal take of the wolf would not harm the wolf population and state recovery objectives. <p>Require more than one depredation event to occur before lethal take is permitted.</p>
Concern 33	<p>Commenters had suggestions for who could perform lethal take of wolves. Many commenters wanted the rule to exclusively permit CPW personnel to carry out lethal management. One commenter said that the Service should not carry out lethal take and that rules should instead be enforced by "animal damage control agents" to ensure livestock operators' livelihoods are adequately protected. One commenter said that U.S. Department of Agriculture (USDA) Wildlife Services should be the first choice for investigating and taking problem wolves, while another commenter said USDA Wildlife Services should never be permitted to use lethal control. Commenters also proposed that CPW and the Service should be the only personnel allowed to conduct lethal control and that all lethal take should occur within seven days of the incident.</p>
Concern 34	<p>A commenter worried that delegating lethal take authority to state and Tribal officials would lead to a stagnant and unsuccessful reintroduction, citing the decline of the Mexican wolf population under State management. Commenters also said that the 10(j) rule for the Mexican wolf and the red wolf reintroductions had not contributed to the species' recovery and worried about a similar outcome in Colorado.</p>
Concern 35	<p>Commenters stated that only the Service and designated agents should have the authority to lethally take wolves and that private citizens should not be permitted to do so.</p>
Concern 36	<p>Commenters expressed opposition to the implementation of a 10(j) rule. Commenters requested that wolves be considered endangered, rather than experimental and nonessential, when they are reintroduced. Commenters stated that the rule would be contrary to the intentions of the ESA and worried that the rule could put wolves in jeopardy.</p>
Concern 37	<p>Some commenters expressed concern about prioritizing livestock over wolves, noting the ecological impacts cattle can have on landscapes and indicating that wolves are the native species, while cattle have been introduced.</p>
Concern 38	<p>Some commenters expressed opposition to the use of traps, snares, poison, and hound hunting. Commenters said that traps should never be used to resolve conflicts and noted that incidental take of wolves in traps and snares should be prosecuted. Commenters noted that Colorado permits trapping and hound hunting of other species that could have a high risk of capturing wolves too. Commenters asked the Service to update the rule to forbid incidental take of wolves caused by traps and hounds to discourage their use because they could threaten the recovery of the experimental population. Commenters specifically requested that the Service forbid the use of poisons, such as sodium cyanide and Compound 1080 in wolves' range or in their potential future range. One commenter noted that the practice of hounding, or hunting with hounds, in Colorado could increase the likelihood of unintended or illegal take. This commenter suggested the Service exclude hounding from allowable incidental take included in the rule and work with the State to revise hounding regulations to reduce potential impacts to wolves.</p>

Table 1. Code, Corresponding Concern ID, and Corresponding Concern Statement

Concern 39	Commenters requested that the Service change the definition of “livestock producer” from “a person that is actively engaged in farming/ranching and that receives a substantial amount of total income from the production of livestock” to “a person that is actively engaged in farming/ranching and receives income from the production of livestock” because many agricultural operations are diversified in Colorado and the term “substantial amount” may be limiting.
Concern 40	Commenters requested the Service clarify the definition of problem wolf, since “calendar year” implies a wolf attacking in December and a month later in January might not count as a problem wolf. Commenters suggested changing the language to “within any 12-month period.”
Concern 41	Commenters asked for the problem wolf definition to include wolves who have depredated on livestock once rather than twice.
Concern 42	Commenters stated that language forbidding artificial or intentional feeding of wolves should be added and noted if evidence of intentional feeding is found, the wolf should not be considered a problem wolf.
Concern 43	Commenters asked the Service to add harassment and stalking of people and domestic animals to the definition of a problem wolf, along with livestock.
Concern 44	Commentors requested clarity about depredation events on public lands, specifically if depredation on public lands would count toward determining if a wolf is a problem wolf and asked for the definition to be updated to include attacks on federal grazing allotments and Tribal land.
Concern 45	A commenter asked for an update to the definition of “in the act of attacking” to include other injuries to livestock, including running through a fence while a wolf is chasing them and heart and lung problems from being chased for long distances. Another commenter asked the Service to remove the phrase, “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” because it would be too subjective and difficult to enforce. Another commenter asked the Service to remove the phrase “at any moment” from the definition.
Concern 46	A commenter asked that the Service not consider harassment as take and requested that it be defined separately.
Concern 47	A commenter asked the Service to clarify and give examples of the characteristics that a wolf would need to exhibit to justify taking that wolf.
Concern 48	A commenter said the definition of “incidental take” should cover working dogs or other dogs that kill a wolf.
Concern 49	Commenters indicated that livestock operators and landowners should be included as designated agents. Commenters also asked for greater clarity on the process for assigning designated agents. One commenter suggested that the definition be changed to “a Federal, State, or Tribal agency, or employee thereof, authorized or directed by the Service to conduct gray wolf management consistent with this rule”.
Concern 50	A commenter asked for a broader definition of livestock that includes any large animal raised for its meat.
Concern 51	Commenters asked the Service to revise the definition of livestock guard animals to include animals other than dogs, like llamas or donkeys.
Concern 52	A commenter asked for the definition of private land to include leased private lands. A commenter asked for clarity on the current definition because it could include state and locally owned lands and could create confusion.

Table 1. Code, Corresponding Concern ID, and Corresponding Concern Statement

Concern 53	A commenter asked the Service to clarify the definition of immediate and direct threat to human life. They asked the Service to explain what would be considered a threat and to ensure that a person's fear when seeing a gray wolf would not be justification for lethally taking the wolf.
Concern 54	A commenter asked the Service to clarify the definition of intentional harassment to ensure intentional harassment does not injure or inadvertently kill wolves.
Concern 55	A commenter asked the Service not include non-working pets and domestic bison in the domestic animal definition for consistency with the State Plan.
Concern 56	Commenters questioned what proof would be required before purposeful take would be authorized. Commenters requested that the Service require specific proof of a wolf predating on livestock to authorize take of that wolf. Some commenters asked for photos, scat, and hair samples to be permitted as evidence of an attack if a depredation cannot be directly linked to wolves. Other commenters said the rule should forbid tampering or interfering with carcasses from potential wolf depredation events to preserve evidence. A commenter asked the Service to allow evidence other than livestock carcasses as proof of depredation because bears and other wildlife can eat carcasses and remove evidence.
Concern 57	Commenters requested that the language related to animal husbandry in alternative 1 under "Agency take of wolves that repeatedly depredate livestock" be removed.
Concern 58	Commenters requested that the Service update the language in alternative 1 under "Additional taking by private citizens on their private land" so that wolf depredations on neighboring properties can factor into the Service issuing "shoot-on-sight" authorizations.
Concern 59	Commenters asked the Service to clarify that baiting, attracting, and intentionally feeding wolves is illegal.
Concern 60	Commenters requested the Service provide examples of what would be considered incidental take, such as killing a wolf while driving on a highway.
Concern 61	Commenters suggested that the Service include an escape clause in the 10(j) rule.
Concern 62	Commenters requested the rule use the terms "killing" and "harassment" instead of take.
Concern 63	Commenters asked the Service to clarify that pursuit of wolves with all-terrain vehicles, on horseback, or by other measures would only be permitted to prevent livestock depredation to prevent people from chasing wolves indiscriminately.
Concern 64	Commenters asked the Service to clarify that passive and proactive deterrents like flashing lights and fladry should be considered opportunistic harassment, not intentional harassment, and that no written take authorization should be required to use passive deterrent measures.
Concern 65	Commenters requested that the Service rename shoot-on-sight permits to "Chronic Depredation Permits" for consistency with the State Plan.
Concern 66	Commenters asked the Service to clarify the term "regulatory standards" in this sentence in the DEIS, "States or Tribes must submit a science-based report showing the action meets regulatory standards."
Concern 67	Commenters requested the rule clarify the differences between take, lethal take, and harassment.
Concern 68	Several commenters requested more stringent reporting requirements, while others requested more permissive reporting requirements

Table 1. Code, Corresponding Concern ID, and Corresponding Concern Statement

Concern 69	Commenters asked the Service to integrate the State Plan into the rule framework as long as the plan uses the best available science. Commenters noted differences between the State Plan and the Service's rule and asked for inconsistencies to be explained or addressed. A commenter asked for rule to clarify that the State Plan can be more restrictive than the Service's rule.
Concern 70	Some commenters asked for neighboring states to be granted 10(a)1(A) permits to give them the flexibility to return dispersing wolves to Colorado.
Concern 71	A commenter asked the Service to allow lethal management if big game population levels fall by 5 percent or more from population levels prior to the reintroduction and to allow hunting of gray wolves when populations achieve the 2-2-2 rule. A commenter requested additional management flexibility to allow the Service and its designated agents the authority to haze, relocate, or kill wolves that are adversely affecting other wildlife species and to stop migration across state and Tribal boundaries.
Illegal Take	
Concern 72	Commenters requested the Service revise the rule to hold people accountable for illegal take. One commenter suggested the Service set limits on the number of wolves that can be lethally taken in a certain timeframe. One commenter suggested punishing illegal take through fines, imprisonment, and seizing of the firearm. Commenters suggested a lack of enforcement of take provisions has led to more illegal taking in other reintroduced wolf populations. Commenters cited data or suggested studies that should be reviewed for inclusion in the FEIS.
Concern 73	Commenters noted that individuals who lethally take a wolf while defending livestock, working dogs, or pets should not be prosecuted.
Concern 74	Commenters noted that individuals who injure or lethally take a wolf while mistaking it for a coyote or another species should not be prosecuted or subject to any legal action, referencing the McKittrick Policy.
National Environmental Policy Act (NEPA)	
Concern 75	Commenters expressed thoughts or opinions concerning the public involvement process for the EIS. One commenter questioned why the Service did not allow people to provide verbal comments at the public meetings for the DEIS. Another commenter questioned why public meetings during review of the DEIS were held on the Western Slope rather than in Front Range communities.
Concern 76	Commenters questioned why the EIS does not analyze the potential impacts of wolf reintroduction or why a separate EIS has not been completed to analyze wolf reintroduction. Commenters stated that since the Service has jurisdiction over the implementation of the ESA, including the conservation, transportation, release, and/or reintroduction of listed species under or in the absence of section 6 cooperative agreements, the EIS should address Colorado's wolf reintroduction. One commenter asked the Service to approve regulations that would require a NEPA assessment of the reintroduction. One commenter noted that the State should be required to complete an EIS because wolves reintroduced to Colorado would quickly disperse to federal lands in the state. One commenter stated that no gray wolves should be reintroduced until the NEPA process is completed for the reintroduction and a 10(j) rule is in place.
Concern 77	A commenter noted the study area should be expanded to the maximum area where reintroduced gray wolves are expected to disperse within the foreseeable future.
Concern 78	A commenter noted that release and transportation of an endangered species outside its current range seems beyond the scope of typical section 6 cooperative agreements, in response to a statement in the DEIS that reintroduction of gray wolves in Colorado would be allowed under CPW's section 6 cooperative agreement.

Table 1. Code, Corresponding Concern ID, and Corresponding Concern Statement

Concern 79	A commenter questioned the Service's use of data in a 2022 study by Ditmer et al. to determine the list of focal counties in the EIS. The commenter suggested that more detailed, site-specific analysis is needed for areas in the State's proposed release area. Another commenter suggested additional counties that should be added to the focal counties, including Pitkin, Summit, San Juan, and Hinsdale, because they "are within the dispersal area of the release zones."
Concern 80	A commenter suggested that the Service pause the NEPA process until CPW has finalized the State's Wolf Restoration and Management Plan and include any changes in the reintroduction process and management of gray wolves in the FEIS. This commenter suggested that the EIS should again be released for public comment after final changes in the State Plan are incorporated.
Concern 81	Commenters suggested that the purpose and need for the proposed action should be revised to reflect the Service's statutory responsibilities to conserve endangered species and their habitats. Commenters suggested that the Secretary of the Interior must make the finding that the 10(j) rule is consistent with the purposes of the ESA and ensure the conservation of wolves and ecosystems in Colorado; therefore, these responsibilities should constitute the purpose and need for the proposed action.
Consultation	
Concern 82	The Navajo Nation requested government-to-government consultation and coordination with Tribes and the development of a Colorado wolf management group with CPW, the Service, impacted Tribes, and other groups.
Concern 83	Commenters were supportive of the Service's collaboration with CPW and encouraged the Service to ensure the State Plan and rule are compatible. One commenter asked the Service to coordinate with the State Plan to avoid negative impacts to ungulates, livestock, and other wildlife. Another commenter suggested that the Service should integrate recommendations developed by CPW's Stakeholder Advisory Group and Technical Working Group into the rule. One commenter asked the Service to retain management authority and not improperly delegate authority to Colorado.
Concern 84	Commenters made requests for continued coordination with state and federal agencies. Commenters asked the Service to continue to involve and seek input from wildlife agencies in states neighboring Colorado. One commenter noted that the USDA would be an important partner for the Service in providing tools and resources to agricultural producers. Commenters also suggested forming agreements with neighboring states to return dispersing wolves to the 10(j) area to alleviate any burdens on the Mexican wolf recovery effort and to allow gray wolf restoration in Colorado where there would be more management flexibility.
Socioeconomics	
Concern 85	Commenters suggested that the estimates of livestock depredation should be revised to portray more realistic estimates or questioned the data used in the analysis. Commenters questioned if the analysis includes livestock in feedlots, which would be less vulnerable to depredations. Commenters also noted that the analysis in the EIS should assess projected losses in local areas rather than statewide. Commenters noted limitations associated with the data from Wyoming used in the analysis (i.e., that the total number of livestock used includes livestock in the Predator Zone, where depredations are not likely to be reported, and may artificially decrease the total number of projected depredations) and provided suggestions for revisions.
Concern 86	Commenters stated that reintroduction of wolves would result in adverse socioeconomic impacts from decreases in ungulate populations, hunter participation, and hunting revenues, including revenues for local communities, Tribal communities, and CPW. Commenters noted that a socioeconomic impacts to outfitters and guides would be adverse and long term.
Concern 87	Commenters noted that wolves and other predators are responsible for a relatively small percentage of livestock deaths compared to non-predator causes of death including disease and weather conditions. Commenters provided data from the USDA on the causes of death for livestock.

Table 1. Code, Corresponding Concern ID, and Corresponding Concern Statement

Concern 88	Commenters noted that the reintroduction of wolves in Colorado would result in beneficial economic impacts, including revenues from increased tourism driven by wildlife viewing opportunities, increases in ungulate populations, reduced deer-vehicle collisions, and reduced agricultural damage from ungulates.
Concern 89	Commenters noted that reintroduction of wolves would result in significant economic impacts on livestock producers from depredation and the cost of implementing measures to prevent depredation, and on small businesses in rural areas. Commenters noted indirect impacts on livestock producers from the presence of wolves, including decreases in reproduction and weight gain and increased stress in livestock. One commenter suggested that allowing wolves on federally managed grazing allotments would violate existing lease agreements. One commenter noted that costs for measures to reduce or avoid depredations should be feasible for livestock producers. Commenters noted that costs may be significant for small operations and for rural communities. One commenter noted that these socioeconomic impacts may result in changes in land use at the county or regional level because livestock producers may be forced or choose to sell their ranches. One commenter noted that the conclusion that there would be no long-term impacts on livestock production overall in the state is inaccurate and based on data that were inappropriately extrapolated from states that are not similar to Colorado. One commenter requested that the Service consider impacts to communities in other states.
Concern 90	One commenter noted that the costs associated with the proposed reintroduction are unacceptable impacts that are expected to continue once wolves are on the landscape. The commenter suggested that these costs should be addressed in the 10(j) rule.
Concern 91	Commenters expressed support for lethal or nonlethal measures to prevent livestock depredation based on the costs of the measures. One commenter suggested that the management flexibility allowed under alternative 1, including lethal take, would reduce agency management costs and costs for livestock producers. Another commenter provided data related to a program using nonlethal livestock protection methods in Idaho and discussed how the program was less costly than lethal take.
New Alternatives	
Concern 92	Commenters requested that the alternatives included in the EIS address dispersal of gray wolves outside the experimental population boundary, either through capture and relocation of wolves that disperse outside the boundary or by allowing some degree of dispersal. Commenters identified the potential for livestock depredation in other states and impacts on Mexican wolves as reasons for capturing and relocating dispersing wolves. One commenter asked that the final rule recognize the eligibility of livestock producers in neighboring states for compensation under federal programs in the event of livestock depredation. Some commenters suggested that wolves that leave the boundary should be allowed to disperse to support establishment of wolf populations in neighboring states, with some commenters suggesting the only exception should be if dispersal of wolves would pose unacceptable impacts on the Mexican wolf. One commenter suggested tracking gray wolves that disperse outside the boundary to understand factors that may cause wolves to disperse outside Colorado.

Table 1. Code, Corresponding Concern ID, and Corresponding Concern Statement

Concern 93	Some commenters noted the range of alternatives addressed in the EIS is too narrow, and commenters suggested additional alternatives that should be considered to support the conservation of reintroduced gray wolves in Colorado or to limit or prohibit lethal take. Alternative regulatory tools suggested including use of Safe Harbor Agreements or a statewide 10(a)1(A) permit while maintaining the species' endangered status in Colorado. Commenters also suggested considering alternative versions of the rule that would prohibit all lethal take, lethal take on public lands, or lethal take in the absence of nonlethal management strategies. Multiple commenters suggested the Service should retain management authority over reintroduced wolves in Colorado. One commenter suggested that the Service should expand the geographic area of the northern Rocky Mountains distinct population segment to encompass Colorado in recognition of the dispersal of individual wolves into Colorado from the northern Rocky Mountains region. Some commenters requested that the Service include provisions for ecosystem protection in Colorado in the range of alternatives. Commenters also requested that the Service consider alternatives that include education and financial incentives for livestock producers and rural communities to increase social tolerance for wolves.
Concern 94	Commenters suggested additional provisions or elements that should be included in the 10(j) rule. These included a prohibition on baiting wolves, recognition of the State of Wyoming's authority to manage wildlife species under its jurisdiction, a preference for relocating wolves that chronically depredate livestock, authorizing the use of trapping to support monitoring or translocation of wolves, requiring use of radio collars for monitoring, and allowing flexibility to manage the wolf population to maintain numbers once it reaches a certain target goal. Commenters suggested the Service identify a population goal for gray wolves in Colorado and/or establish limits on lethal take until reintroduced gray wolves meet certain population targets. Another commenter requested an addition to the 10(j) rule to forbid killing of wolves if they are not at an abundance that is serving to "meaningfully limit" coyote populations.
Concern 95	Multiple commenters suggested that the Service assess introducing Mexican wolves to Colorado in conjunction with the State's reintroduction of gray wolves, or that connectivity between gray wolves and Mexican wolves be allowed to support genetic diversity in the wild population of Mexican wolves.
Concern 96	Commenters suggested expanding the scope of the optional provision related to ungulates to allow management flexibility to address unacceptable impacts on other species as these impacts are identified or to allow management of wolves to address other conflicts related to ungulates (e.g., if wolves cause ungulate herds to mingle with livestock herds, displace ungulate herds into road rights-of-way causing impacts to public safety, or to address unacceptable impacts on ungulate herds following severe weather conditions).
Ecosystems	
Concern 97	Commenters suggested that the rule and EIS should be revised to discuss biodiversity concerns related to the reintroduction of the gray wolf in Colorado. Commenters discussed the ecosystem effects that have been attributed to gray wolves and provided data sources. Many commenters discussed the concept of trophic cascades and noted that predators affect the behavior and abundance of prey species, which can have more widespread ecosystem impacts. Potential effects mentioned included improving the condition of riparian areas, increasing habitat for other special status species, reducing disease transmission in ungulates, and mitigating climate change by creating carbon sinks. Commenters noted that lethal take would reduce or affect the ecosystem benefits provided by reintroduced wolves.
Environmental Justice	
Concern 98	One commenter suggested that the term "environmental justice" should be deleted from the EIS and the analysis combined with the socioeconomics analysis. The commenter suggested that the term "environmental justice" should not be used because it is suggestive, emotional language that "has no mooring in sound science."

Table 1. Code, Corresponding Concern ID, and Corresponding Concern Statement

Concern 99	One commenter asked if education and outreach, specifically using Spanish-language materials, was provided for environmental justice groups of concern that included a high percentage of people of Hispanic, Latino, or Spanish origin. The commenter recommended the Service conduct predator awareness training for minority livestock producers, to include nonlethal methods for avoiding depredation, and suggested this training may reduce depredations for livestock producers who may be disproportionately affected.
Tribal Resources	
Concern 100	Commenters requested that the Service consult with Tribal representatives from Colorado to incorporate traditional ecological knowledge into the planning process.
Concern 101	Commenters noted the taking of a wolf would be considered the taking of a sacred animal by the Global Indigenous Council.
Concern 102	Commenters requested that the EIS reflect there should be no wolves in the Tribal Reservation and Brunot Agreement Area. They requested a no wolf buffer south of I-70 to ensure Tribal rights are protected.
Concern 103	A commenter asked for the Service to GPS collar all wolves so that they can be removed from Tribal lands where they are not desired. The commenter also requested the Service remove any wolf from Tribal lands where they are not desired at no cost to the Tribe.
Special Status Species	
Concern 104	Commenters asked for the Service to evaluate impacts of the rule on special status species more thoroughly. Specific concerns about impacts to special status species included wolves preying on lynxes and competing with them for food sources and predation on the Greater sage-grouse, Columbian sharp-tailed grouse, and Gunnison sage-grouse. Additionally, commenters noted that ranchers have worked with the Service, CPW, the Forest Service, and the Bureau of Land Management to protect lower elevation sagebrush habitats for Gunnison sage-grouse and worried about predation on grouse species. A commenter asked the Service to consider adding flexibility to the rule to protect species of special concern if they are negatively affected by the reintroduced wolves.
Gray Wolf Impacts	
Concern 105	Commenters expressed concerns that the lethal take permitted in the rule could negatively affect gray wolves and hinder their recovery in Colorado. A commenter noted that given the small initial number of wolves slated for reintroduction, any lethal take of wolves could impact recovery. Commenters also expressed concern about how lethal take could create pack instability and lead to pack dissolution. Other impacts of lethal take on gray wolves that commenters cited were disturbances to hunting patterns, territory isolation, behavior, genetic diversity, and social structure. Commenters noted that wolves have complex social patterns that include non-breeder altruism and cooperative hunting—characteristics that can be disturbed by removal of small numbers of wolves. Commenters asked the Service to consider additional research on potential numbers of wolves that would be lethally taken in Colorado and to reevaluate how lethal take has affected wolves in Idaho, Montana, and Wyoming without federal protections.

Table 1. Code, Corresponding Concern ID, and Corresponding Concern Statement

Concern 106	Commenters suggested that some of the comparisons to other wolf reintroductions in the rule and DEIS were incorrect. A commenter noted that the Northern Rocky Mountains and Yellowstone National Park have key differences in land use from Colorado, including large areas that are free of livestock and larger areas of winter range for elk. They asserted that wolves' success in the Northern Rocky Mountains could be attributed to ample elk for prey and to the lack of lethal take in response to livestock predation in areas without livestock. A commenter also said that the DEIS's reference to low levels of lethal take in Oregon and Washington was misplaced because the data was collected during initial monitoring years and because wolves in Colorado would be more likely to prey on livestock and be lethally taken. The commenter predicted that levels of lethal take would be similar to levels experienced by Mexican wolves in Arizona and New Mexico. A commenter also suggested that research in the Northern Rocky Mountains and Alaska indicating that wolves could withstand high levels of human-caused mortality were not applicable to Colorado because their wolf populations were larger and more established. The commenter asked the Service to evaluate in the EIS the relevance of the data on the effects of human-caused mortality in the Northern Rocky Mountains and Alaska to wolves in Colorado.
Concern 107	Commenters proposed corrections to the rule and DEIS related to gray wolf impacts. Proposed corrections included: (1) Asking the Service to remove "sport hunting" from the rule section titled "Actions and Activities in Colorado that May Affect Introduced Gray Wolves." The commenter noted that the inclusion of sport hunting could create confusion because regulated hunting would not be considered while wolves are federally listed and the 10(j) rule is in effect. (2) Requesting reevaluation and correction of the descriptions of potential wolf depredation incidents in the DEIS. Commenters asserted that two of the depredations in Jackson County were on dogs, and the third was on livestock. They also said that CPW has not conclusively determined the cause of the calves' deaths in the 2022 incident near Meeker and asked the Service to include CPW's position on the events in the EIS. Another commenter asserted that the investigation into the depredation near Meeker had found no evidence of wolf involvement. (3) Changing the number of wolves in the group in north-central Colorado from seven individuals to two individuals based on information from March 2023.
Concern 108	A commenter noted that the analysis of the no-action alternative and alternative 1 in the DEIS is not clear about which alternative would be more beneficial to wolf conservation.
Concern 109	One commenter asked the Service to revisit the analysis of alternative 1 in the DEIS where the text states, "Alternative 1 could have adverse environmental impacts to individual wolves through regulated take but is not expected to hinder recovery or have population-level effects in the long term." The commenter asserted that lethal take of individual problem wolves would not have adverse impacts on the environment.

Table 1. Code, Corresponding Concern ID, and Corresponding Concern Statement

Mexican Wolf Impacts	
Concern 110	Commenters stated that any reintroduction of the northern gray wolf may jeopardize recovery of the Mexican wolf, and the Service should ensure that State trust authorities for the recovery of the Mexican wolf are not harmed by the proposed reintroduction. Commenters requested that the Service complete a more robust analysis of potential impacts on Mexican wolves in the EIS. Commenters noted that the EIS does not clarify how gray wolves that leave the experimental population boundary would be returned to prevent impacts on the genetic integrity of the Mexican wolf. Commenters requested that the Service identify all available tools and outline a specific plan for returning gray wolves that leave the experimental population boundary to prevent impacts on Mexican wolves. Some commenters requested the Service issue a 10(a)1(A) permit allowing the capture and return of gray wolves that disperse beyond the boundary. Commenters additionally suggested advising the State of Colorado not to proceed with the gray wolf reintroduction due to potential impacts on Mexican wolves or taking action to maintain a buffer outside the experimental population boundary between gray wolves and Mexican wolves.
Concern 111	Commenters suggested that reintroduced gray wolves be allowed to mix with Mexican wolves either in a zone of intergradation in Colorado or New Mexico and Arizona to increase the genetic diversity of Mexican wolves.
Concern 112	One commenter suggested that the experimental population boundary for the Mexican wolf should be expanded to the north based on the potential historic range for this subspecies and the small number of individuals in the wild in the U.S. and Mexico. This commenter suggested that the EIS take a harder look at the status of Mexican wolf recovery in the description of the program in the "Cumulative Impacts" section, rather than describe the Recovery Plan and the effects of the gray wolf reintroduction on the Mexican wolf recovery program. The commenter also suggested the Service consider potential impacts under the rule to Mexican wolves that disperse into Colorado.
Other Wildlife	
Concern 113	Commenters stated that reintroduction of gray wolves without management flexibility would result in severe decreases in ungulate populations. Commenters also noted that potential impacts on ungulate populations or the current conditions of these populations must be considered in development of the rule or analyzed in more detail in the EIS. Specific areas suggested for further analysis included ungulate population and hunting license trends, indirect impacts as a result of changes in ungulate behavior, and potential impacts on ungulates in the focal counties. One commenter suggested that ungulate populations in Colorado are no longer sufficient to support a population of gray wolves and the reintroduction should be reconsidered. One commenter suggested that illegally reintroduced species, such as moose, should not be considered a sustainable source of prey for reintroduced gray wolves.
Concern 114	Commenters noted that reintroduction of gray wolves in other parts of the country has contributed to improvements in the health of ungulate herds or ungulate population numbers. Commenters suggested areas of the analysis, including discussing the potential impacts on hunting, that should be revised to consider an improvement in the health of ungulate herds or ungulate population numbers.

Table 1. Code, Corresponding Concern ID, and Corresponding Concern Statement

Impact Topics	
Concern 115	One commenter asked the Service to include an analysis of the best available science on the benefits wolves can provide to ecosystems and how those benefits can mitigate the causes and effects of climate change. They also requested a description of anticipated climate change impacts in the planning area and a discussion of how climate change could impact the affected environment and environmental consequences of each alternative. They noted that climate change could exacerbate impacts of lethal take and change the rule's ability to advance wolf conservation. The commenter suggested using the Council on Environmental Quality's Interim Climate Guidance for NEPA, particularly the section titled "Considering the Effects of Climate Change on the Proposed Action," to guide the analysis. The commenter also recommended referencing the National Fish, Wildlife, and Plants Climate Adaptation Strategy for information on climate change analysis, resiliency, and adaptation measures. The commenter pointed out that Colorado is already experiencing the effects of climate change and encouraged the Service to examine how the impacts of 10(j) rule might be altered by climate change in the EIS. One commenter asserted that wolves could help mitigate climate change by depredating ungulates and asked for the possible positive impacts to be evaluated.
Concern 116	<p>Commenters requested analysis of additional topics in the EIS, including:</p> <ul style="list-style-type: none"> • Recreation, including impacts on local economies and revenue from the recreational hunting and outfitting industry. • Effects on the mining, oil and gas, and timber industries. • Impacts on the livestock industry, particularly related to grazing patterns. • Potential for wolves to disperse to New Mexico and possible damages caused by the wolves in the state. • A review of consistency with the Mesa County Resource Management Plan. <p>One commenter suggested that all of the issues dismissed from detailed evaluation in the EIS should be analyzed in detail.</p>
Concern 117	Commenters asked the Service to consider evaluating the impacts of wolves causing ungulates with chronic wasting disease to disperse into new habitats and potentially spread the disease. A commenter also requested an analysis of how wolves could act as disease vectors by transporting prions via their digestive tracts. Commenters also requested the Service address other disease risks that may be caused or exacerbated by wolves, including Echinococcus and Hydatid Disease.
Cumulative Impacts	
Concern 118	Commenters noted that the presence of wolves would result in indirect impacts on the Gunnison sage-grouse as a result of displacement of existing predators that may prey on sage-grouse and add to the predation pressure on this species.
Concern 119	Commenters noted potential impacts that may result in surrounding states as gray wolves disperse outside Colorado, including impacts on ungulate populations from predation.
Concern 120	One commenter noted revisions to the State Plan will need to be captured in the FEIS, particular the removal of phase 4 in the draft State Plan, which would have allowed hunting of wolves.

Table 1. Code, Corresponding Concern ID, and Corresponding Concern Statement

Other	
Concern 121	Commenters expressed concerns regarding funding for the management of reintroduced gray wolves. One commenter noted, in response to language in the rule stating that the rulemaking would not impose a cost of \$100 million or more in any given year on local or State governments or private entities, that costs below this amount could still significantly or uniquely affect local governments. Multiple commenters noted that the Service is ultimately responsible for the success of the reintroduction and requested that the reintroduction be paused until a long-term funding source is established. Commenters requested that the Service complete a federalism assessment pursuant to the provisions of Executive Order 13132 with input from organizations representing local governments in Colorado and the local governments most likely to be affected. Another commenter suggested that the Service ensure it is adequately funded to manage wolves that disperse outside the experimental population boundary.
Concern 122	Commenters requested additional actions related to or by other federal agencies in response to the State Plan. One commenter requested that the Service decision documents and interagency agreements specify that reintroduced gray wolves will not be provided additional protections as sensitive species on lands managed by other federal agencies, including the Bureau of Land Management (BLM) and US Forest Service (USFS). Commenters requested that other federal agencies, including the BLM, USFS, and National Park Service, update their resource management plans to address potential impacts from the proposed reintroduction before publication of the FEIS.
Concern 123	Commenters questioned or recommended changes to the language and maps in the rule. These changes include specifying that a reference to “previous reintroduction efforts” refer to efforts in other states, replacing the terms “we,” “us,” and “our” throughout the rule with the U.S. Fish and Wildlife Service or Service, and correcting the proposed deadline for State reintroduction in the preamble. Multiple commenters requested that the Service update the map of the State’s proposed release sites to show currently proposed release sites. One commenter additionally requested the Service include the percentage of federally managed land in the release areas and distance to other federally managed lands outside the release areas. One commenter asked why the Service is planning to prepare annual reports to evaluate progress toward achieving State downlisting and delisting criteria, questioning if the State is planning to downlist or delist wolves in Colorado.
Concern 124	Commenters noted that the Service must use the best available science in determining the presence of suitable habitat for gray wolves in Colorado and developing the 10(j) rule. Commenters suggested that computer models should not be considered “best available science” in determining habitat suitability and potential wolf occupancy. One commenter noted that the Service must base actions under the ESA on evidence supported by the best scientific and commercial data available.
Concern 125	One commenter requested that the Service revise the 10(j) rule to allow wolf hunting when authorized by State or Tribal authorities. One commenter noted that allowing hunting when allowed by State or Tribal authorities would allow the State to manage an overly abundant wolf population.
Paperwork Reduction Act	
Concern 126	Commenters requested that in the section of the rule related to the Paperwork Reduction Act, text be edited to read “The report, due by June 30 of each year, will describe wolf conservation and management activities that occurred in Colorado each calendar or biological year up until 5-years post reintroduction.”

Table 1. Code, Corresponding Concern ID, and Corresponding Concern Statement

Essential or Nonessential	
Concern 127	Commenters expressed a preference for reintroduced gray wolves to be designated an essential experimental population based on the reported ecosystem effects of wolf populations, desires to restore a native species, and perceived risks to wolves in Colorado or across the species' range if the population is designated nonessential. One commenter noted reintroduced wolves in Colorado would be relatively genetically isolated from other populations of the species as rationale for designating reintroduced wolves as essential. One commenter suggested that the nonessential designation should be timebound and lifted once biodiversity standards have been met. Commenters also stated that the nonessential population designation has had adverse effects on the recovery of the Mexican wolf in New Mexico.
Concern 128	One commenter suggested that the determination to establish the reintroduced population of gray wolves as "essential" or "nonessential" should be analyzed under the NEPA process and stated the NEPA document fails to take a "hard look" at this issue. Specifically, the commenter stated the DEIS does not look at the impact of the rule on Mexican wolves and does not consider whether potential benefits may exist in allowing a zone of integration between Mexican wolves and gray wolves. The commenter also stated that the EIS does not consider the impacts of lethal take that would be allowed under the rule on the remainder of the listed entity (gray wolves) in the lower 44 states.
Requests for Extension	
Concern 129	One commenter asked for an additional 60 days to provide comments on the DEIS. The commenter noted the length of the document and requested more time for research before submitting comments.

PUBLIC SCOPING COMMENT SUMMARY

The following report is organized by codes and then concern statements. Representative quotes are provided for each concern statement along with the Service's response to the concern statement.

Representative quotes are presented exactly as they were submitted by the commenters. Grammar and spelling have not been changed. These representative quotes are not the only comments received under a particular concern statement; rather, these quotes have been chosen to represent those comments categorized under each concern statement.

BOUNDARY

CONCERN STATEMENT 1: Commenters requested the boundary of the nonessential experimental population be reduced from the entire State of Colorado, with some suggesting it be 50 miles (80 kilometers) around each release site. Commenters noted this would allow gray wolves migrating into Colorado to have full protection under the Endangered Species Act (ESA) rather than be considered threatened, as they would be under the 10(j) rule. Commenters also suggested that specific areas of the State of Colorado be excluded (i.e., North Park, Moffat County, Routt County and Rio Blanco County) because of the existing gray wolves in these areas.

Representative Quote: A federal management rule that truly benefits Colorado wolves should include a narrow geographic boundary for the 10(j) population of wolves of 50 miles around any reintroduction sites, leaving wolves already on the ground and those migrating into the state naturally as fully protected under the ESA.

Representative Quote: The Proposed Rule acknowledges the likelihood of continued dispersal, Proposed Rule at 42, and that there is no reasonable method for distinguishing between dispersing wolves and NEP wolves, id. at 41. Classifying either all wolves in Colorado, or all wolves outside North Park, as nonessential and experimental, fails to establish a reasonable definition of the NEP. The Proposed Rule effectively argues that most wolves would be nonessential, therefore all wolves are nonessential: "[E]ven if gray wolves from the NRM or other populations were to disperse into the NEP, the presence of one or a few individual dispersing gray wolves would not constitute a population, as described above. Therefore, gray wolves reintroduced into Colorado will be wholly geographically separate from the delisted portion of the NRM population as well as the remainder of the currently listed 44-State entity. Based on this geographic separation, we conclude that any gray wolves found in Colorado after the initial release will, with a high degree of likelihood, be members of the NEP; therefore, we conclude that geographic location is an appropriate means to identify members of the NEP." Proposed Rule at 41-42. This assumption is arbitrary and ignores the ongoing reality of continuing successful dispersal. In order to establish a more reasonable geographic criteria for separating the NEP from areas where dispersing wolves have been documented, the NEP should exclude not only North Park, but also Moffat County, where multiple confirmed wolf sightings were documented in 2020, and neighboring Routt and Rio Blanco Counties, where substantial suitable habitat and prey base can support dispersing wolves. Alternatively, the Service should also consider limiting NEP status to a discrete geographic area around the reintroduction sites themselves.

Representative Quote: A reasonable and limited definition of the NEP is of utmost importance because, absent the 10(j) rule, gray wolves in Colorado continue to receive the full protections of listed status under the ESA, including protection from take and the requirement that federal agencies consult with the Service to avoid jeopardy. An NEP designation will remove those protections from all wolves within its area, leading to the very real possibility that dispersing wolves will now be subject to lethal removal based on claims, real, imagined, or fraudulent, of impacts to livestock. The fact that those dispersing wolves do not yet meet the Service's time and number threshold for a full population cannot obscure the reality that they will be losing protections under a 10(j) designation. For the rule to achieve its statutory purpose of furthering conservation, the scope of designation must ensure that the benefits of reintroduction are not outweighed by the additional harm to the

species authorized. Therefore, a limited NEP either confined to reintroduction sites, or excluding known dispersal areas of northwest and north central Colorado, should be considered as a reasonable alternative.

Response: As noted in the FEIS, in section 3.2.1, “Gray Wolf,” wolves are able to disperse over long distances. Further the State has the ability to reintroduce wolves anywhere west of the Continental Divide and manage them across the entire State of Colorado. The 10(j) boundary that encompasses the State of Colorado would allow for management flexibility anywhere wolves may disperse after initial release, while promoting the conservation of the species as a whole by increasing the number of gray wolf populations in the remaining listed entity. The Service established a precedent for defining gray wolf populations for establishment of 10(j) populations in the early 1990s, and the designation of the entire State of Colorado (versus excluding portions of the State as suggested) is consistent with this precedent as well as consistent with the area covered by the State Plan. To deviate from that definition now would be considered arbitrary and capricious. Further explanation of why a smaller 10(j) boundary was not considered is provided in the FEIS (section 2.3.3), under “Alternatives Identified During Scoping but Not Evaluated Further.”

CONCERN STATEMENT 2: Commenters requested that the boundary for the 10(j) be expanded to be larger than the State of Colorado and include the northwest portion of Utah that falls within the Northern Rocky Mountain Distinct Population Segment and north of the Colorado State border into Wyoming up Interstate 80. They noted this would provide a buffer zone for the wolves and address the wolf dispersal that would likely occur.

Representative Quote: If wolves are restored to Colorado as an experimental population under section 10(j) of the Endangered Species Act, the boundary of the potential 10(j) experimental population should be expanded beyond Colorado’s state borders to protect the Colorado population. This buffer zone would act to protect our investment of wolf restoration. The boundary should be extended to encompass the northwest portion of Utah that falls with the Northern Rocky Mountains Distinct Population Segment and should also extend north of the Colorado state border into Wyoming up to Interstate 80. Currently wolves in Wyoming are classified as predators and can be killed year-round by any means. Without a buffer zone, even wolves living inside protected landscapes such as Yellowstone and Denali National Parks, have been killed just outside the edge of the protective boundary

Representative Quote: The Service should not arbitrarily limit management flexibilities to Colorado Rather than learn the lesson that established wolf populations can disperse widely into new and unexpected areas, the Service’s experimental population proposal seems to repeat that earlier error. It indicates that only the State of Colorado and its residents will have the flexibility to manage the experimental population. When these wolves eventually cross into Arizona, New Mexico, and Utah all possibilities the proposed rule acknowledges they would automatically be treated as endangered with all of the regulatory consequences that flow from that status. Indeed, Utah opposes Colorado’s reintroduction plan because it would result in wolves entering Utah, receiving endangered status, and leaving the state little to no flexibility to manage conflicts. Wolf populations growing to the point that they can disperse to other areas is recovery progress that should be rewarded, not punished. Yet the Service’s proposal to define the experimental population along political boundaries rather than where the reintroduced wolves roam threatens to punish any neighboring states that accommodate wolves and contribute to the population’s success. Instead of advancing gray wolf conservation, limiting the experimental population in this way is likely to set its conservation back.

Response: The Service considered having a boundary larger than the State of Colorado but dismissed it from further consideration. See FEIS section 2.3.3, “Alternatives Identified During Scoping but Not Evaluated Further.” In summary, special management provisions, such as a 10(j) rule, are only applicable within the experimental population boundary where an ESA-listed species will be reintroduced and allow for the conservation of the species while reducing the regulatory burden associated with introduction of an

endangered species. If the gray wolf is not federally listed as endangered in a state, including some states neighboring Colorado, designation of a 10(j) rule and creation of an experimental population boundary would not be applicable, and these regulatory tools would not change the designation of wolves in that state to offer more protection. Furthermore, a 10(j) rule and experimental population boundary cannot be applied in areas where existing populations of a species are present.

CONCERN STATEMENT 3: Commenters stated opposition to using 10(a)(1)(A) permits to remove wolves that venture to neighboring states and return them to Colorado. Commenters stated that dispersing wolves should be able to live where they find suitable habitat and that dispersal would help reestablish the population. They also expressed concern regarding potential injuries to wolves during relocation.

Representative Quote: 10(a)(1)(A) defenders opposes assurance agreements and permits under section 10(a)(1)(A) if intended to be used as permission to allow removal of wolves that roam beyond Colorado's borders in areas where they are protected under the ESA. Any wolves found in neighboring states where ESA protections are in place including wolves that have dispersed from Colorado should be managed as "endangered" under the ESA, not removed or returned to Colorado. Section 10(a)(1)(A) permits must be consistent with the ESA's recovery mandate. Permitting the removal of wolves from areas where they would otherwise be protected under the ESA or limit natural occupation to the confines of the 10(j) boundary would not only fail to promote recovery of gray wolves; it would undermine those efforts. Dispersing wolves tend to avoid high-exposure areas like densely populated human communities and open agricultural lands (Morales-Gonzalez, A. et al. 2022). The behavior of avoiding conflict-prone environments is desirable and should be encouraged rather than suppressed through automatic management removals. Furthermore, wolves captured through trapping may suffer injuries, which can hinder their hunting ability and lead them to eat slower-moving livestock instead of native prey. Therefore, the unintended consequences of rule-mandated wolf capture or removal can result in undesirable outcomes that unnecessarily increase conflict and run counter to conservation of the species. Ultimately, gray wolves should be permitted to live where they find suitable habitat, and allowing wolves to utilize habitat corridors from the southwest through the Rockies will help re-establish population connectivity vital to the long-term success of the species (Carroll et al. 2006).

Response: The capture and return of wolves from neighboring states is not part of the 10(j) rule but would be addressed with separate 10(a)(1)(A) permits as necessary. Should wolves need to be captured and returned, injury or mortality during trapping is rare. Should the Service or designated agent need to relocate a wolf, all necessary precautions would be taken to ensure the safety of the wolf. Based on the issuance of the 10(a)(1)(A) permit that allows for these relocations, the Service knows that these infrequent wolf captures would not jeopardize the species and would support the State of Colorado to achieve the goals set forth in the State Plan.

CONCERN STATEMENT 4: Commenters questioned the legality of introducing wolves to areas of Colorado where they are already present, specifically northwest Colorado. They further noted that the reintroduced population would not be wholly separate geographically, and therefore alternative 2 is not a legal alternative. Commenters questioned the Service's definition of a population of gray wolves and the determination that an existing population of gray wolves had not been identified in Colorado at the time of publication of the FEIS.

Representative Quote: Reintroduction of wolves means they are no longer part of the ecosystem in the planned reintroduction area. They are already in Northwest Colorado! Reintroduction in Northwest Colorado cannot be legal if they are already here. These wolves are killing pets, working dogs and livestock, as well as other wildlife in this area. They are approaching homes within 40' in the Walden area.

Representative Quote: Alternative 2 is unlawful because on its face it violates the section 10(j) requirement that experimental populations be “wholly separate geographically” from non-experimental populations of the same species. As preface, we acknowledge that the known distribution and numbers of breeding wolves in Colorado and Wyoming at present justify designating the state of Colorado as an experimental population area, as Alternative 1 proposes, due to the way the Service has defined what constitutes a population, and specifically because there is just one known breeding pair in Colorado and the southern portion of Wyoming has no known breeding wolves coupled with state rules that allow killing all wolves in southern Wyoming. As noted in the DEIS, these Wyoming circumstances have led to as-yet insufficient wolf colonization of Colorado habitats to establish a population as defined by the Service, and suggest an infrequency of contact between wolves in Wyoming and wolves in Colorado consistent with describing the upcoming Colorado experimental population area as wholly separate geographically. That said, in contrast to Alternative 1, Alternative 2 would eliminate the geographic separation that section 10(j) requires between an experimental and a fully-endangered population, through (were it to be selected) bifurcating Colorado arbitrarily within areas of suitable habitat on both sides of such a (future) delineating line: Under this alternative, wolves that establish a population naturally in the 10(a)(1)(A) permit area would be granted more protection than wolves that are reintroduced to the rest of the state. The wolf population may increase more rapidly in the state as a whole because of the protection granted in one small area, which would support wolf conservation and recovery objectives. However, wildlife do not respect invisible boundaries of administrative zones, and wolves that occur naturally in the 10(a)(1)(A) permit area would eventually disperse into the experimental population boundary based on biological needs and their social environment. The proposed rule and the DEIS present Alternative 2 as an actionable alternative only if a wolf population (that is, two breeding pairs that each keep alive at least two pups, during each of two successive years) is found to be naturally occurring in Colorado. As such, Alternative 2 serves merely as a stopgap in the event that wolf recolonization of Colorado proceeds such that Alternative 1 could not be carried out. Yet in such circumstances, those naturally-occurring breeding wolves would not be geographically separated from habitat that would be designated as an experimental population area, nor would there be an intervening region in which regulations would effectively separate the two populations. For example, the DEIS specifies a possible wolf recolonization region in which wolves would not be designated as experimental: “A portion of the state, potentially including most of Jackson County and the western part of Larimer County (areas within Colorado big game management units 161, 6, 7, 16, 17, and 171) would be covered under a section 10(a)(1)(A) permit that the Service would issue to the State of Colorado under alternative 2.11.” Yet such an outlined area would have no geographic separation from other areas of suitable wolf habitat in Colorado.

Response: As noted in section 1.4 of the FEIS, wolves that are known to occur in Colorado in 2023 do not meet the Service's definition of a population of gray wolves (i.e., at least two breeding pairs of wild wolves successfully raising at least two young each year [until December 31 of the year of their birth], for two consecutive years). This definition is consistent with the definition of a population of gray wolves used in the 1994 10(j) rule and EIS for the reintroduction of gray wolves to Yellowstone National Park and Central Idaho and considers sustained breeding and territory formation by multiple packs of wolves in a geographic area. Transient wolves, such as the group of wolves documented in the state in 2020 and lone dispersing wolves, do not meet the definition of a population. Colorado Parks and Wildlife (CPW) would continue to monitor for the presence of any naturally recolonizing wolves, and if a naturally recolonizing population of wolves is discovered in Colorado prior to finalization of the 10(j) rule, the Service would exclude the geographic area where the naturally recolonizing wolf population occurs from the experimental population boundary. Under alternative 2, the home ranges of any naturally occurring breeding pairs of gray wolves in Colorado would be excluded from the experimental population boundary and managed consistent with the gray wolf's federal status and the State Plan. Section 2.4.3 of the FEIS was revised to clarify how existing and reintroduced populations of gray wolves would be delineated separately under alternative 2.

CONCERN STATEMENT 5: Commenters questioned what the status of wolves crossing into Colorado from other states would be and asked how the Service could apply section 10(j) regulations to wolves that had dispersed naturally to Colorado. They suggested that since populations must be "wholly separate geographically" that wolves entering Colorado should not be part of the experimental population.

Representative Quote: Second, wolves naturally expanding into Colorado arguably preclude the Service's proposed experimental population. The Endangered Species Act requires experimental populations to be "wholly separate geographically from nonexperimental populations of the same species." 20 The Service acknowledges that wolves from the Northern Rocky Mountain population have, in fact, established a breeding pair in the area proposed for the experimental population. 21 And several commentators have objected to the proposal on the ground that it violates the Endangered Species Act. The Service proposes two potential ways around this problem. First, it suggests that by crossing the Wyoming border wolves from the Northern Rocky Mountain population cease being a part of that population but don't become part of any other population or form any new population. Second, it suggests that the area where naturally dispersing wolves have been seen could be excluded from the experimental population area. Neither is satisfying, especially considering the high likelihood that the naturally occurring and reintroduced wolves will merge and raise complicated questions about their status and regulations that apply to them. Indeed, a lawsuit has already been filed seeking to compel the Forest Service to regulate delisted wolves in Wyoming as if they were endangered because actions in Wyoming may affect the wolves naturally dispersing to Colorado where they receive endangered status.

Response: Section 2.4.2 of the FEIS notes that individual gray wolves may disperse into Colorado from the northern Rocky Mountains population; however, these movements likely would be infrequent given Colorado's distance (more than 124 miles [200 kilometers]) from existing populations of gray wolves compared to the normal dispersal distances of gray wolves and the difficulty of dispersal across most of Wyoming. As noted in the response to concern 4, individual wolves that disperse into Colorado do not meet the Service's definition of a population. Under alternative 1, wolves that disperse naturally into Colorado following establishment of the 10(j) rule would be managed as part of the experimental population.

CONCERN STATEMENT 6: One commenter expressed concern about how the three alternatives in the DEIS would protect wolves from being killed when they cross or are driven across the border into southern Wyoming.

Representative Quote: The Proposed Rule and DEIS consider only three alternatives: the mandatory no-action alternative, a Nonessential Experimental Population (NEP) designation throughout the state, or "promulgating a section 10(j) rule for the gray wolf population that would be reintroduced in a limited territory and issuing a permit under section 10(a)(1)(A) for an existing gray wolf population, should one become established prior to finalization of the section 10(j) rule." DEIS at 2-2. These limited alternatives ignore the uncontested fact that wolves have successfully dispersed from the Northern Rockies into both northwest Colorado and North Park, and successfully bred in North Park. These dispersing wolves have been unsuccessful in establishing longer-lasting breeding populations due to the near-certainty of killing when they cross (or are driven across) the border into southern Wyoming, where they can be hunted as predators essentially without limit.

Response: Gray wolves are not listed under the ESA in Wyoming; therefore, if an introduced wolf from Colorado crosses the border into Wyoming, it would not be protected. Furthermore, intentionally moving wolves from Colorado into Wyoming is a form of harassment/take that is not an exception provided by the rule, and would be a violation of section 9 of the ESA.

ENDANGERED SPECIES ACT

CONCERN STATEMENT 7: One commenter noted that because gray wolves are federally listed as endangered under the ESA, the State must obtain approval from the Service to reintroduce the species.
Representative Quote: Since gray wolves are federally protected as “endangered” under the Endangered Species Act (ESA), Colorado must receive permission from the U.S. Fish and Wildlife Service (USFWS) to manage reintroductions.
Response: Chapter 1 of the FEIS describes the Service’s involvement in the reintroduction effort. To facilitate reintroduction efforts, the State of Colorado has requested the Service designate the gray wolf population that would be reintroduced as an experimental population under section 10(j) of the ESA. A 10(j) experimental population designation would not be necessary for the reintroduction, as the State proposes to use wolves from areas where they are not listed as endangered. However, if no 10(j) designation were made, take of wolves would be forbidden in most circumstances, and there would be limited management flexibility available to livestock producers and the State.
CONCERN STATEMENT 8: Commenters requested that the 10(j) rule state that the Service will propose to delist the nonessential experimental population from the ESA as soon as possible after Colorado removes wolves from the state list. Some commenters noted that reintroduction of wolves in Colorado should support delisting the species under the ESA or not affect the Service's decision to delist the species in the lower 44 states. They further noted if the Service determines that the currently listed entity no longer meets the standards for an ESA listing, it must delist the species (including any wolves in Colorado), regardless of the status of Colorado's wolf reintroduction.
Representative Quote: Delisting under state law should trigger delisting under the ESA. Once adopted, Colorado’s wolf management plan will include different management phases, which are triggered based on population counts over time. For example, after achieving a minimum count of 150 wolves for two successive years, wolves will be delisted from Colorado’s list of threatened and endangered species. At that point, the Service should remove the NEP from the ESA list. The 10(j) rule should explicitly state that the Service will propose to delist the NEP from the ESA as soon as possible after Colorado removes the wolves from the state list, following the specific and measurable delisting criteria set forth in Colorado’s wolf management plan.
Representative Quote: Information pertaining to the conservation status of gray wolves and how it relates to the proposed reintroduction and rulemaking efforts. We support the continued protection of the gray wolf under both federal and state law. The issues surrounding the protection of gray wolves under the federal ESA are complex both biologically and legally. Establishment of a self-sustaining population of wolves in Colorado should lead to stronger justification for removal of the species from the protections of the federal ESA.
Response: Recovery or delisting of the population inside or outside the proposed nonessential experimental population is beyond the scope of the rule. However, if the population of wolves in the lower 44 states is delisted in the future, the 10(j) rule would no longer apply to the reintroduced population in Colorado. If wolves are relisted due to litigation or other reasons, the rule would once again be in effect.

<p>CONCERN STATEMENT 9: Commenters recommended that the Service retain authority over the State of Colorado in implementing measures to promote the recovery of the gray wolf in the state and meet requirements under section 7(a)(1) of the ESA.</p>
<p>Representative Quote: There must be explicit language that makes it clear that the USFWS retains enough management authority to fulfill its duty to conserve gray wolves in Colorado and does not delegate all management authority to the state</p>
<p>Representative Quote: The Service has a Section 7(a)(1) duty to conserve listed species, and the Draft Rule, in its current iteration with excessive allowances of take and extreme deference to state and private actors to carry out such take, may fail to comport with the Service’s conservation mandate under the ESA. 16 U.S.C. § 1536(a)(1). While the State is undertaking the reintroduction effort on its own volition, the Service cannot abdicate its responsibility for ensuring the recovery of this listed species altogether by this Section 10(j) rule. The Service should be engaged in ably assisting the State with achieving the true, biological recovery of the species in Colorado which the Service acknowledges as a population of up to 1,200 wolves (88 Fed. Reg. 10,268) not completely handing over the reins to the State, landowners, livestock producers, and federal land permittees to carry out alleged recovery actions as they see fit with very little oversight from the Service, as the Draft Rule currently provides.</p>
<p>Response: The Service would retain authority over the taking of gray wolves by the Service and its designated agents in accordance with the 10(j) rule while the species is federally listed under the ESA. The State of Colorado would be eligible to request to become a designated agent and would be required to comply with the provisions of the 10(j) rule. Section 7(a)(1) requires federal agencies to further the purposes of the ESA by carrying out programs for the conservation of endangered species and threatened species; this section does not apply to state agencies.</p>
<p>CONCERN STATEMENT 10: Commenters noted that the rule may violate the ESA by not addressing threats to the species or supporting recovery and conservation of the species in Colorado. One commenter suggested the Service should complete section 7 consultation to assess the impacts of lethal take on the species.</p>
<p>Representative Quote: In addition to our concerns with the Draft Rule as explained above, we note that the Draft Rule may also violate the ESA in other regards as well. First, the Service should initiate Section 7 consultation to assess the impacts of the Draft Rule’s excessive lethal take allowances and its overall effect of decreasing protections for wolves in the experimental population, on the listed entity, gray wolves in Lower 44 state population. 16 U.S.C. § 1536(a)(2).</p>
<p>Representative Quote: In nature, a species usually moves into a new area gradually when the conditions are favorable. This might happen because a competing species becomes less dominant providing an opportunity for expansion or there is an increase in prey in an area that makes conditions favorable. There may be several failed attempts by a species to move into an area before the conditions are right and expansion is successful. In nature, the species must be robust and the habitat must be favorable for success. When man introduces a species to a new area, like the Service is attempting with the gray wolf in Colorado, it does so suddenly. The conditions and habitat may or may not be favorable for the introduction. At the moment of sudden introduction, the species is at its most vulnerable and needs the most protection in order for it to establish a population and survive. However, the Service’s proposal for the reintroduction of the gray wolf provides the fewest protections under the law. This directly undermines the purpose of reintroducing wolves to Colorado and the goals of the ESA. The goal of the ESA is to recover wild species. Reintroduction of gray wolves furthers that objective by introducing an apex species to a portion of its historic range and expanding on the Service’s gray wolf program beyond Minnesota and Yellowstone. The ESA states that the Service shall make its</p>

management determinations based on the best scientific and commercial information available. However, the Service states that the primary reason for selecting its preferred alternative is for “management flexibility.” Flexibility is not one of the factors the Service should use for making its determinations. The Service is therefore manipulating the regulatory framework for the endangered wolf based on its own needs and not the requirements of the ESA or those in the best interest of the species.

Response: The rule includes a section on causes of decline and threats. Further, as part of the 10(j) process, the rule details how the establishment of a nonexperimental population would further the conservation of the species and discusses species recovery. The Service has addressed all the areas requested by commenters in the rule. Section 7 intra-Service consultation has occurred as part of this process to ensure this rulemaking would not jeopardize the continued existence of the gray wolf.

CONCERN STATEMENT 11: One commenter noted that the requirement for federal agencies to consult with the Service on any federal activities that may impact gray wolves would delay fuel reduction and wildfire mitigation projects on federal lands in Colorado and increase the risk of catastrophic wildfires.

Representative Quote: Federally managed lands in Colorado would be required to consult with USFWS on any management activities where they may affect wolves. This would further slow fuel reduction projects and any other management activities on federal lands, further hindering fuel mitigation projects, and increasing the danger of more catastrophic wildfires in Colorado.

Response: Under a non-essential experimental designation (i.e., 10(j) rule), federal agencies, except for the National Park Service and the USFWS National Wildlife Refuge System, treat the species as a species proposed for listing for purposes of section 7 of the ESA (50 CFR § 17.83(a)(2)). Federal agencies are only required to confer with the Service on actions that are likely to jeopardize the continued existence of proposed species or result in destruction or adverse modification of proposed critical habitat. Under this action, the Service is not designating critical habitat for gray wolves in Colorado. The 10(j) rule reduces the regulatory burden of conducting actions on federal lands, except on National Park Service and National Wildlife Refuge System lands, where the species is treated as threatened under the ESA.

UNGULATE PROVISION

CONCERN STATEMENT 12: Commenters expressed opposition to adding a provision to the rule to manage gray wolves that are impacting ungulate populations. Some commenters reasoned that the provision would be unnecessary because of scientific research indicating that wolves do not tend to markedly reduce ungulate populations, especially on larger scales. A commenter said that elk populations have increased in Idaho, Montana, and Wyoming even with wolves present and asserted that lethal control of wolves would rarely be justifiable. Another commenter cited research from Alberta, Canada, and Alaska that indicated removing predators did not necessarily increase ungulate populations or reduce hunter harvest of elk. Commenters noted that the lethal take of wolves permitted in the northern Rocky Mountains nonessential experimental population has led to unsustainable wolf hunting practices. Commenters said that managing wolf populations to benefit ungulates and the hunting industry would be contrary to the goals of the reintroduction. They also indicated that allowing lethal take of a federally listed species to provide recreational opportunities like hunting would be inappropriate. A commenter argued that lethal take of wolves to benefit hunters would be immoral and unfair because thriving wolf populations confer ecological benefits to all people. Commenters noted that wolves tend to predate on weak and diseased ungulates, leading to a stronger and healthier ungulate population and

reducing chronic wasting disease. One commenter specifically requested that wolves not be killed in response to decreases in nonnative mountain goat populations.

Representative Quote: A quarter century of data on wolf predation on elk in Idaho, Montana, and Wyoming that has resulted in INCREASES in elk in all three states suggests that lethal control of wolves will rarely be necessary or justifiable.

Representative Quote: (5) Whether to allow lethal management of gray wolves that are having a significant impact to ungulate populations, similar to the provisions in the 2005 final rule that established a northern Rocky Mountains (NRM) gray wolf nonessential experimental population (70 FR1286, January 6, 2005). As noted above we oppose the inclusion of a take allowance for a federally-listed species. It is inappropriate to allow such take that could substantially affect the recovery trajectory of a listed species simply to provide recreational opportunity. Colorado's wolf plan (currently not finalized) does have such a take provision but is not applicable until wolves are removed from the protections of the state threatened and endangered species act. Allowing take to bolster wild ungulate populations is unacceptable while wolves are protected as threatened or endangered under either federal or state law.

Representative Quote: I hope any rule will recognize that wolves are vital to maintaining healthy, biodiverse ecosystems, as has been demonstrated many times, for example in Yellowstone National Park. They must never be "managed" to protect ungulate populations. On the contrary, an uncontrolled ungulate population alters and threatens the health of the ecosystems that support it.

Representative Quote: The USFW should not incorporate a provision into the Draft 10(j) Rule that would allow for the lethal removal of gray wolves that are having an allegedly significant impact on native ungulate populations. Such a provision would serve no purpose in furthering the conservation needs of the endangered species as required by the ESA. Additionally, science does not support such a provision. Data from Montana, Wyoming, and Idaho show that elk populations have increased since wolves were reintroduced. Moreover, wildlife managers are highly unlikely to obtain reliable scientific data showing a causal link between wolf presence and ungulate population decline. Ungulate populations are limited by a complex combination of factors, including availability of winter range, competition with livestock, human tolerance, and hunting.

Response: The final rule does not include a general provision to allow for take in relation to ungulate management. However, the final rule does include a provision to allow the Southern Ute Indian Tribe and the Ute Mountain Ute Tribe, as designated agents, take related to ungulate management on reservation lands. Adding this provision recognizes the sovereignty of these Tribal nations.

CONCERN STATEMENT 13: Commenters expressed support for adding a provision to the rule to manage gray wolves that are having an impact on ungulate populations. Commenters requested that the provision mirror the guidelines in the 2005 final rule that established a northern Rocky Mountains gray wolf nonessential experimental population. Commenters argued that the ungulate provision in the northern Rocky Mountains nonessential experimental population rule gave managers the tools to mitigate effects on ungulates, and they indicated that ungulate populations would be at risk without the provision. Commenters noted that a reduction of ungulate populations could have economic impacts, particularly in the form of reduced revenues from hunting and decreased funding for CPW via ungulate hunting license sales. Commenters also worried that if wolves are allowed to severely depopulate ungulates, they may seek out livestock as an alternate food source, increasing impacts on livestock. Some commenters were specifically concerned about wolf impacts to the recovering moose population without the ungulate provision in place. A few commenters worried about high levels of predation on ungulates during the winter because wolves can travel on snow while ungulates typically do not. One commenter said that because wolves reproduce in litters with multiple pups, they have an

advantage over other species that produce a single offspring annually, so the ungulate provision should be included to counteract that advantage.

Representative Quote: Pg ix Alt 1 Agency take to reduce impacts on wild ungulates: This is important to be included in the final Rule because there is definite potential for a pack(s) to begin killing in large numbers rather than just what they need to survive. This could be detrimental to one or many more guides and outfitters as well as to a rural community that economically depends on big game hunting.

Representative Quote: Please apply the Section 10(j) Rule as described in your Alternative Concept #1 (preferred alternative) to ALL Wolves in Colorado and allow legal management of ALL wolves that are having a significant impact to livestock and ungulate populations, similar to the provisions in the 2005 final rule that established a Northern Rocky Mountain (NRM) gray wolf NEP (70 FR 1286, January 6 2005). These allowances will give CPW the proper, and necessary tools to effectively manage wolves when they become a significant problem depredating on livestock and wild ungulate populations within the State.

Representative Quote: Colorado's big game hunting and fishing generate \$1.8 Billion dollars annually to the Colorado economy, \$900,000 in big game hunting alone. In addition, trophy elk and deer hunting units exist in Moffat County and take over 20 years for hunters to draw tags within these units. Landowners in these hunt areas, as well as most hunt areas of Moffat County rely on big game hunting as a critical component of income for their ranches. Moffat County STRONGLY requests the USFWS adopt an EIS and 10(j) rule that applies to wildlife population management. Only applying 10(j) to livestock and not including wildlife, would eliminate a critical component of landscape scale management, and hamstring CPW from wildlife management. We understand there is consternation regarding the potential lethal take of an endangered species (wolves) for the management of game species such as deer, elk, antelope, big horns, and moose. However, these species have traditionally supported the Colorado Parks and Wildlife budget, as well as a major draw for out of state visitors. Colorado must not compromise the prized big game herds and wildlife watching and hunting opportunities, in the name of a top line predator that voters narrowly chose to be in this State. Colorado must be able to manage wolf populations in balance with big game, not instead of big game.

Representative Quote: This leads to my second issue as the management of the ungulate herds. Our ungulate herd is already declining with a low calf recruitment. When the ungulate population suffers the management of wolves needs to be a part of the plan. The ungulate herds have been encroached on and moved around due to increased human activity, building, recreation, etc. In GMU 47 and 444 cow tags were reduced to only 10 per season to help the low numbers. These animals have already had a loss of habitat and winter range but having another predator will not help these animals in our area. Please consider the ungulate management along with wolf management as other wildlife in this state is managed.

Response: As noted in the response to Concern Statement 12, a provision has been added to the final rule to allow for take related to ungulate management that would only apply to the Southern Ute Indian Tribe and the Ute Mountain Ute Tribe on Tribal reservation lands. Adding this provision recognizes the sovereignty of these Tribal nations.

TAKE

CONCERN STATEMENT 14: Commenters expressed disapproval for the lethal take permitted in the rule. Some commenters said that all lethal take of wolves, except in immediate defense of life, should be illegal. Commenters asked that people who lethally take wolves face felony criminal penalties, at least two years in prison, and fines.

<p>Representative Quote: Lethal management of wolves should not be permitted except in extremely rare circumstances of immediate defense of life.</p>
<p>Representative Quote: First we need to give wolves in CO full ESA protection with the exception of hazing and using all non lethals to mitigate livestock loss. The 10-J rule was clearly a part of the failure in the NC red wolf reintroduction and has hampered the Mexican Grey reintroduction. We saw that wolves were needlessly killed and poachers were embolden with the lack of punishments under the 10-J. Wolf poaching needs to carry a mandatory federal prison sentence. Labeling them experimental and inconsequential only emboldens those who want to kill them.</p>
<p>Representative Quote: The 10(j) rule should be revised to prioritize and concentrate solely on the non-lethal management of wolves in response to livestock conflicts. USFWS should modify the proposed 10(j) rule to strictly curtail any lethal management of wolves especially and importantly on public lands. As a taxpaying citizen, I really tire of hearing about these lethal methods on public lands, and notably, when so much of the public is unaware. USFWS should remove any provisions in the draft management rule that allow individuals to “shoot on sight” and lethal management of wolves should not be permitted except in extremely rare circumstances of immediate defense of life.</p>
<p>Response: The legal protections afforded to gray wolves under this rule are considered adequate and allow for the conservation of the species, while reducing the regulatory burden associated with species introduction. Except for narrowly defined exceptions, killing of wolves would be a violation of the take prohibitions described in section 9 of the ESA and of this rule and would subject the offenders to the penalties described in section 11 of the ESA. The ability to take a wolf on public lands is also dependent on any regulations of the public land agency related to firearm possession, use, or hunting on said lands. The Service believes the management authorized is appropriate based on the previous implementation of similar strategies of removing livestock-depredating wolves that has proved successful for wolf recovery elsewhere. In section 2.4.1 of the FEIS, a no-action alternative was considered where no lethal or injurious take would be permitted. The analysis found that the no-action alternative would not meet the purpose and need for the proposed action.</p>
<p>CONCERN STATEMENT 15: Commenters cited scientific research that has proven the effectiveness of nonlethal approaches at reducing livestock conflicts over lethal approaches. Some commenters noted that legalized lethal take of wolves can lead to less public respect and tolerance of wolves and may encourage more poaching. Commenters were specifically opposed to private individuals being permitted to lethally take wolves. One commenter noted that even when individual problem wolves are targeted for lethal take, mistakes have occurred, and the incorrect wolf was killed as a result. The commenter gave an example from southeast Washington. Commenters requested that wolves in Colorado be considered endangered with full ESA protections and noted that previous extirpations of wolves have been because of liberal lethal take. Other commenters asked for the rule to specifically ban lethal take of pups and breeding pairs. Commenters urged the Service to require nonlethal prevention measures before allowing any lethal take. Proposed methods for conflict avoidance included fladry, conditioned taste aversion, strobe lights, low stress stockmanship, range riders, fox lights, guard animals, removing livestock carcasses and bone piles, increasing human supervision, and adjusting calving time and location. Commenters cited studies and examples from the northern Rocky Mountains and Great Lakes region that document nonlethal conflict prevention’s effectiveness. One commenter suggested additional management strategies, such as using avoidance collars on wolves so that they avoid coming close to livestock and making wolves’ first encounter with livestock negative, so they learn to avoid livestock. Another commenter asked for more management flexibility to address expanding gray wolf populations. The commenter also asked for new technology measures to be considered such as “LED lights attached to ears of livestock, electric fences, shock collars put on wolves, or deterrents such as the radio-activated guard (RAG) box, a device which keeps wolves away by emitting strobe lights and sounds when</p>

triggered by a signal from radio collars.” Another commenter asked the Service to allow use of less than lethal munitions to opportunistically harass wolves.

Representative Quote: Lethal management often fails to provide a long-term solution to wolf-livestock conflict and has the highest variability of success when compared to non-lethal practices. In addition, there is significant evidence showing that lethal management of wolves may be less functionally effective at mitigating subsequent livestock losses than non-lethal deterrents.

Representative Quote: While human interests and safety are always a state concern, the same must be provided to wildlife. Please make certain that wolves are adequately protected for their growth and well-being. There must be no slaughter of pups or breeding/nursing females, and any wolf posing a potential threat must first be evaluated, since killing even one wolf can destroy its pack.

Representative Quote: We need to require implementation of non-lethal livestock-wolf conflict prevention on both private and public lands. Science is screaming that conflict avoidance and coexistence strategies are much more effective at protecting livestock than lethal methods. These methods include flagging, fox lights, guard animals, adjusting calving time and location, removing livestock carcasses, and increased human supervision. These methods are very effective. There are many recent studies from the Northern Mountain Rocky states and The Great Lakes that document the effectiveness of non-lethal conflict prevention. Again, killing wolves does not protect livestock. Lethal methods do not solve the problem of wolf depredation and fail to provide long-term solutions. These sources also find that killing wolves is the least effective method of conflict prevention. Lethal management of wolves should not be permitted except in extremely limited circumstances. I, also, do not want to “tie the hands of the agencies” by insisting that no wolf should ever be killed. However, historically, the liberal use of lethal control has been a major detriment to the other wolf populations in the U.S. No one has ever been prosecuted for the poaching of a red wolf, yet they are killed illegally every year. The Mexican Grey Wolf population also suffers from poaching and legal killings. These killings are a direct result of the flexibility of their 10(j) rulings. We cannot allow that in CO. Lethal control should NEVER be performed by Wildlife Services. Wildlife services kill hundreds of thousands of native animals every year, including hundreds of wolves and tens of thousands of coyotes. Private individuals should NOT be allowed to kill wolves. No wolf should be killed on public land, except in defense of a human life.

Representative Quote: Additionally, new technological measures are proposed such as LED lights attached to ears of livestock, electric fences, shock collars put on wolves, or deterrents such as the radio-activated guard (RAG) box, a device which keeps wolves away by emitting strobe lights and sounds when triggered by a signal from radio collars (Breck et al., 2002; Schultz et al., 2005; Salvatori and Mertens, 2012).

Response: The Service considers it important to retain the ability to remove wolves in specific situations in which nonlethal management actions are ineffective at resolving conflicts. The effectiveness of nonlethal deterrents depends on various characteristics of the area and individual livestock operations. For instance, many tools (flagging, radioactivated guard boxes, and electric fencing) are only effective in small areas. Nevertheless, some innovative tools (diversionary feeding, range riding, hazing) have reduced wolf depredations in certain situations. The Service would continue to focus on and expand the use of nonlethal tools where appropriate. The rule limits lethal removal at the agency’s discretion. The Service anticipates using removal as a last resort to balance conserving the species and preventing depredations. Additionally, the ability to take a wolf on public lands also depends on any regulations of the public land agency related to firearm possession, use, or hunting on said lands. The Service notes that the conclusion referenced by commenters of an inverse relationship between illegal killing and the level of protection afforded to wolves is far from a consensus in the scientific literature.

CONCERN STATEMENT 16: Commenters asked for wolf population recovery to be at the center of the Service's action. Commenters proposed that ranchers should not be allowed to take wolves until there is a self-sustaining population established in the state. Commenters also asked the Service to consider the intrinsic value of each individual wolf and the overall health of the population in addition to establishing numerical population goals. Commenters requested that the Service clarify how lethal take allowances would benefit the reintroduced wolf population and aid in their recovery. One commenter said the Service should prioritize the protection of gray wolves over other topics discussed in the rule and FEIS. The commenter noted that human-caused mortality was the main driver of gray wolf population decline in both the past and the present. The commenter urged the Service to consider that lethal take of wolves has weakened the metapopulation formed by wolves in central Idaho, northwest Montana, and the Yellowstone region.

Representative Quote: Legal taking of wolves by ranchers should not be permitted until there is a self-sustaining population in a given state. The Colorado Division of Wildlife places that number at 250-300.

Representative Quote: Along with this designation, I would like to see an emphasis placed on animal welfare, ensuring that the wolves of Colorado are managed in a humane manner. Giving strong credence to recent research that shows how human activity can have devastating impacts on individual wolf packs, which in turn could have equally deleterious effects on livestock producers and their operations. Recognizing the intrinsic value of each individual wolf and the health of the population, not just focusing on the number of wolves in the population, should be of the utmost importance.

Representative Quote: The Service should adhere to the elemental protection needs of the species above and beyond the other factors under consideration. As noted in the Proposed Rule, "Unregulated, human-caused mortality was the primary factor that caused population declines of gray wolves across the lower 48 States during the late 1800s and early 1900s." It remains so today. The State of Idaho is in the process of exterminating most of its wolf population that once numbered near 2,000 at its peak prior to the delisting of wolves from the Northern Rockies. Wolves were reintroduced to Idaho and Yellowstone National Park under a similar 10j Rule as a nonessential experimental population. While this allowed wider authority to kill wolves, as these states have done by the thousands, it has not resulted in greater tolerance of wolves. In fact, there is more opposition to wolves today than nearly 30 years during their reintroduction. The Service has failed to acknowledge the breakdown in the Northern Rockies wolf metapopulation that is threatening to dismantle the basic tenets of the Northern Rockies wolf recovery plan. Under this plan, the subpopulations of central Idaho, northwest Montana, and the Yellowstone region were to form the basis of a connected metapopulation. As the states move to remove more wolves and reduce numbers down as far as they can, the metapopulation itself is now endangered.

Representative Quote: We need your help to ensure the 10(j) rule doesn't sacrifice wolf protection and recovery in the name of "flexibility." A robust Colorado wolf population is necessary for the recovery of wolves across the West, and the rules that manage them need to reflect this obligation.

Response: The Service believes that wolves that exhibit depredating behavior do not further the conservation of the species and for that reason should be controlled. The selective removal of this type of individual animal is warranted in certain limited circumstances, and their removal contributes to overall conservation of the species. In Idaho during the first 10 years under the northern Rocky Mountain 10(j) rule, a small percentage of the population of wolves was controlled due to depredations, while the wolf population continued to expand from 14 individuals to 476 individuals. The Service anticipates similar conditions in Colorado. Overall, the 10(j) rule would allow for the conservation of the species, while reducing the regulatory burden that may arise in these situations. Establishment and monitoring of population goals and management measures that may be implemented to achieve recovery of the species in the State fall under the State Plan.

CONCERN STATEMENT 17: Commenters expressed support for lethal take allowances in the rule and in the FEIS and said that lethal take is a necessary management strategy to have available. Commenters were in favor of the management flexibility provided in the rule and under alternative 1 of the FEIS. Commenters noted that the previous reintroductions in the northern Rocky Mountains have succeeded with the management flexibility of a 10(j) rule. Commenters noted that lethal take is necessary to protect the livestock industry and other wildlife and requested that the permitting process for lethal take be liberal and streamlined to prevent livestock losses. Some commenters were specifically supportive of take provisions for wolves caught in the act of predating on pets and working dogs. Commenters said that lethal take would be important to prevent extreme growth of wolf populations in Colorado and impacts on livestock, big game, and other wildlife species. Some commenters said they appreciated the greater flexibility allowed in the Service's rule compared to the State Plan, specifically in relation to taking wolves "in the act of attacking" and the reporting requirements. Commenters said that lethal take would be the only feasible option in many cases and asserted that nonlethal measures like relocation and livestock guardian dogs are ineffective.

Representative Quote: Lethal control must remain in the 10(j) Rule and subsequent implementation. Any weakening of the use of lethal control will limit the success of the Colorado Plan and negatively impact livestock production, and other wildlife species. The previous reintroductions in the Northern Rocky Mountains have all done so with a 10(j) and have been very successful.

Representative Quote: The 10J designation needs to include the following: Trapping as a management option for wolves; A quick and efficient process for lethal take permits for livestock owners when depredation takes place or wolves are chronically harassing livestock; A comprehensive and flexible incidental take section; and Provide options for relocation/removal of wolf packs negatively impacting livestock production, depressing wildlife populations or creating human concerns. The ban of the use of leghold traps by Colorado's Amendment 14 does not apply to federal agencies in Colorado. With the exception of California, all other states use trapping as a management tool. Without the assistance of this tool, the Colorado wolf population will reach a point of extreme growth with unmitigated impacts to livestock, big game and other wildlife species. The Bureau of Land Management's failure to control the feral horse population serves as a prime example for unchecked growth of a high impact species.

Representative Quote: We find positive differences between provisions in the proposed 10(j) rule and similar allowances referenced in Colorado Parks and Wildlife's (CPW) Wolf Restoration and Management Plan. First, we appreciate that the proposed 10(j) rule allows for flexibility beyond what the state of Colorado would allow, including the taking of wolves "in the act of attacking" livestock without a permit or authorization from FWS. Second, we are encouraged to see that the definition of livestock under the proposed 10(j) rule is broader than what CPW recognizes and includes domestic bison as well as pigs, mules, and alpacas. Third, we are pleased to see that the safety of our pets is accounted for in the proposed 10(j) rule, and that wolves could be taken without FWS authorization, if in the act of attacking pets beyond livestock guard animals and working dogs. Fourth, we are in favor of the flexible reporting requirements in the proposed rule whereby opportunistic and intentional harassment of wolves will be reported to FWS within 7 days as opposed to the 24-hour notification required by the state. We appreciate that the FWS can issue a written take authorization for limited duration of 45 days or less, where the state issues a limited duration permit only if state or federal agents are unable to implement lethal control actions.

Representative Quote: The permitting process for intentional harassment and take provisions should be expeditious, liberal and streamlined to allow for timely prevention of conflicts and depredations.

Representative Quote: Lethal Take Wolves have been living in other states, so this is not an experiment. If wolves have no reason to fear humans, they are not deterred from killing livestock, even in the presence of range riders, and have no reason to avoid human contact. Recent killings in North Park illustrate this. "Non-lethal" deterrents, while highly recommended and celebrated, are, in fact, not effective. Experience in other states, and in North Park, show that the wolves soon learn to ignore fladry, noisemakers, range riders and other

deterrents if there is no consequence to hunting and killing prey. A predator “any predator” has to kill another living creature every few days in order to survive. Ribbons tied to a fence will not change their minds. We have used Livestock Guardian Dogs to protect our sheep since 1980. They are expensive to maintain and require a lot of management. They are usually effective with coyotes because they are the larger dominant canines. Livestock Guardian Dogs are not a deterrent to wolves who can and do kill them.
Response: The Service notes the support provided for the lethal take provided in the rule. In the final rule, the Service has removed the inclusion of pets from the allowable lethal take provision and the definition of domestic animals. The Service did not receive many comments related to the inclusion of domestic pets. In addition, retaining the pet provision could lead to conflicts between the Service’s rule and the State Plan because the State Plan does not include take of wolves in the event of depredation or attacks on domestic pets. However, herding and guarding animals (such as alpacas, llamas, donkeys, and certain breeds of dogs commonly used for herding or guarding livestock) are considered livestock and are included in the allowable lethal take provision.
CONCERN STATEMENT 18: A commenter said reporting of lethal take or harassment should be permitted through a phone call or website in addition to mail or email.
Representative Quote: Section 17.84(6) requires harassment or lethal take of gray wolves to be reported to USFWS or its designated agent. The Rule currently provides for reporting by US Mail or email. The Rule should also authorize reporting through a phone number or website to provide maximum flexibility to reporting individuals.
Response: According to the proposed regulation promulgation provided in the rule, any take of wolves, including opportunistic harassment or intentional harassment, must be reported to the Service, the Colorado Ecological Services Field Office Supervisor, or a Service-designated agent of another federal, state, or Tribal agency. The rule does not specify that any method of communication is not permitted.
CONCERN STATEMENT 19: Commenters asked the Service to fine livestock operators who do not remove carcasses promptly.
Representative Quote: Dead livestock, dogs or other domestic animals should be removed promptly after collecting any evidence. They should not be allowed to attack predators. Fines should be imposed for those who leave dead livestock to attract predators in an effort to be able to kill wolves
Response: The Service agrees that the carcasses of livestock that die for reasons unrelated to wolves should be removed as promptly as possible; however, it is outside the Service’s regulatory authority to require this. In addition, due to the size and remoteness of many livestock operations, it would be impractical for ranchers to discover and remove every carcass within a timeframe that would prevent wolves from potentially feeding on them.
CONCERN STATEMENT 20: Commenters asked that each pack of wolves be consistently monitored to give livestock operators a chance to take steps to protect their animals and prevent lethal take from occurring as a result of depredations.

<p>Representative Quote: The Proposed Rule provides for GPS and VHF to be used to assist with individual identification. The percentage of GPS units will decline as wolf numbers increase in Colorado. To accurately focus non-lethal resources every pack must be monitored in real time and that information be shared with livestock producers in the surrounding area to allow for additional management to be put in place.</p>
<p>Representative Quote: 3-8 Domestic Prey Species/Livestock Depredation. This section highlights the need for lethal control under the 10(j) designation; and the need for trapping to radio collar and monitor wolves to assist livestock owners with targeted implementation of non-lethal deterrents.</p>
<p>Response: The State would monitor gray wolves in the nonessential experimental population area using GPS collars, radio telemetry, or other standard wolf population monitoring techniques, as appropriate. Monitoring wolves and groups of wolves falls under the State Plan, and decisions regarding how monitoring data are used or distributed would be left to the State.</p>
<p>CONCERN STATEMENT 21: Several commenters requested a limit to the overall numbers of wolves that can be lethally taken.</p>
<p>Representative Quote: The proposed rule lacks any quantitative or qualitative checks on the number of wolves that can be injured or killed under these take provisions (Proposed Rule 49-52). Given the concerns above regarding the vagueness and subjectivity of numerous take authorizations, coupled with substantial anti-wolf prejudice and the publicly-expressed intent of numerous individuals to engage in poaching, these provisions may well lead to levels of take comparable to those currently ongoing in Idaho and Montana. Particularly given expected low wolf numbers during early years of restoration efforts, coupled with the threat of being killed over the Wyoming border, these take provisions could, absent quantitative checks, lead to either the destabilization of individual packs or the overall failure of the restoration effort. No lethal take should be authorized without a prior analysis, by the Service, of how that take will affect both the pack in question and the resilience of the entire Colorado wolf metapopulation.</p>
<p>Response: The Service will coordinate with the State of Colorado and review annual reporting to ensure that there is progress toward wolf recovery per the State Plan. As specified in table 1 of the rule, livestock operators may only be issued “repeated depredation” take authorization of a limited number of wolves, if: (1) the landowner has had at least one depredation by wolves on livestock that has been confirmed by the Service or its designated agent within the last 30 days; (2) the Service or its designated agent has determined that repeatedly depredating wolves are routinely present on the private land and present a significant risk to the health and safety of livestock; and (3) the Service or its designated agent has authorized lethal removal of wolves from that same private land. Note that the term “repeatedly depredating wolves” has replaced the term “problem wolves” in the final rule.</p>
<p>CONCERN STATEMENT 22: Commenters asked the Service to work collaboratively with livestock operators and require proof of use of conflict prevention measures before lethal take is considered. Commenters noted that immediately allowing lethal take would disincentivize use of nonlethal management as a first step. Commenters said that the onus should be on livestock operators to manage their livestock to avoid conflicts rather than managing wolves to avoid conflicts. A commenter said that determinations regarding causes of livestock deaths should be made publicly available prior to any lethal take and should include summaries of livestock losses, investigation reports, maps of areas with known wolf activity and depredations, and conflict deterrence plans specific to the area. They also requested that take authorizations should end after the wolf is killed, the wolf leaves the area, or after 14 days. Commenters also suggested that wolves that chronically depredate on</p>

livestock could be translocated rather than lethally taken. Commenters asked the Service to ensure that the rule does not unintentionally incentivize lethal take over nonlethal take.

Representative Quote: We need to require implementation of non-lethal livestock-wolf conflict prevention on both private and public lands. Science is screaming that conflict avoidance and coexistence strategies are much more effective at protecting livestock than lethal methods (6). These methods include flagery, fox lights, guard animals, adjusting calving time and location, removing livestock carcasses, and increased human supervision. These methods are very effective (7,8,9). There are many recent studies from the Northern Mountain Rocky states and The Great Lakes that document the effectiveness of non-lethal conflict prevention (10,11,12,13). Again, killing wolves does not protect livestock. Lethal methods do not solve the problem of wolf depredation and fail to provide long-term solutions (14,15,16). These sources also find that killing wolves is the least effective method of conflict prevention. 5. Lethal management of wolves should not be permitted except in extremely limited circumstances. I, also, do not want to “tie the hands of the agencies” by insisting that no wolf should ever be killed. However, historically, the liberal use of lethal control has been a major detriment to the other wolf populations in the U.S. No one has ever been prosecuted for the poaching of a red wolf, yet they are killed illegally every year. The Mexican Grey Wolf population also suffers from poaching and legal killings. These killings are a direct result of the flexibility of their 10(j) rulings. We cannot allow that in CO.

Representative Quote: A requirement that multiple, documented, nonlethal coexistence practices are first used and proved unsuccessful before any wolf killing is allowed. Fladry (Young, 2018), low-stress stockmanship (Louchouran, 2023), conditioned taste aversion (Dingfelder, 2010), livestock protection dogs (Gehring, 2010) and other non-lethal management techniques such as strobe lights (WDFW, 2015) are increasingly viable practices.

Representative Quote: Regarding lethal take for depredation, I ask that proof be required of meaningful deployment of non-lethal conflict reduction techniques before any such lethal take is allowed. I would hope, too, that no lethal take be allowed on public lands.

Representative Quote: We would like to see what regulatory actions will be available to mitigate perverse incentives inspiring the questionable take of wolves in retaliation for perceived hunting or livestock losses.

Response: Nonlethal control methods are preferred and encouraged as noted in concern response 15. However, the Service considers it important to retain the ability to remove wolves in specific situations in which nonlethal management actions are ineffective at resolving conflicts. The 10(j) rule provides the framework for implementation of any take that may occur. The Service ultimately authorizes the take of gray wolves under limited circumstances. The ability to take a wolf on public land also depends on any regulations of the public land agency related to firearm possession, use, or hunting on said lands. Monitoring and reporting on wolves and wolf depredation fall under the State Plan, and decisions regarding how monitoring data is used or distributed would be left to the State.

CONCERN STATEMENT 23: Commenters asked the Service to incorporate additional scientific research into its take provisions. Commenters said the take permitted in the rule favors people who do not support wolf reintroduction and does not rely on the science behind wolf conflict prevention. Commenters asked the Service to incorporate science on minimum viable population sizes in the rule. Commenters noted research with the following findings:

- Keeping wolf mortality as close as possible to natural death rates leads to less depredation by wolves, while higher lethal take leads to more depredation because of social disruption to wolves.
- Only targeted lethal removal of known individual depredating wolves can reduce future depredations.

- Timing of removal should be less than 7 days after the depredation event for the most effective reduction in conflicts.
- Nonlethal tools are more effective than lethal management.
- Lethal take of wolves, particularly pack leaders, can lead to pack dispersal. Dispersing wolves are more likely to predate on livestock.

Representative Quote: General comments on lethal removal of depredating wolves. We would first note that the targeted lethal removal of known depredating wolves, whether “in the act” or otherwise known to have killed livestock, can reduce future depredations; untargeted or indiscriminate public harvest, however, does not (DeCesare et al. 2018). Further, Bradley et al. 2015 provide guidelines for timing and when partial or total pack removal is most effective; response within 7 days is more effective than a longer period of time after the depredation. These guidelines should be incorporated in the Service’s standards and required for any designated agent, livestock owner, or other individual authorized to lethally take wolves under the rule.

Representative Quote: The proposed 10(j) rule is not grounded in best available science of wolf ecology or biology. Best available science informs that wolf pack survivability is reduced by human killing of family members and ecological effectiveness is diminished. Instead, rather than contributing to conservation of wolves, lethal management subverts wolf conservation by legitimizing legal wolf killing and exacerbating illegal wolf killing. - Best available science informs that lethal management is ineffective and exacerbates livestock losses to wolves. - Best available science informs that non-lethal livestock-carnivore strategies are effective in preventing livestock depredations and maintain wolf family structure. - Require livestock-wolf conflict prevention: Allow lethal take on private and public land only after all reasonable non-lethal livestock-carnivore conflict prevention strategies have first been exhausted. - Killing wolves should never be the first line of defense and killing wolves to prevent livestock attacks should never be allowed on Colorado’s public lands. - Livestock who are turned out to graze on large public land allotments die for many reasons including weather, disease, injury (22). o Wolves, mountain lions, black bears and other native carnivores should not become a scapegoat. - Killing wolves can exacerbate conflicts with livestock by disrupting the stable social structures that wolves rely on. Numerous scientific reviews have questioned the scientific merit and efficacy of lethal predator control. - Non-lethal methods to prevent conflicts are more effective, ethical and economical than killing wolves. Most scientific research today suggests the deployment of an array of non-lethal tools is the most consistently effective way to prevent these types of incidents, including barriers such as fencing or fladry, human presence and light/sound deterrents. That is especially true when comparing the effectiveness of non-lethal methods in the scientific literature to lethal methods, which have been found to be highly variable and even counterproductive for preventing incidents. Lethal methods in response to incidents may exacerbate conflict through the disruption of wolf families, which often disband after they lose a member to human-caused killing. Such break up of wolf families increases the risk that otherwise cooperative hunters that prefer wild prey will turn to domesticated animals. Killing wolves is not the correct answer (56).

Representative Quote: I believe this proposed rule is just meant to appease people who want to liberally take wolves off the landscape. The people who "suffer" from wolf depredations, will learn how to adjust to non-lethal control methods. If we are truly following the best science in this necessary reintroduction, then we must acknowledge that killing a wolf usually makes problem situations worse. Research evidence from Kira Cassidy has shown that killing a pack leader will usually weaken the wolf pack because they will have lost their best/most experienced hunters. This loss will likely cause dispersal of the wolf pack or cause the remaining pack members to target softer prey (i.e. livestock). Dispersing wolves are also more likely to go after livestock due to the difficult nature of hunting large mammals alone. This research shows that the worst thing you can do to a wolf pack is kill one or both of the pack leaders. It can cause an increase in wolf depredations on livestock. This rule totally overlooks the fact that we must use all non-lethal controls available and not resort to the killing of "problem" wolves. Please don't be fooled by this rule. It is a misguided attempt to appease hunters, ranchers,

etc. and go after wolves as much as they can while ignoring the science that says this kind of response will only create more problems.
Representative Quote: 13. Best science can conclude about the state of the science for preventing predation on livestock. At present, the evidence is better for non-lethal methods, and they seem on average more effective at protecting livestock (Treves et al. 2016; van Eeden et al. 2018, Khorozyan et al. 2020). Furthermore, lethal methods pose a risk of counter-productive increases in livestock loss, detected in two studies in Europe and several in the USA on wolves (Fernandez-Gil et al. 2016; ImBert et al. 2016; Santiago-Avila et al. 2018), and studies of recreational hunting of cougars in Washington state (Peebles et al. 2013) and beyond (Laundre & Papouchis 2020).
Response: As stated in previous responses, the 10(j) rule provides the framework for protections and exceptions allowing for lethal control of wolves under limited circumstances. The Service considers it important to retain the ability to remove wolves in specific situations where nonlethal management actions are ineffective to meet the purpose of the 10(j) rule of conserving the species while reducing the regulatory burden from reintroductions. The ability to take a wolf on public lands also depends on any regulations of the public land agency related to firearm possession, use, or hunting on said lands. The Service does not anticipate that lethal removal would exceed natural mortality levels in the reintroduced gray wolf population, as outlined in section 4.4.1 of the FEIS, "Gray Wolf," under alternative 1.
CONCERN STATEMENT 24: Commenters asked for clarity on whether recreational hikers on public land could take wolves in the act of attacking their dogs.
Representative Quote: Taking wolves "in the act of attacking" livestock on PUBLIC land. As above, we support this form of take under the rule if the required reporting and confirmation are strictly enforced. The description in the table on page 50 of the proposed rule states that "any person legally present on public land may immediately take a wolf that is in the act of attacking the individual's stock animal or dog." This is a broad take allowance that would presumably allow a recreational hiker to lethally take a wolf attacking their pet dog. If that is the intent, more description would help to clarify this take allowance, and it should be noted that current Colorado law does not authorize the taking of other predators attacking pets.
Response: The Service has revised the rule's inclusion of pets in the authorization of take to only include "working dogs" to minimize confusion and to be consistent with the State Plan. However, as stated in the rule, anyone may engage in opportunistic harassment of gray wolves.
CONCERN STATEMENT 25: One commenter said that the Service should not allow wolves to be driven from public to private lands where they could be subjected to take.
Representative Quote: The 10 (j) rule must be revised to prioritize the non-lethal management of wolves in livestock conflicts and curtail any lethal management of wolves on public lands - and do not allow the "convenient" ushering of wolves onto private lands so they can be "managed" there as the BLM does with wild horses and burros.
Response: The 10(j) rule does not authorize an individual to "drive" wolves from one area to another, regardless of if the land is public or private. As noted under Concern Statement 6, intentionally moving wolves from one area to another is a form of harassment/take that is not an exception provided by the rule and would be a violation of section 9 of the ESA. Conditions set forth in the 10(j) rule dictate when and where nonlethal versus

lethal control can be used to manage wolves. The ability to take a wolf on public lands also depends on any regulations of the public land agency related to firearm possession, use, or hunting on said lands.

CONCERN STATEMENT 26: Commenters asked for a broadening of the take allowed on public lands, noting that livestock can end up outside their owner's allotments and should still be defensible from wolf attacks.

Representative Quote: Lastly, I would like to see a literal broadening of the ability for public land permittees to be able to use take to defend their livestock and dogs being attacked by wolves to beyond their designated allotment to wherever their livestock may be. Public lands are under multiuse doctrine which means that often gates get left open or cut, livestock are kept away from water sources by campers, chased by dogs. There are many reasons that livestock may be off its owner's allotment.

Representative Quote: Additionally, the proposed rule provides that when it comes to take on public land, any livestock producer and public land permittee who is legally using public land under a valid Federal land-use permit may take a gray wolf in the act of attacking livestock or dogs on the person's allotment or other authorized for the person's used without prior written authorization. Delta BoCC would suggest that the language be amended to read "any livestock produce and public land permittee... who is legally using public land under a valid Federal land-use permit may take a gray wolf in the act of attacking livestock or dogs legally present on public lands without prior written authorization." This would protect Delta County permittees from the scenario where livestock would be on adjoining allotment and/or private lands due to gates being open.

Representative Quote: (iv) Take on public land. The proposed rule includes provisions authorizing Any livestock producer and public land permittee (see definitions in paragraph (a)(4) of this section) who is legally using public land under a valid Federal land-use permit may take a gray wolf in the act of attacking livestock or dogs on the person's allotment or other area authorized for the person's use without prior written authorization. We recommend changing this provision to read "Any livestock producer and public land permittee (see definitions in paragraph (a)(4) of this section) who is legally using public land under a valid Federal land-use permit may take a gray wolf in the act of attacking livestock or livestock guard animals legally present on public land." The limitation of this provision to only the person's allotment or other specific area authorized for use under a grazing permit would not account for livestock that may have strayed onto adjacent public lands. This is not an infrequent occurrence and can be due to recreators not closing gates, livestock being run through fences by predators, or any number of circumstances.

Response: The 10(j) rule allows for take of wolves on public lands under specific conditions and specifies that any take occurring on public lands would be subject to the regulations of the federal land management agency. The Service has modified language in the rule to clarify this issue: "Any livestock producer and public land permittee. . . who is legally using public land under a valid Federal land-use permit may take a gray wolf in the act of attacking livestock or working dogs legally present on public lands without prior written authorization." Livestock, as defined in the rule and FEIS, includes livestock herding and guard animals.

CONCERN STATEMENT 27: Commenters were opposed to any take on public land, saying that public lands should be a refuge for wolves. One commenter said that not permitting lethal take on public lands would provide necessary incentives for livestock operators to nonlethally protect their livestock from wolves. Commenters noted that although Colorado Proposition 114 says that Colorado will not impose land use restrictions on private lands for purposes of wolf reintroductions, the Service should impose land use

restrictions on public lands and forbid take of wolves on public land. Other commenters said that lethal take on public land should only be permitted if individual problem wolves could be targeted.
Representative Quote: Lethal control is to be carefully considered only in emergency situations and only by CPW on private land. Lethal control is inappropriate and should never be considered on public lands. Public lands belong to me and the wolves on that land belong to everyone. Taking wolves on public land is taking something irreplaceable from all of us.
Representative Quote: You should allow no killing of wolves on public land under any circumstances. Wolves are still an endangered species.
Representative Quote: Additional taking by grazing permittees on public land (Proposed Rule at 51). In addition to the problems of shoot-on-sight policies on private land, the Service has failed to even consider whether lethal take in support of public land grazing permits is justifiable or consistent with provisions of land management and grazing law. Grazing on public land is a privilege, and grazing permits must comply with Forest Service and Bureau of Land Management plans, which in turn must address the multiple-use requirements of their governing statutes. Authorizing lethal take of wolves on public land, based on a single depredation, presumes that the livestock permittee's interest in continuing operations without taking measures to minimize conflict outweighs the public's interest in other uses of the public lands, including enjoying the presence of viable wild wolf packs. Proposition 114 states clearly that the State of Colorado shall not impose land use restrictions on private lands for purposes of wolf restoration, but this provision both does not and cannot apply to federal agencies' management of the federal public lands.
Response: The ability for public land permittees to take wolves for the purposes of removing depredating wolves is necessary to mitigate conflict with livestock producers and is consistent with the purpose of the 10(j) rule to conserve the species while reducing the regulatory burden of a species' introduction. This ability is essential for the recovery of the gray wolf because the regulation of human-caused mortality has been a primary factor contributing to increased wolf abundance and distribution in the lower 44 states. The ability to "take" a wolf on public lands is also dependent on any regulations of the public land agency related to firearm possession, use, or hunting on said lands. State management of wolves is beyond the scope of the rule and EIS.
CONCERN STATEMENT 28: Commenters worried that the regulations for shoot-on-sight in the rule are too vague and that key terms like harassing and molesting do not have clear definitions. They asked for more straightforward definitions to avoid confusion.
Representative Quote: We strongly recommend that the Service clearly define chasing, harassing and molesting in a way that makes it clear to livestock owners what evidence of a real threat would be necessary to legally allow lethal take. Any guidance that can be given would ease the concerns of the livestock owners and assure wolf advocates that lethal take only occurs under clear circumstances that would result in the death or injury of livestock.
Representative Quote: Taking wolves "in the act of attacking" livestock on private land. This provision allows for lethal take for "harassing" and "molesting" and in the definitions section includes "chasing;" these terms are not defined in the proposed rule or elsewhere in federal regulation. Livestock owners will not be able to clearly identify when these provisions apply and so I oppose taking wolves in this circumstance. I believe the Service should clearly define these terms to give livestock owners directions under the proposed rule. Allowing the take of a wolf in the act of attacking livestock will not solve anything. The livestock owner should provide proof of the attack to management and if there is take there should be a 24-hour reporting rule.

Representative Quote: The proposed 10(j) rule allows for lethal take for “harassing” and “molesting” and in the definitions section includes “chasing.” These terms need to be clearly defined in the proposed rule, DEIS or elsewhere in federal regulations. Livestock owners need to be clear on when these provisions apply.

Response: The Service added examples to the rule to guide harassment activities and clarified the definition of “in the act of attacking.” The term “shoot-on-sight” written take authorization was replaced with “repeated depredation” written take authorization in the final rule. The precise requirements to qualify for issuance of a repeated depredation authorization are provided in the final rule. The terms used to describe wolves in the act of attacking are consistent with section 3 of the ESA and previous 10(j) rules. The term “take” is also defined in section 3 of the ESA. The terms “harm” and “harass” are defined by regulation and are not repeated in the rule. See 50 CFR § 17.3.

CONCERN STATEMENT 29: Commenters expressed opposition to shoot-on-sight take authorizations and for permission to take wolves in the act of attacking. A commenter noted that wolves often chase or test potential prey without the chase resulting in an attack. One commenter noted that the 1994 rule governing wolf reintroduction in the northern Rocky Mountains does not include shoot-on-sight authorizations for private landowners and said that the allowance would not be necessary.

Representative Quote: “Shoot-on-sight” permits should be eliminated or, at minimum, significantly narrowed. The Proposed Rule would allow the Service to issue a limited-duration “shoot-on-sight” take authorization allowing a landowner, their employees, or a public land grazing permittee to take up to a specified number of wolves. These authorizations should be eliminated because they are unnecessary and contrary to the conservation of the species. First, the Proposed Rule’s other exceptions for agency take of wolves and take by individuals when a wolf is in the act of attacking domestic animals adequately cover all situations where lethal removal might be considered, as a last resort, necessary. Indeed, the 1994 4(d) rule governing wolf reintroduction in the Northern Rocky Mountains did not include any analogous provision for private landowner take authorization and there is no reason why it is necessary here. Second, expanding the circumstances where private individuals (rather than agency officials) may lethally take wolves should be disfavored, because private individuals do not receive the same training as government officials, and their actions are not subject to the same accountability and transparency mechanisms as agency actors. Third, “shoot-on-sight” authorizations are intrinsically untargeted and are likely to result in the killing of random wolves who are not “problem” wolves responsible for livestock attacks, undermining the efficacy of the authorization as a means of addressing conflict and amplifying the damaging effects of the killing on the population.

Representative Quote: Additionally, the Draft Rule’s “shoot-on-sight” provisions, see 88 Fed. Reg. 10,272, must be removed altogether, especially on federal public lands, but also as unnecessary on private lands as well. This is a particularly egregious allowance of take that cannot be said to serve the conservation needs of the species and is thereby entirely inappropriate in this Section 10(j) rule.

Response: The ability to provide take authorization for a landowner or public land permittee for the purposes of removing depredating wolves is necessary to mitigate conflict with livestock producers and is essential for the recovery of the gray wolf. Regulation of human-caused mortality has been a primary factor contributing to increased wolf abundance and distribution in the lower 44 states. “Shoot-on-sight” written take authorizations have been renamed to “repeated depredation” written take authorizations in the final rule. Repeated depredation written take authorizations are of limited duration and scope, include direct oversight by the Service or its designated agents, and are authorized only when the Service or its designated agents are unavailable to address the situation. The ability to take a wolf on public lands is also dependent on any regulations of the public land agency related to firearm possession, use, or hunting on said lands.

<p>CONCERN STATEMENT 30: Commenters requested that take authorization permits be extended for a period longer than 45 days. A commenter asked for the shoot-on-sight requirements to be changed to specify that the predation event was confirmed within the last 30 days, rather than the predation event occurring within the last 30 days. The commenter noted that grazing allotments are often large and remote and that it is impractical to expect all depredations to be discovered and confirmed within 30 days.</p>
<p>Representative Quote: b. The “shoot on-sight” written take authorization permit should be available for longer than 45 days in the face of continued depredation or should be allowed to be extended. Our grazing allotment is permitted for 82 days and we see continuous depredation by resident predators in our area (bear, lion, coyote) for the entire duration. I assume depredation behavior from wolves would be similar.</p>
<p>Representative Quote: The requirement that a shoot-on-sight order must be preceded by a confirmed depredation within the last 30 days (50 C.F.R. 17.84(iii)(B) and iv(B)) should specify that the confirmation must have occurred within the last 30 days, not that the depredation itself occurred within the last 30 days. Public land grazing allotments are large, and portions of many allotments are remote and difficult to access regularly. Some large private holdings also contain remote or inaccessible areas. As a result, it is not practical to expect that all depredations will be discovered within 30 days, let alone be confirmed. Further, staff or funding constraints may make it difficult or impossible for USFWS or its designated agent to confirm all depredations within 30 days, even if they are promptly discovered and reported.</p>
<p>Response: The Service believes the maximum 45-day duration of the “repeated depredation” written take authorization is appropriate. Note that “repeated depredation” written take authorization is the updated term for “shoot-on-sight” written take authorization for the final rule. The length of the authorization is designed to ensure that only wolves identified as posing a high risk of depredation are targeted for removal. The rule stipulates that to qualify, the grazing allotment must have had at least one depredation by wolves on livestock that was confirmed by the Service or its designated agent within the last 30 days. As such, the confirmation must have been within the last 30 days, not the depredation event.</p>
<p>CONCERN STATEMENT 31: A commenter asked the Service to forbid attracting wolves in order to harass them. The commenter notes that the term “intentional harassment” is too vague and could include methods of tracking, searching out, and waiting for wolves that lead to attracting wolves to human-dominated areas and livestock, resulting in habituation. The commenter was in favor of including methods like predator calls to deter wolves.</p>
<p>Representative Quote: Intentional harassment. We recommend removing any allowance for attracting wolves in order to harass them. The definitions of opportunistic harassment and intentional harassment imply that intentional harassment could include “prior purposeful actions to attract, track, wait for, or search out the wolf.” (Emphasis added). Intentionally attracting wolves in order to harass them could run counter to the intent of such harassment, which is to keep wolves from approaching humans and their livestock. If “attracting” can be clearly defined to include methods such as using predator calls or other means that will not potentially attract wolves to human dominated areas or livestock, this provision would be acceptable. Without such constraints, it could lead to further depredations or habituation. On the other hand, tracking, waiting for, and searching out wolves can be done in ways that will cause avoidance and we support inclusion of those methods in the proposed rule.</p>

Response: The Service has added language to the rule prohibiting the use of attractants or intentional feeding of wolves for the purposes attracting them.

CONCERN STATEMENT 32: Some commenters made suggestions for conditions that should be met prior to the authorization of lethal take. Suggested conditions included:

- Require four or more livestock losses on private land by a single wolf within seven days to lethally take the wolf.
- Require the Service to determine that no circumstances attracted wolves to predate on the livestock, including the presence of carrion or unusual odors.
- Verify that the livestock operator implemented at least two area-specific conflict minimization techniques.
- Verify that further nonlethal prevention would not be effective and that lethal take of the wolf would not harm the wolf population and state recovery objectives.
- Require more than one depredation event to occur before lethal take is permitted.

Representative Quote: LETHAL MANAGEMENT OF WOLVES SHOULD NOT BE PERMITTED EXCEPT IN EXTREMELY LIMITED CIRCUMSTANCES, should be conducted only by CPW professionals, never be conducted by Wildlife Services, never be conducted by private individuals, and only be conducted on privately-owned land, never on publicly owned land. – In defense of human life or if a wolf is perceived to be a threat to human life and safety. – Regarding livestock, those extremely limited circumstances or cases of urgency are defined by all of the following conditions being met: 1) There are 4 or more livestock losses on private land confirmed to be by the same wolf within 7 days; 2) FWS determines that no identified circumstance exists that attracts or encourages wolf livestock conflict; 3) no carrion or unusual odor attracted the wolf to livestock prior to wolf attacks on stock; 4) FWS confirms livestock owners in the area have worked to reduce conflicts and have documented the appropriate implementation of at least two area-specific conflict minimization techniques; 5) FWS determines the livestock losses are likely to keep occurring despite non-lethal measures; 6) the identified wolf caused the chronic livestock loss and killing it is likely to reduce the threat of livestock losses; and 7) FWS determines that killing the wolf is not expected to harm the wolf population's ability to reach recovery objectives statewide.

Representative Quote: All scientific methods should be used to keep wolves away from livestock before lethal management is used.

Response: The 10(j) rule provides for both lethal and nonlethal take to conserve the species while reducing the regulatory burden of species reintroduction. The allowances for lethal take in the rule are narrow and limited. With these limited allowances, including additional requirements on the use of lethal take would create barriers that would reduce the effectiveness of the rule and would not provide the management flexibility the rule was developed to provide. Language has been added to the FEIS to state why these concepts are not included in the final documents.

CONCERN STATEMENT 33: Commenters had suggestions for who could perform lethal take of wolves. Many commenters wanted the rule to exclusively permit CPW personnel to carry out lethal management. One commenter said that the Service should not carry out lethal take and that rules should instead be enforced by "animal damage control agents" to ensure livestock operators' livelihoods are adequately protected. One commenter said that U.S. Department of Agriculture (USDA) Wildlife Services should be the first choice for investigating and taking problem wolves, while another commenter said USDA Wildlife Services should never be permitted to use lethal control. Commenters also proposed that CPW and the Service should be the only

<p>personnel allowed to conduct lethal control and that all lethal take should occur within seven days of the incident.</p>
<p>Representative Quote: Killing wolves should be a last-resort measure performed only by the FWS or their designated agent, and strictly limited to chronic conflict situations where nonlethal approaches or other solutions have proven ineffective at resolving the conflict.</p>
<p>Representative Quote: Additionally, any take/lethal control permits issued under the 10(j) rule should only be given to Colorado Parks and Wildlife staff, and not to private individuals or to individuals associated with USDA-Wildlife Services which has been implicated in the deaths of the endangered Mexican gray wolf (23). We know that wildlife service's kill hundreds of thousands of wild, native animals every year in this country and we will no longer allow it. We also know that Wildlife services poisons (with poisons like sodium cyanide and Compound 1080) our land in an attempt to cull predators. We will not tolerate these poisons in wolves' actual or potential range.</p>
<p>Representative Quote: I would support the following provisions: Lethal control should be conducted only by FWS or CPW staff, and only in cases of livestock losses confirmed to be by the same wolf, within 7 days of an incident. All kill authorizations should be revoked after the depredating wolf is killed or leaves the area, or after 7-14 days, if no wolf is killed. Do not allow for 45 day permits since it is impossible to determine if the "problem wolf" is still in the area, or if other wolves are moving through the area and are not preying on livestock.</p>
<p>Representative Quote: "The Service or our designated agent may carry out harassment, nonlethal control measures, relocation, placement in captivity, or lethal control of problem wolves." 88 FR 10278. USDA Wildlife Services should remain the first choice for investigating and taking problem wolves.</p>
<p>Response: The legal protections afforded to gray wolves under this rule are considered adequate. Except for narrowly defined exceptions in the 10(j) rule, lethal take of wolves would be a violation of the section 9 take prohibitions described in the ESA. As stated in the rule, the Service may work with other federal, state, or Tribal agencies to develop a Memorandum of Agreement or Cooperative Management Agreement to authorize these entities as designated agents to conduct gray wolf management consistent with this rule.</p>
<p>CONCERN STATEMENT 34: A commenter worried that delegating lethal take authority to state and Tribal officials would lead to a stagnant and unsuccessful reintroduction, citing the decline of the Mexican wolf population under State management. Commenters also said that the 10(j) rule for the Mexican wolf and the red wolf reintroductions had not contributed to the species' recovery and worried about a similar outcome in Colorado.</p>
<p>Representative Quote: Delegating authority on all aspects of wolf management including the killing of wolves to state and tribal officials, and in particular to Colorado Parks and Wildlife, will likely keep the wolf population in Colorado suppressed for an even longer period than the Mexican wolf population remained demographically stagnant in Arizona and New Mexico. That is because, parsing out year-by-year results in the latter two states, one finds that from 2003 to 2009, during which period the Arizona Game and Fish Department brought into existence and chaired the Mexican Wolf Adaptive Management Oversight Committee (AMOC), with authority on wolf removals, the Mexican wolf population in the wild in Arizona and New Mexico declined from 55 to 42 an almost 24% decrease in wolf numbers. The Colorado Parks and Wildlife and its draft wolf restoration and management plan, operating in similar landscapes, similarly calling for the removal of wolves that prey on livestock, and similarly containing no measures to require nonlethal protection of livestock from wolves, if given an opportunity will similarly suppress the number of wolves.</p>

<p>Representative Quote: It is my strong opinion that FWS follow the “No Action Alternative” option. Here are my reasons: The FWS proposed 10(J) rule does not follow best available science nor will it conserve gray wolves. The 10(J) rule has been instrumental in derailing the reintroduction of the red wolf (<i>Canis Rufus</i>) and has been a roadblock in the reintroduction of the Mexican gray wolf (<i>Canis Lupus Baileyi</i>) in NM and AZ. Gray wolves need the full protection of the Endangered Species Act. When protection is removed as seen in several northern Rockies states human-caused mortality has a significant impact on wolf populations, pack cohesion and pack behavior.</p>
<p>Representative Quote: We must protect the wolf population of Colorado to ensure the survival of their species. The Red Wolf, the Mexican Grey Wolf, and the Grey Wolf populations have been kept down by the liberalization of killing wolves allowed by the 10(j).</p>
<p>Response: The establishment of a 10(j) nonessential, experimental population would provide regulatory flexibility and discretion in managing the reintroduced species to encourage recovery in collaboration with partners, especially private landowners. Before authorizing the release as an experimental population of a listed species and before authorizing any necessary transportation to conduct the release, the Service must find, by regulation, that such release would further the conservation of the species. In making such a finding, the Service uses the best scientific and commercial data available.</p>
<p>CONCERN STATEMENT 35: Commenters stated that only the Service and designated agents should have the authority to lethally take wolves and that private citizens should not be permitted to do so.</p>
<p>Representative Quote: Lethal management of wolves should be a last-resort measure performed only by the FWS or their designated agent, and strictly limited to chronic conflict situations where nonlethal approaches or other solutions have proven ineffective at resolving the conflict.</p>
<p>Representative Quote: ONLY CPW/USFW officials should be able to use lethal control. Public citizens should NEVER be issued a take permit and USDA’s wildlife services should NEVER be able to use lethal control.</p>
<p>Response: The majority of conflicts are likely to occur on private property or in remote and difficult to reach locations, making timely responses by Service or designated agent personnel difficult. Authorizing take for livestock operators and landowners under strictly defined circumstances would help to minimize conflict when landowners are the closest responders. It would also meet the purpose of the 10(j) rule in conserving the species while reducing the regulatory burden.</p>
<p>CONCERN STATEMENT 36: Commenters expressed opposition to the implementation of a 10(j) rule. Commenters requested that wolves be considered endangered, rather than experimental and nonessential, when they are reintroduced. Commenters stated that the rule would be contrary to the intentions of the ESA and worried that the rule could put wolves in jeopardy.</p>
<p>Representative Quote: First we need to give wolves in CO full ESA protection with the exception of hazing and using all non lethals to mitigate livestock loss. The 10-J rule was clearly a part of the failure in the NC red wolf reintroduction and has hampered the Mexican Grey reintroduction. We saw that wolves were needlessly killed and poachers were emboldened with the lack of punishments under the 10-J.</p>
<p>Representative Quote: Management “flexibility” created under a 10(j) rule will not improve recovery probabilities for gray wolves. Evidence from previous wolf reintroduction efforts where the 10(j) rule has been</p>

implemented does not support this proposition. Actually, evidence documents that the 10(j) rule has undermined recovery of wolves in the United States by exacerbating both legal and illegal wolf killing (6,24,25). Colorado's wolf reintroduction has thus become essential to the conservation of gray wolves, in which case they should be considered fully endangered, not experimental, as detailed under the endangered species act. We must protect the wolf population of Colorado to ensure the survival of their species. The Red Wolf, the Mexican Grey Wolf, and the Grey Wolf populations have been kept down by the liberalization of killing wolves allowed by the 10(j).

Representative Quote: I am urging you to keep the strongest ESA protections for reintroduced wolves in Colorado. I am strongly against the 10(J) rule that would allow the taking (injury or killing) of wolves "in the act of attacking" (wounding, harassing, molesting, or killing) livestock or dogs (working or pet) on both private and public land. The science does not support this alternative. Killing wolves to prevent conflict with livestock has been shown in most situations as ineffective and has actually been documented to increase livestock-wolf conflict. Lethal management of wolves should not be permitted except in extremely limited circumstances.

Representative Quote: Colorado Parks and Wildlife should not be going forward with 10J. Killing wolves in wolf packs that predate on livestock has not been successful nor deters wolf families from killing livestock in addition they have been too often mismanaged. In Washington between late 2021 to late 2022 Washington Department of Fish and Wildlife issued 3 kill orders to 3 different wolf packs that were predating on livestock and during all 3 of these kill orders issued something went wrong. In late 2021 the Columbia Family which lives in Southeast Washington there was a wolf killed in that wolf family after the kill order expired and apparently there was a mishap in communications as to when that kill order was supposed to have ended. The Smackout Family which lives in Northeast Washington had a kill order placed on them in early fall 2022 and a wolf from a completely different pack was killed under that kill order, a black wolf from the dirty shirt family. To put it simply, the wrong wolf from the wrong pack was killed. And the Leadpoint Family which lives in Northeast Oregon had a kill order placed on them in fall 2022 and it was confirmed that the reason the kill orders weren't working there was because one of the effected livestock producers wasn't properly disposing their cattle carcasses properly and Washington Department of Fish and Wildlife once learning this info had to call off the kill order.

Response: Multiple gray wolf populations occur throughout the country, including the delisted northern Rocky Mountain population. As such, the establishment of a 10(j) experimental population in the State of Colorado is not likely to jeopardize the continued existence of the species. The provisions of section 10(j) were enacted to ameliorate concerns that reintroduced populations would negatively impact landowners and other private parties, by giving the Service and its designated agents greater regulatory flexibility and discretion in managing the reintroduced species to encourage recovery in collaboration with partners, especially private landowners. The EIS does consider and analyze the no-action alternative, which was determined not to meet the purpose and need for action.

CONCERN STATEMENT 37: Some commenters expressed concern about prioritizing livestock over wolves, noting the ecological impacts cattle can have on landscapes and indicating that wolves are the native species, while cattle have been introduced.

Representative Quote: The ESA was intended to protect species from threats regardless of economic issues. The wolf is the only animal that has a protection exemption allowing legal "take" and it's been a means to lethal take without employing better management of the species that are invasive, such as cattle. It's time for humans to adapt to wolves in their presence not the other way around. Given the destructive nature of cattle and livestock on public lands it makes sense to reduce grazing permits, to stop subsidizing cattle and livestock through carnivore killing and to prioritize native wildlife. I'm glad that Colorado will once again include wolves but, it is appalling what is happening in the Rocky Mountain states. The management of wolves in those states is

unconscionable. I don't want to see Colorado's wolves return only to suffer the same fates. If the USFWS did its duty and relisted the Rocky Mountain wolves, then they would repopulate Colorado naturally, but they are mercilessly slaughtered by a crazed legislature that has no regard or respect for wildlife unless it can be slaughtered as a trophy or as public enemy number 1. Do your duty and protect wolves. Don't call them an experimental population and allow for legal take. Just protect them as other species under the ESA are protected and relist the Rocky Mountain population.

Response: The purpose and intent behind a nonessential, experimental population is to contribute to the conservation of the species and minimize regulatory burdens of reintroducing an endangered species to improve reintroduction success. The Service strives to balance the conservation needs of the gray wolf with the needs and concerns of local communities, including livestock operators. The take allowances in this rule were developed to ensure that progress toward recovery dictates the availability of management flexibility, while also ensuring that the Service and its partners maintain the ability to address conflict situations.

CONCERN STATEMENT 38: Some commenters expressed opposition to the use of traps, snares, poison, and hound hunting. Commenters said that traps should never be used to resolve conflicts and noted that incidental take of wolves in traps and snares should be prosecuted. Commenters noted that Colorado permits trapping and hound hunting of other species that could have a high risk of capturing wolves too. Commenters asked the Service to update the rule to forbid incidental take of wolves caused by traps and hounds to discourage their use because they could threaten the recovery of the experimental population. Commenters specifically requested that the Service forbid the use of poisons, such as sodium cyanide and Compound 1080 in wolves' range or in their potential future range. One commenter noted that the practice of hounding, or hunting with hounds, in Colorado could increase the likelihood of unintended or illegal take. This commenter suggested the Service exclude hounding from allowable incidental take included in the rule and work with the State to revise hounding regulations to reduce potential impacts to wolves.

Representative Quote: In short, hounding in Colorado occurs year-round and is commonplace on public and private lands, and for furbearer hunters, CPW permits the use of an unlimited number of hounds. These policies set up hunters for the illegal take of wolves and the FWS must do more to work with CPW to tighten state hounding regulations. CPW's liberal hounding regulations create unacceptable risks for wolves and for their recovery. These permissive regulations set wolves up for take in likely unexpected numbers. For example, as we witnessed during the February 2021 Wisconsin wolf trophy hunt, where wolf hunting with hounds was permitted, hounds maimed or outright killed wolves. Wisconsin DNR appeared to hide the numbers of wolves maimed or killed, but as we later gleaned from tribal members who could not openly speak about this after they had retrieved wolves' bodies, the toll was considerable. Many tribal members were horrified by the desecration. On the other hand, wolves are intolerant of other canids in their territories and will attack and kill hunting hounds" especially over bear bait piles. Sending hounds into wolves' territories especially during wolves' breeding season, will sow chaos.

Representative Quote: Because the use of traps and snares presents an unacceptable risk of causing harmful take of wolves, it should be excluded from the 10(j) rule's exception for incidental take in order to discourage their use where they would threaten the recovery of the experimental population.

Representative Quote: INCIDENTAL TAKE OF WOLVES CAUSED BY TRAPS AND HOUNDS SHOULD NOT BE PERMITTED. The Proposed Rule provides that "any person may take a gray wolf if the take is incidental to an otherwise lawful activity, if reasonable due care was practiced to avoid such taking, and such taking was reported within 24 hours. 106 Colorado law permits certain methods of taking other species hound hunting and, with special agency permits, trapping that pose a high and unavoidable risk of taking wolves. Because it is impossible to exercise "due care" to avoid taking a wolf when carrying out these activities in wolf range, the

Service should explicitly exclude them from the 10(j) rule's blanket exception for incidental take (as the Proposed Rule currently does for shooting a wolf as a result of mistaking it for another species). There is no conceivable benefit to the conservation of the population associated with permitting incidental take caused by hound hunting and trapping and therefore no legal justification for the Service to elect to expose non-target wolves to these inherently high-risk activities under the 10(j) rule.
Representative Quote: Incidental take of non-target wolves in traps or snares should be prosecuted. - Predator poisons including sodium cyanide and Compound 1080, which are administered by the USDA-Wildlife Services on private lands, should not be permitted for use in wolves' range or potential future range.
Response: While regulating State hunting practices is beyond the scope of this rulemaking process, the State cannot authorize hunting of the gray wolf as long as the species (including the population in Colorado) is listed under the ESA. The 10(j) rule does not authorize incidental take of reintroduced gray wolves associated with the use of traps, poisons, or hounds. Trapping, capture, hunting, and pursuing are all prohibited forms of take, as described in section 9 of the ESA. Authorization to conduct these activities while the gray wolf is listed must be obtained through an exemption issued by the Service to the take prohibitions.
CONCERN STATEMENT 39: Commenters requested that the Service change the definition of "livestock producer" from "a person that is actively engaged in farming/ranching and that receives a substantial amount of total income from the production of livestock" to "a person that is actively engaged in farming/ranching and receives income from the production of livestock" because many agricultural operations are diversified in Colorado and the term "substantial amount" may be limiting.
Representative Quote: Livestock Producer - defined as a person that is actively engaged in farming/ranching and that receives a substantial amount of total income from..... The amount of income that person receives from livestock production has nothing to do with whether or not they produce livestock. Additionally, what qualifies as "substantial" is ambiguous. This income requirement should be removed from the definition.
Representative Quote: I would recommend the definition of Livestock Producer be changed because the current definition, "a person that is actively engaged in farming/ranching and that receives a substantial amount of total income from the production of livestock" does not accurately reflect the reality of agriculture within the state of Colorado much less livestock production. There are places in Colorado where agriculture is diversified, and livestock may not provide a substantial amount of the total income for that operation. There are 39,000 identified farms and ranches across the state, most of which produce some sort of livestock. According to the USDA Economic Research service 96% of the farms and ranches rely on some off-ranch income. On those family farms, the amount of their total which comes from off-ranch sources is 82%. I recommend that the following words be stricken from the definition, "that, "a substantial amount of total. It would then read, Livestock Producer is a person that is actively engaged in farming/ranching and receives income from the production of livestock.
Response: The definition of livestock producer has been revised in the final rule to "a person that is actively engaged in farming/ranching and that receives income from the production of livestock."
CONCERN STATEMENT 40: Commenters requested the Service clarify the definition of problem wolf, since "calendar year" implies a wolf attacking in December and a month later in January might not count as a problem wolf. Commenters suggested changing the language to "within any 12-month period."

<p>Representative Quote: In the definition of Problem Wolf would recommend for clarity two changes. It reads “wolves that we or our designated agent confirm to have attacked any other domestic animals on private land twice within a calendar year. I read this to mean that attacks on allotments would not be counted toward determining the wolf to be a problem wolf. When you use the term calendar year, I read that to mean January through December. That would mean, if a wolf attacked in December of 2023, and then attacked in January of 2024, the wolf could not be determined to be a problem wolf. If it was not the intent to leave out wolf attacks on public lands or to restrict the counting to a calendar year to merely define a problem wolf as wolves that we or our designated agent confirm to have attacked any other domestic animals twice within a 12-month period.</p>
<p>Representative Quote: There is also a potential timing issue if “calendar year” as used in the definition of “problem wolves” is interpreted literally. A depredation in January of year 2 would not be in the same calendar year as December of year 1. It would be clearer if the timing was described as “within a 12-month period.”</p>
<p>Response: A calendar year is the preferred method to identify wolves as repeatedly depredating animals and is a defined period for data collection and monitoring purposes. In other states, accurate recording of wolf depredations on a continuous basis has proven to be impractical because wolf populations expand and contract naturally. Note that the term “problem wolves” has been updated to “repeatedly depredating wolves” in the final rule.</p>
<p>CONCERN STATEMENT 41: Commenters asked for the problem wolf definition to include wolves who have depredated on livestock once rather than twice.</p>
<p>Representative Quote: Moffat County requests the definition of a problem wolf be recharacterized. Since problem wolves being present are the standard for take, lethal, and non-lethal harassment, the definition of a problem wolf is critical to be accurate. Moffat County requests the standard of 2 documented attacks on domestic animals within a 12-month time frame be lowered. One attack within 12 months or two within 24-months would be more adequate. As wolf populations increase in Colorado, it will be more likely that wolf attacks will not be caught and documented, and problem wolves will cause livestock harassment without being designated a problem wolf. The definition of a problem wolf should give the livestock operator maximum ability to protect his herd, and a 2-attack standard should be reevaluated.</p>
<p>Representative Quote: The Proposed Rule defines “Problem wolves” as “wolves that we or our designated agents confirm to have attacked any other domestic animals twice within a calendar year are considered problem wolves for purposes of agency wolf control actions. I would ask that this wording be changed to any wolf that has attacked a domestic animal once within a calendar year be considered a problem wolf for purposes of agency wolf control actions. This does not allow for a problem wolf to train the young members of the pack to attack domestic animals.</p>
<p>Representative Quote: The Proposed Rule defines problem wolves: "wolves that we or our designated agents confirm to have attacked any other domestic animals twice within a calendar year are considered problem wolves for purposes of agency wolf control actions." I would ask that this wording be changed to any wolf that has attacked a domestic animal once within a calendar year be considered a problem wolf for purposes of agency wolf control actions. Irony that a domestic dog only gets one bite, but we'd consider clemency to a wolf. A dog who bites is put down. A wolf should be also. Defining a problem wolf as one domestic animal attack also means that problem wolf will not have the opportunity to teach the young members of the pack about the vulnerability of domestic animals.</p>
<p>Response: The term “problem wolf” has been updated to “repeatedly depredating wolf” in the final rule. The term "repeatedly depredating wolf" is meant to identify wolves that present a significant risk to the health and</p>

safety of livestock. The Service does not consider a single depredation event as reaching this threshold of significant risk. A landowner may however request a “repeated depredation” written take authorization, issued at the Service’s discretion, to take wolves on their private land if the landowner has had at least one depredation by wolves on livestock.
CONCERN STATEMENT 42: Commenters stated that language forbidding artificial or intentional feeding of wolves should be added and noted if evidence of intentional feeding is found, the wolf should not be considered a problem wolf.
Representative Quote: Furthermore, when determining the status of “problem wolves,” language from the NRM 10(j) rule should be added to clarify: “No evidence of artificial or intentional feeding of wolves can be present. Improperly disposed livestock carcasses located in the area of depredation will be considered attractants. On Federal lands, removal or a decision on the use of such attractants must accompany any control action. If livestock carrion or carcasses are not being used as bait for an authorized control action on Federal lands, it must be removed or otherwise disposed of so that they will not attract wolves” (USFWS 1994).
Response: As stated in the rule, the Service or its designated agent will consider any evidence of unusual attractants or artificial or intentional feeding of wolves before carrying out harassment, nonlethal control measures, relocation, placement in captivity, or lethal control of repeatedly depredating wolves. Note that the term “repeatedly depredating wolves” is used in the final rule, replacing the term “problem wolves”. Additionally, private landowners may only take wolves on private land if there is no evidence of intentional baiting, feeding, or deliberate attractants of wolves. The Service has added language to the rule prohibiting the use of attractants or intentional feeding of wolves for the purposes of attracting wolves.
CONCERN STATEMENT 43: Commenters asked the Service to add harassment and stalking of people and domestic animals to the definition of a problem wolf, along with livestock.
Representative Quote: 48 (rule) “Problem wolves.” Wolves that we or our designated agents confirm to have attacked any other domestic animals twice once within a calendar year or are stalking/harassing domestic animals or people are considered problem wolves for purposes of agency wolf control actions.” Comment is asking twice to be changed to once and the text "or are stalking/harassing domestic animals or people" to be added.
Response: The definition of repeatedly depredating wolf relates to the act of depredation of livestock. The presence of wolves and a perception of "stalking" do not necessarily present a significant risk to the health and safety of livestock or people. Note that the term “repeatedly depredating wolves” is used in the final rule, replacing the term “problem wolves.”
CONCERN STATEMENT 44: Commenters requested clarity about depredation events on public lands, specifically if depredation on public lands would count toward determining if a wolf is a problem wolf and asked for the definition to be updated to include attacks on federal grazing allotments and Tribal land.

Representative Quote: Problem wolf is defined as being on private land. Problem wolves will be on private, state, federal and tribal lands, therefore BoCC requests the final language read "Confirm to have attacked any domestic animals on private land and/or federal grazing permit land twice within the last twelve months."

Representative Quote: Problem wolf is defined as being on private land. Problem wolves will be on private, state, federal and tribal lands and therefore LeValley Ranch request that the final language read "confirm to have attacked any domestic animals on private and/or federal grazing permit land twice within the last 12 months. Areas within Delta and surrounding counties are very remote and will not be easily accessible in a timely manner by the service or designated agent, therefore LeValley Ranch requests language that allows for confirmation or reasonable evidence of loss when there is strong evidence of wolves in the area. In addition, the definition of a "problem wolf" and "in the act" needs to be clarified to reduce ambiguous language.

Response: In regard to clarity on depredation events on public lands:

- The definition of repeatedly depredating wolf is inclusive and does not specify where depredation occurs. "Repeatedly depredating wolves—Wolves that we or our designated agents confirm to have attacked domestic animals two or more times within a calendar year are considered repeatedly depredating wolves." Note that the term "repeatedly depredating wolves" is used in the final rule, replacing the term "problem wolves."
- Under table 1 of the rule, a livestock producer and/or public land permittee may be issued written take authorization under specified circumstances. The rule provides authorization for both private land and public land if the conditions are met.
- The ability to "take" a wolf on public lands is also dependent on any regulations of the public land agency related to firearm possession, use, or hunting on said lands.
- Clarification requested by commentors for "in the act" is provided in Concern Statement 45.

CONCERN STATEMENT 45: A commenter asked for an update to the definition of "in the act of attacking" to include other injuries to livestock, including running through a fence while a wolf is chasing them and heart and lung problems from being chased for long distances. Another commenter asked the Service to remove the phrase, "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" because it would be too subjective and difficult to enforce. Another commenter asked the Service to remove the phrase "at any moment" from the definition.

Representative Quote: Definition of "In the Act of Attacking: The proposed rule would allow a landowner to take a wolf in the act of attacking livestock or dogs on their private land. It would also allow a public land permittee with livestock "who is legally using public land under a valid Federal land-use permit" to take a wolf in the act of attacking livestock or dogs. The rule defines attacking as the actual biting, wounding, grasping, or killing of livestock or dogs, or chasing, molesting, or harassing (emphasis by NPCA) by wolves that would indicate that such biting, wounding, grasping, or killing is likely to occur. While NPCA supports the take of wolves that are in the act of killing livestock or dogs, the inclusion of harassing or molesting could lead to the killing of wolves that are merely near livestock. Wolves are frequently in the same area as natural prey or livestock without killing them. MacNulty et al. (2007) found that wolves watching a prey species "rarely led directly to attacking. The proposed rule should change "In the Act of Attacking" to "In the Act of Killing" and create stronger sideboards that create more clarity and less subjectivity between the act of merely being near livestock, which some could claim is harassment, to behavior that demonstrates the wolf is actually attacking. If a landowner is there to observe wolves near livestock, rather than lethal take, the landowner should be able to implement opportunistic harassment measures to further reduce the chance of livestock depredation.

<p>Response: The definition of “in the act of attacking” is sufficient as written in the rule. The term as defined in the rule was written to provide flexibility to prevent an imminent depredation event. Changing the word “attacking” to “killing” would not allow livestock producers this flexibility. The rule requires reporting and evidence of the incident to ensure the wolf in question was taken appropriately.</p>
<p>CONCERN STATEMENT 46: A commenter asked that the Service not consider harassment as take and requested that it be defined separately.</p>
<p>Representative Quote: Confusion: Allowable forms of “take.” Harassment vs take. Should these be separated out on page 71-72? Pg. 71 - (5) Under Allowable forms of “take” of grey wolves, harassment is considered “take.” “Harassment” should not be under “take.”</p>
<p>Response: The terms “harm” and “harass” are appropriately defined in the final rule and FEIS (appendix A).</p>
<p>CONCERN STATEMENT 47: A commenter asked the Service to clarify and give examples of the characteristics that a wolf would need to exhibit to justify taking that wolf.</p>
<p>Representative Quote: Page 52: (6) to remove wolves with abnormal physical or behavioral characteristics, as determined by the Service or our designated agent, from passing on or teaching those traits to other wolves. Comment: The Service should give examples of such “abnormal physical or behavioral characteristics,” if it knows what they are. Otherwise, (6) becomes a catch-all phrase left entirely to the Service or its agent.</p>
<p>Response: The description of abnormal physical or behavioral characteristics provided in the rule is appropriate and sufficient. Examples include, but are not limited to, hybridization (including with domestic dogs) and habituation to humans or infrastructure.</p>
<p>CONCERN STATEMENT 48: A commenter said the definition of “incidental take” should cover working dogs or other dogs that kill a wolf.</p>
<p>Representative Quote: 46 (rule) Incidental Take coverage should include livestock protection dogs or other dogs if they inadvertently kill a wolf; intentional harassment to deter wolves from threatening or attacking; and should cover mistaken identity since Colorado has a large population of wolf/dog hybrids, and young wolves may look similar to coyotes.</p>
<p>Response: In the unusual case of a dog killing a wolf, the Service would consider that as an incidental take of the wolf unless the dog was purposefully sent to chase and attack the wolf. See Concern Statement 74 for issues related to take of wolves due to mistaken identity.</p>
<p>CONCERN STATEMENT 49: Commenters indicated that livestock operators and landowners should be included as designated agents. Commenters also asked for greater clarity on the process for assigning designated agents. One commenter suggested that the definition be changed to “a Federal, State, or Tribal agency, or employee thereof, authorized or directed by the Service to conduct gray wolf management consistent with this rule”.</p>

<p>Representative Quote: Designated Agents: The Proposed Rule defines “Designated agent” in two different ways: 1) “Designated agent” Federal, State, or Tribal agencies authorized or directed by the Service may conduct gray wolf management consistent with this rule; 2) “Designated agent” An employee of a Federal, State, or Tribal agency that is authorized or directed by the Service to conduct gray wolf management consistent with this rule.” To eliminate this inconsistency, CCA suggests that the Service combine its separate definitions of “Designated agent” to read, “[a] Federal, State, or Tribal agency, or employee thereof, authorized or directed by the Service to conduct gray wolf management consistent with this rule.</p>
<p>Representative Quote: Designated Agent Should include livestock/landowners that have had confirmed depredation, or are in proximity of wolves that pose an imminent threat to the safety of humans, and domestic animals including pets.</p>
<p>Response: The Service has revised the rule to ensure a single definition of “designated agent,” as an employee of a federal, state, or Tribal agency that is authorized or directed by the Service to conduct gray wolf management. As described in the rule, the process starts with a letter to the Service requesting designated agent status. The letter includes a proposal for the work to be completed and resume of qualifications for the work to be performed. The Service responds with a letter to the requester authorizing them to complete the work if they meet the required qualifications. Livestock operators and private landowners are afforded options in this rule, outside designated agent status, for managing conflicts.</p>
<p>CONCERN STATEMENT 50: A commenter asked for a broader definition of livestock that includes any large animal raised for its meat.</p>
<p>Representative Quote: The definition of livestock proposed in section 17.84(a)(4) of the Draft Rule (pages 69-70) will cover nearly all the animals raised by GCSA and its members. However, the definition should recognize that other animals are raised by livestock producers in Colorado, including but not limited to ungulate species, and the definition should be broad enough to include any large animal raised for its meat.</p>
<p>Response: The definition of livestock provided in the proposed rule is appropriate and in accordance with previous 10(j) rules.</p>
<p>CONCERN STATEMENT 51: Commenters asked the Service to revise the definition of livestock guard animals to include animals other than dogs, like llamas or donkeys.</p>
<p>Representative Quote: 48 (rule) “Livestock” Cattle, sheep, pigs, horses, mules, goats, domestic bison, and herding and guarding animals (alpacas, 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.” Owners of non-working dogs should have the ability to protect their pets when on their private property or if their dog is under leash or voice control on federal lands. Allowing wolves to kill dogs without consequences creates a bigger safety problem for livestock guardian dogs, livestock, and humans. There must be rapid and effective response to wolves that threaten and attack domestic animals and people.</p>
<p>Representative Quote: Lethal Take: Although GCSA supports the lethal take provisions in the Draft Rule, GCSA believes they should be clarified to address some points of potential confusion: - 50 C.F.R. 17.84(a)(5)(iii)(A) should make it clear that lethal take is authorized if a gray wolf is attacking any livestock guard animal on private land, not just dogs. While the definition of “livestock” includes guardian animals other than dogs, subsection (5)(iii)(A) as written refers to gray wolves in the act of attacking “livestock or dogs (working or pet).” This could</p>

<p>be read to suggest that lethal take is not permitted if wolves attack other guardian animals, such as llamas or donkeys. - Similarly, 50 C.F.R. 17.84(5)(iv) should make it clear that lethal take is authorized if a gray wolf attacks any guardian animal on public lands that are being lawfully used under a valid Federal permit, not just dogs. While the definition of livestock includes guardian animals, the reference to dogs in subsection 5(iv) could suggest that lethal take is not permitted if wolves attack other guardian animals on public lands. Because this does not appear to be USFWS's intent, this subsection should be clarified.</p>
<p>Response: The definition of livestock provided in the rule has been revised and includes cattle, sheep, pigs, horses, mules, goats, domestic bison, and herding and guarding animals (alpacas, llamas, donkeys, and certain breeds of dogs commonly used for herding or guarding livestock).</p>
<p>CONCERN STATEMENT 52: A commenter asked for the definition of private land to include leased private lands. A commenter asked for clarity on the current definition because it could include state and locally owned lands and could create confusion.</p>
<p>Representative Quote: The proposed rule defines Private Land as all land other than that under Federal Government ownership and administration and including Tribal reservations. This definition will likely cause confusion as it includes all non-Federal lands such as state and locally owned lands.</p>
<p>Response: For the purposes of the rule, the Service treats both State- and local-owned(county and city) lands as private lands.</p>
<p>CONCERN STATEMENT 53: A commenter asked the Service to clarify the definition of immediate and direct threat to human life. They asked the Service to explain what would be considered a threat and to ensure that a person's fear when seeing a gray wolf would not be justification for lethally taking the wolf.</p>
<p>Representative Quote: Furthermore, to avoid a circumvention on the prohibition of unlawful taking under the provisions of Table 1 allowing for the taking of grey wolves "in defense of human life" and "in the act of attacking livestock" on private or public land, the regulations should further clarify what level of "demonstration" is required to substantiate a claim that there was a direct threat to human life or that the gray wolf was in the act of attacking livestock or dogs, as permitted by the proposed regulation. Additionally, although the language is not facially vague, many landowners may confuse an "immediate and direct threat" to human life to mean their personal fear at seeing a grey wolf, rather than it actually presenting a danger to them, and this language should be clarified to make more explicit that the grey wolf must be beginning an attack on a person to justify such a taking in defense of human life, rather than the more vague "threat" language that is ripe for misinterpretation and abuse. This clarification will again serve the purpose of the regulation by conserving the population of gray wolves by preventing unnecessary takings and mitigating the possibility of provoking attacks that otherwise would not have occurred.</p>
<p>Response: The definition of "take in defense of human life" provided in the rule is appropriate and in accordance with previous 10(j) rules. The rule specifies that the taking of a wolf without an immediate and direct threat to human life may be referred to the appropriate authorities for prosecution.</p>

<p>CONCERN STATEMENT 54: A commenter asked the Service to clarify the definition of intentional harassment to ensure intentional harassment does not injure or inadvertently kill wolves.</p>
<p>Representative Quote: Intentional Harassment: In order to deter livestock depredation on private or public lands, the proposed rule would allow the Service to issue written take authorization for deliberate or pre-planned harassment of wolves in a nonlethal, injurious manner by a landowner or public land permittee. In order to increase the effectiveness of the intentional harassment action to deter depredation and ensure the action does not lead to injury that could result in unintentional fatality, the Service should define and limit the actions permitted as “intentional harassment.</p>
<p>Response: The rule defines intentional harassment as the deliberate and pre-planned harassment of wolves, including by less-than-lethal munitions that are designed to cause physical discomfort and temporary physical injury but not death. The rule provides examples of allowable less-than-lethal munitions. Less-than-lethal munitions are an effective tool to deter depredation.</p>
<p>CONCERN STATEMENT 55: A commenter asked the Service not include non-working pets and domestic bison in the domestic animal definition for consistency with the State Plan.</p>
<p>Representative Quote: The definition of Livestock deviates from the list of livestock as defined in CRS 33-2-105.8. Domestic bison are not included in the definition of livestock in CRS 33-2-105.8. Matching these definitions (i.e., removing bison from the 10j definition) is critical to eliminate confusion.</p>
<p>Representative Quote: Definitions: Domestic Animals includes pets within the definition. CPW requests that domestic, non-working pets not be included in this definition. Our draft regulations do not include an ability to take wolves when a conflict with domestic pets occurs, and having consistent rules and regulations between federal and state agencies is important in this issue. Livestock includes domestic Bison. Definition of livestock in CRS 33-2-105.8 does not include domestic bison. Matching these definitions (removing bison from the 10j definition) is critical for our purposes.</p>
<p>Response: During the public comment period, the Service received comments both to include and exclude domestic bison in the definition of livestock. The Service will continue to include domestic bison in the definition of livestock to be consistent with the State’s definition of livestock (Colorado Revised Statute § 35-50-103(7)). To avoid confusion and be consistent with take authorized under state law, the rule has been revised to change the definition of domestic animals to include only working dogs, not pets.</p>
<p>CONCERN STATEMENT 56: Commenters questioned what proof would be required before purposeful take would be authorized. Commenters requested that the Service require specific proof of a wolf predating on livestock to authorize take of that wolf. Some commenters asked for photos, scat, and hair samples to be permitted as evidence of an attack if a depredation cannot be directly linked to wolves. Other commenters said the rule should forbid tampering or interfering with carcasses from potential wolf depredation events to preserve evidence. A commenter asked the Service to allow evidence other than livestock carcasses as proof of depredation because bears and other wildlife can eat carcasses and remove evidence.</p>
<p>Representative Quote: Evidence of Loss Standard: The Proposed Rule states, “to preserve physical evidence that the livestock or dogs were recently attacked by a wolf or wolves, the carcass and surrounding area must not be disturbed. The Service or designated agent must be able to confirm that the livestock or dogs were wounded, harassed, molested, or killed by wolves. The take of any wolf without such evidence of a direct and</p>

<p>immediate threat may be referred to the appropriate authorities for prosecution.” “The Service or designated agent must be able to confirm that the livestock or dog were wounded, harassed, molested, or killed by a wolf or wolves. The carcass of any wolf taken and the area surrounding it should not be disturbed to preserve physical evidence that the take was conducted according to this rule.” There will likely be cases where a kill cannot be located, or a carcass is naturally disturbed before a Designated agent is able to investigate and confirm the kill by wolves, but strong evidence of wolf presence in the area remains, i.e., tracks, scat, and/or fur. To ensure consistency with the Colorado Wolf Restoration and Management Plan, CCA requests that the Service amend the Proposed Rule to require the same preponderance of evidence of loss standard: “A preponderance of evidence, including dead or injured livestock or working dogs, or other physical evidence should be present, which would lead a reasonable person to believe that a depredating wolf or wolves were involved, or that a wolf attack on livestock or dogs was occurring or imminent.</p>
<p>Representative Quote: I urge that lethal management be the absolute last resort, and that it be used only if incontrovertible evidence confirms that the livestock damage or loss was due indeed to wolves. And then, only the wolves identified as preying on livestock should be targeted, and only by agents of the FWS.</p>
<p>Representative Quote: There will be cases where a wolf kill would not be located in an area that is easily accessible and agency staff will not be able to get to the carcass in time to confirm the kill by wolves. However, there may be strong evidence of wolf presence that the rancher could verify by taking photos and scat and/or hair samples from the site. Therefore, we request language that allows for confirmation or reasonable evidence of loss when there is strong evidence of wolves in the area.</p>
<p>Response: Comment response 21 addresses the procedures for a “repeated depredation” take authorization (previously called “shoot-on-sight” take authorization in the proposed rule) and responses to wolves caught in the act of attacking livestock. The 10(j) rule provides the standard for what conditions need to be met before purposeful take would be authorized (see table 1 in the final rule)</p>
<p>CONCERN STATEMENT 57: Commenters requested that the language related to animal husbandry in alternative 1 under “Agency take of wolves that repeatedly depredate livestock” be removed.</p>
<p>Representative Quote: Pg viii Alt 1 Agency take of wolves that repeatedly depredate livestock: “(4) evidence that animal husbandry practices recommended in approved allotment plans and annual operating plans were followed.” Request the animal husbandry language be removed from all areas as noted in comments for page 75.</p>
<p>Response: As noted in the FEIS, animal husbandry practices, such as adjusting calving timing and location, increased human supervision by range riding over large grazing areas, and livestock guardian dogs, have been proven effective at minimizing livestock losses and thereby reducing wolf conflict with livestock operators. The Service believes that all nonlethal options for reducing wolf conflict should be used prior to using lethal take.</p>
<p>CONCERN STATEMENT 58: Commenters requested that the Service update the language in alternative 1 under “Additional taking by private citizens on their private land” so that wolf depredations on neighboring properties can factor into the Service issuing “shoot-on-sight” authorizations.</p>
<p>Representative Quote: Pg vi Alt. 1 Additional taking by private citizens on their private land. Similar to the public land issue noted above, it is important to include neighboring private property where at least one depredation has occurred. There will likely be situations where wolves kill on one landowner’s property and</p>

then attack on a neighboring property. Agency staff should be able to provide neighboring landowners the ability to take a wolf that has killed livestock and/or pets on the neighbors and has now moved to their property and is threatening to kill again.
Response: If caught in the act of attacking, landowners have the ability to defend their livestock from attack (see Comment Response 21). As it relates to depredations on neighboring lands and additional take authorizations, the Service believes the language in alternative 1 under “Additional taking by private citizens on their private land” is appropriate to address depredations on private land.
CONCERN STATEMENT 59: Commenters asked the Service to clarify that baiting, attracting, and intentionally feeding wolves is illegal.
Representative Quote: Page 51: The Service or our designated agent may carry out harassment, nonlethal control measures, relocation, placement in captivity, or lethal control of problem wolves. The Service or our designated agent will consider: (1) 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; (2) the likelihood that additional wolf-caused losses or attacks may occur if no control action is taken; (3) evidence of unusual attractants or artificial or intentional feeding of wolves; and (4) evidence that animal husbandry practices recommended in approved allotment plans and annual operating plans were followed. Comment: Is it not true that the use of unusual attractants or artificial or intentional feeding of wolves is illegal? Why is this issue lumped in with wolf attacks and management procedures? Recommendation: It should be made clear that this practice, baiting, is illegal and may be prosecuted.
Response: Intentional baiting, feeding, or deliberate attractants of wolves are prohibited under section 9 of the ESA. The Service has added language to the rule prohibiting the use of attractants or intentional feeding of wolves for the purposes of attracting wolves, as noted in Comment Response 42.
CONCERN STATEMENT 60: Commenters requested the Service provide examples of what would be considered incidental take, such as killing a wolf while driving on a highway.
Representative Quote: Incidental take: We support this allowance for take, with the restrictions noted in the proposed rule, including 24 hour notice of such take. The prohibition on shooting a wolf through “mistaken identity” is a necessary addition, there is no excuse for mis-identifying a wolf as another species, and any uncertainty should lead the shooter to refrain. It may be useful for the Service to provide a non-comprehensive list of possible situations that would be considered incidental take, such as striking and killing a wolf on a highway.
Response: Incidental take is defined in the rule as take that occurs incidental to an otherwise lawful activity, if reasonable due care was practiced to avoid such taking, and such taking was reported within 24 hours. As such, any take that occurred as a result of an activity that meets this description would be considered incidental. The Service does not believe any additional clarification is necessary.
CONCERN STATEMENT 61: Commenters suggested that the Service include an escape clause in the 10(j) rule.

<p>Representative Quote: The 10(j) rule should include an “escape clause.” The Service should include an “escape clause” that authorizes the State to lethally remove all members of the experimental population if its “nonessential” status is at risk. The Service has included such escape clauses in numerous other experimental population rules. This provision is very appropriate here, given that Colorado’s wolf population is not being established to further any necessary conservation objectives, and removal of the population would not impact the status of wolves throughout the lower 48 states, which have long met recovery objectives and no longer meet the standards for endangered or threatened status under the ESA. See 85 Fed. Reg. 69778 (Nov. 3, 2020) (final rule delisting wolves throughout lower 48 states).</p>
<p>Response If the wolf population in Colorado changes to the degree that the status of the population under the ESA needs to change, the Service would be required to do additional rulemaking to change that status.</p>
<p>CONCERN STATEMENT 62: Commenters requested the rule use the terms “killing” and “harassment” instead of take.</p>
<p>Representative Quote: 1) Whereas “conservation” has historically been defined as “the act of preserving, guarding, or protecting; the keeping (of a thing) in a safe or entire state,” [1913 Webster], and is so considered in the Endangered Species Act, the consultant, at the behest of the Fish and Wildlife Service (FWS) in cooperation with the Colorado Parks and Wildlife Commission (CPW), has redefined conservation to include killing and harassment, euphemistically called takings. The correct English word should be used throughout the document, not a bureaucratic get-around promoted by FWS and CPW.</p>
<p>Response: The terms “conservation” and “take” are both defined in section 3 of the ESA. Both terms are used appropriately in the context of the rule.</p>
<p>CONCERN STATEMENT 63: Commenters asked the Service to clarify that pursuit of wolves with all-terrain vehicles, on horseback, or by other measures would only be permitted to prevent livestock depredation to prevent people from chasing wolves indiscriminately.</p>
<p>Representative Quote: In the preamble, under Regulatory Framework, the draft rule notes that the ESA defines “take” of listed species to include pursuit. This should not be included as a form of take as pursuit is an important strategy for non-lethal conflict reduction between livestock and wolves. For example, livestock owners should be able to chase wolves away with ATVs or on horseback or otherwise “pursue” them, but only in order to protect livestock.</p>
<p>Response: The Service has adequately addressed this topic in the final rule. “Pursuit” is listed under the definition of take in the ESA. As such, all forms of pursuit are not permitted unless described in the rule under the allowable forms of take (table 1).</p>
<p>CONCERN STATEMENT 64: Commenters asked the Service to clarify that passive and proactive deterrents like flashing lights and fladry should be considered opportunistic harassment, not intentional harassment, and that no written take authorization should be required to use passive deterrent measures.</p>
<p>Representative Quote: Harassment: The Draft Rule should clarify in 50 C.F.R. §17.84(5)(i) & (ii) that passive, proactive deterrents such as flashing lights or fladry are considered opportunistic harassment, not intentional</p>

harassment, when placed on private property or around fenced areas where livestock are kept, and that no prior written take authorization is required to employ passive deterrent measures.
Response: The final rule sufficiently defines opportunistic harassment. Table 1 states that anyone may conduct opportunistic harassment of any gray wolf in a non-injurious manner at any time without written authorization from the Service. Harassment of a listed species that does not lead to injury or death is not prohibited under the legal definition of harass.
CONCERN STATEMENT 65: Commenters requested that the Service rename shoot-on-sight permits to "Chronic Depredation Permits" for consistency with the State Plan.
Representative Quote: The CPW regulations refer to permits authorizing take of chronically depredating wolves as "Chronic Depredation Permits" rather than "shoot on sight" permits because we think "shoot on sight" is confusing, as livestock owners may also "shoot on sight" wolves caught in the act of attacking livestock or dogs. Please consider eliminating the phrase "shoot on sight" and replacing it with "Chronic Depredation Permits" to provide more clarity to the public.
Response: "Shoot-on-sight" written take authorization was renamed to "repeated depredation" written take authorization in the final rule. Repeated depredation authorizations are likely to be rarely issued, primarily when the Service or its designated agents lack sufficient resources to resolve an issue. The Service prefers a slightly broader approach because chronic depredation likely refers to repeated events over a period of time, whereas the framework of the rule relies on a lower threshold for depredation events.
CONCERN STATEMENT 66: Commenters asked the Service to clarify the term "regulatory standards" in this sentence in the DEIS, "States or Tribes must submit a science-based report showing the action meets regulatory standards."
Representative Quote: 3 SCI requests that the Service clarify what is meant by "regulatory standards" in the provision stating that "States or Tribes must submit a science-based report showing the action meets regulatory standards" or "meets the regulatory standards." DEIS at ix, 2-13, 2-19, 2-25. SCI reads this provision to mean State or Tribal regulatory standards, i.e., the provisions in Colorado's wolf management plan. The DEIS should use that language to be clear.
Response: The Service removed the term "regulatory standard" from the FEIS. The requirements for proposed management of wolves having a negative impact on ungulates are defined in the final rule.
CONCERN STATEMENT 67: Commenters requested the rule clarify the differences between take, lethal take, and harassment.
Representative Quote: The following is confusing, and the Districts ask language to be clarified: - Allowable forms of "take" Harassment vs take Should these be separated out on page 71 72? o Pg. 71 - (5) Under Allowable forms of "take" of grey wolves, harassment is considered "take" o Pg.72 (ii) Intentional harassment – The Districts recommend "agent may issue written harassment authorization valid for" o Pg. 77 (6) Under "Reporting requirements, "take" and "harassment" are differentiated. o Pg. 77 (6)(i) now this paragraph

combines them again. “Report any take of wolves, including opportunistic harassment or intentional harassment” – “Harassment” should not be under “take” consider calling it “non-lethal take” and “lethal take.”
Response: The Service has sufficiently defined these terms in the rule. Lethal take (kill) and harass are prohibited forms of “take” as defined under section 3 of the ESA. Harass is further defined in Service regulations at 50 CFR § 17.3.
CONCERN STATEMENT 68: Several commenters requested more stringent reporting requirements, while others requested more permissive reporting requirements
Representative Quote: Reporting Requirements: The requirement for the report of lethal or injurious take within 24 hours may be impractical. Some backcountry producers may be several days away from having the ability to make this report. We suggest that language be changed to state: “Any lethal or injurious take must be reported to the Service or a designated agent within 24 hours unless impractical, but within 72 hours.”
Representative Quote: We are in favor of the flexible reporting requirements in the proposed rule whereby opportunistic and intentional harassment of wolves will be reported to FWS within 7 days as opposed to the 24-hour notification required by the state. We appreciate that the FWS can issue a written take authorization for limited duration of 45 days or less, where the state issues a limited duration permit only if state or federal agents are unable to implement lethal control actions.
Representative Quote: Taking of wolves on public land should be completely restricted. If there is a take strict rules should apply including providing evidence and implementing a 24 hour reporting rule.
Response: The reporting requirements as defined by the rule are appropriate for assessing the success of the reintroduced populations and management actions authorized by the 10(j) rule.
CONCERN STATEMENT 69: Commenters asked the Service to integrate the State Plan into the rule framework as long as the plan uses the best available science. Commenters noted differences between the State Plan and the Service’s rule and asked for inconsistencies to be explained or addressed. A commenter asked for rule to clarify that the State Plan can be more restrictive than the Service’s rule.
Representative Quote: The inconsistencies between the Proposed 10(j) Rulemaking and the Colorado Wolf Restoration and Management Plan (Colorado Plan) need to be addressed and reconciled to ensure consistent implementation and management. Specific areas of inconsistency include definitions of “problem wolves” and “designated agent.”
Representative Quote: In the same section, under Designated agent, it states that with the approval of an MOA, Colorado will be able to “assume lead authority for wolf conservation and management” within its jurisdiction and “implement the portions of their State wolf management plans that are consistent with this proposed rule.” Colorado may implement any parts of its state plan that are not consistent with the 10(j) rule, as long as they are more restrictive than the 10(j) rule. This is based on Section 6(f) of the ESA, which allows states to enforce laws or rules that are more restrictive than “the exemptions or permits provided for in” the ESA. Please clarify this in the final rule.
Representative Quote: Proposition 114 requires Colorado Parks and Wildlife (CPW) develop a wolf reintroduction plan that will” restore and manage gray wolves in Colorado, using the best scientific data

available. United States Fish and Wildlife Service (USFWS) should integrate the CPW developed plan into the proposed 10(j) management rule framework only to the extent that such plan complies with the best available science.
Response: The final 10(j) rule is intended to provide the federal legal framework and authorize take pursuant to the ESA to support the State's wolf reintroduction effort. Where possible, and respecting the differing authorities of the Service and the State, the Service has reviewed and incorporated consistency with the State Plan in the Service's final rule as appropriate.
CONCERN STATEMENT 70: Some commenters asked for neighboring states to be granted 10(a)1(A) permits to give them the flexibility to return dispersing wolves to Colorado.
Representative Quote: Finally, as discussed above, DWR has baseline data for wild ungulates throughout the state and is therefore uniquely equipped to evaluate the effect of wolves on ungulate populations. DWR is also committed to increasing ungulate monitoring efforts for populations near the proposed reintroduction zones. This information will help to inform proper wolf management into the future and allow for early detection of problematic wolves. Consistent with the requested capture and take provisions, Utah asks for express authority in the 10(a)(1)(A) permit for Colorado's neighboring states to immediately remove any wolves that affect ungulate populations within Utah.
Representative Quote: Utah needs a mechanism to remove wolves from the state and return them to Colorado. It is entirely possible for a 10(j) plan to include management restrictions, protective measures, or other special management concerns to ensure isolation and/or containment of an experimental population. Such management restrictions were implemented in the case of the red wolf and Mexican wolf and should be considered here because of the proximity to other experimental and existing wolf populations. To ensure such containment and as discussed above, Utah, along with the states of Arizona and New Mexico, requests full authority, pursuant to a 10(a)(1)(A) permit under the ESA, to capture wolves dispersing into the state and immediately return those wolves to Colorado. Further, Utah asks for clear language, in both the Final Environmental Impact Statement and the Final Rule associated with the 10(j), establishing that all gray wolves dispersing into Utah will be considered part of Colorado's experimental population and allowing for immediate capture and return to Colorado.
Response: Issuance of 10(a)1(A) permits is a separate action and outside the scope of this rule. Use of 10(a)1(A) permits is a foreseeable future action that is addressed in the FEIS under "Cumulative Impacts."
CONCERN STATEMENT 71: A commenter asked the Service to allow lethal management if big game population levels fall by 5 percent or more from population levels prior to the reintroduction and to allow hunting of gray wolves when populations achieve the 2-2-2 rule. A commenter requested additional management flexibility to allow the Service and its designated agents the authority to haze, relocate, or kill wolves that are adversely affecting other wildlife species and to stop migration across state and Tribal boundaries.
Representative Quote: I would ask that you consider adopting Alternative Concept 1 for the Colorado Parks and Wildlife request for a 10(j) rule concerning the reintroduction of Grey Wolves in Colorado, with the following provisions: 1. Lethal control by the landowner/livestock grower for any Grey Wolf caught in the act of livestock deprivation, including pets and working dogs. 2. Lethal management at any time if any big game population falls

by 5% or more below the current (pre-wolf) management objectives. 3. Grey wolf management by means of hunting is allowed when Grey Wolf populations achieve the 2,2,2 rule.

Representative Quote: 45 (of rule) "Management of the nonessential experimental population would allow reintroduced wolves to be hazed, killed, or relocated by the Service or our designated agent(s) for domestic animal depredations, adversely impacting other wildlife species, or stopping migration across state or tribal boundaries." Comment suggests adding the text "adversely impacting other wildlife species, or stopping migration across state or tribal boundaries."

Response: Hunting of wolves is not allowed while the species is listed under the ESA. Comment response 12 addresses how an ungulate provision has been incorporated into the final rule and FEIS.

ILLEGAL TAKE

CONCERN STATEMENT 72: Commenters requested the Service revise the rule to hold people accountable for illegal take. One commenter suggested the Service set limits on the number of wolves that can be lethally taken in a certain timeframe. One commenter suggested punishing illegal take through fines, imprisonment, and seizing of the firearm. Commenters suggested a lack of enforcement of take provisions has led to more illegal taking in other reintroduced wolf populations. Commenters cited data or suggested studies that should be reviewed for inclusion in the FEIS.

Representative Quote: In the 1970s, wolves were reintroduced into the Rocky Mountain ecological system, but they allowed the trapping and killing of any wolf that preyed upon livestock if they were not in a protected area (Rocky Mountain Wolf Project, 2019). This at the time worked, and the population by the 2000s was a substantially healthier size. Due to this substantial increase, ranchers had more issues with their livestock being killed. With the EPA backing their Act and not allowing them to hurt them under the law, ranchers came to a peak and started illegally shooting them in large quantities. This will need to be addressed within this rule or we will have an incredibly similar situation happen with this round of reintroduction. Unfortunately, even though the EPA appears to be very strict regarding this act, the ranchers got away with murdering wolves in the early 2000s. This needs to be addressed immediately, as this will cause ranchers to not listen to the rules laid out by the EPA not only for the wolves but also for other things backed by the EPA if they know they won't receive any repercussions. This calls for the EPA to strengthen its laws regarding the Endangered Species Act. They did allow ranchers to kill wolves if they were hurting their livestock, but the quantity that was murdered is hard to believe they were all doing that. The EPA needs to mandate rules to how many wolves ranchers are allowed to killing a certain time span. Or set up cameras to prove their reasoning prior to killing entire packs. Holding ranchers accountable is the only means to protect the new wolf population.

Representative Quote: Any incidents should be thoroughly investigated by the USFWS and not solely by local law enforcement. Local law enforcement has shown time and again that they are subject to the effects of favoritism by landowners, local politics, etc. If such an incident is found to not fall under these circumstances, then the perpetrator should be punished by fine AND imprisonment AND loss of the firearm.

Representative Quote: Felony criminal penalties for killing wolves by any means should attach and include, but not be limited to, fines of at least \$10,000 per wolf killed or injured, a mandatory minimum prison sentence for the first offense of at least two (2) years, with credit only for time already served, and no credit or early release or parole/probation for good behavior or any other reason.

<p>Response: The Service is committed to vigorous enforcement in appropriate cases where evidence exists that illegal killing or other forms of unauthorized take, as described in ESA section 9, occurred.</p>
<p>CONCERN STATEMENT 73: Commenters noted that individuals who lethally take a wolf while defending livestock, working dogs, or pets should not be prosecuted.</p>
<p>Representative Quote: It would also be unfair to prosecute a citizen who shoots a wolf while defending their prize property, whether it be award-winning or prime livestock, or a priceless working dog or a beloved pet. The citizens of Colorado must come first.</p>
<p>Representative Quote: If a livestock protection dog injures or kills a wolf, no punitive action should be taken against the owner/agent. Similarly, if an owner of livestock or dog owner needs to harass (which may result in injury/death) a wolf to stop an encounter/attack, no punitive action should be imposed.</p>
<p>Response: Table 1 of the rule describes how the Service would authorize specified individuals to lethally take wolves in the act of attacking livestock or working dogs on both public and private land. The Service removed authorization to take a wolf while defending a pet.</p>
<p>CONCERN STATEMENT 74: Commenters noted that individuals who injure or lethally take a wolf while mistaking it for a coyote or another species should not be prosecuted or subject to any legal action, referencing the McKittrick Policy.</p>
<p>Representative Quote: My two children just completed the Colorado Hunter Safety course, and we were all amazed how similar the coyote looks to the wolf. It would be unfair to prosecute a law abiding hunter who shoots a wolf while under the impression that it was a coyote. The Colorado Division of Wildlife photographs for distinguishing the two animals are almost identical images.</p>
<p>Representative Quote: Accidental harvest of wolves due to mistaken identification while hunting should not be referred for prosecution, per the “McKittrick Policy.” The proposed rule states that “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.” 50 C.F.R. § 17.84(a)(5)(viii) (proposed). The Service’s conclusion contradicts the Department of Justice’s “McKittrick Policy” and should be removed from the 10(j) rule. The McKittrick Policy provides that incidental shooting of a listed species due to mistaken identity does not violate the ESA’s take prohibition because the shooter does not knowingly violate the law. Thus, criminal prosecution in such instances is not appropriate. The McKittrick Policy was previously challenged in a suit involving incidental take by hunters who mistake Mexican wolves for coyotes while lawfully coyote hunting. The Ninth Circuit Court of Appeals rejected this challenge to the Policy; thus, it should apply to incidental take of Colorado’s wolves. <i>WildEarth Guardians v. U.S. Dep’t of Justice</i>, No. 17-16677, 752 Fed. Appx. 421 (9th Cir. 2018). To be clear, SCI does not condone intentional illegal harvest of wolves or any other species, and the Service should refer for prosecution any such take that is not truly accidental and illegal. But as the Service has recognized, it is possible to mistakenly identify wolves as coyotes” even trained Service personnel have done so. And coyote hunters provide a valuable service to the State by helping maintain the ever-increasing coyote population. The reintroduction of wolves into Colorado, and the Service’s 10(j) rule, should not deter hunters from hunting coyotes.</p>
<p>Response: Under the rule, take of a gray wolf is allowed if the take is accidental and/or incidental to an otherwise lawful activity and if reasonable due care was practiced to avoid such take and such take is reported</p>

within 24 hours. The Service may refer incidental take that does not meet these provisions to the appropriate authorities for prosecution. Hunters 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.

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

CONCERN STATEMENT 75: Commenters expressed thoughts or opinions concerning the public involvement process for the EIS. One commenter questioned why the Service did not allow people to provide verbal comments at the public meetings for the DEIS. Another commenter questioned why public meetings during review of the DEIS were held on the Western Slope rather than in Front Range communities.

Representative Quote: It is appalling that you would not take the time or expense that would be needed to hear in-person comments regarding Colorado's Wolf introduction. It's as if you think the wolf introduction is unimportant and the state of Colorado doesn't matter.

Representative Quote: It appears that all of the public scoping meetings were held in areas where the majority of participants were expected to oppose wolf reintroduction. Considering the closeness of the vote for and against Proposition 114, such a choice of location appears to have been purposefully chosen to elicit support for what was to become Alternative 1 or Alternative 2, rather than the straight-forward No-action alternative. The Service should have held public meetings in Colorado's population centers, the Denver metro area, Colorado Springs, and Pueblo. The matter of wolf reintroduction is not only a Western Colorado issue as long as (a) the Colorado Parks and Wildlife Commission represents the entire state and (b) the majority of the lands where wolves would be reintroduced are federal and, hence, of interest to the entire nation.

Response: Public comment was allowed during the review of the rule and DEIS through [regulations.gov](https://www.regulations.gov) and through direct submission of comments to the Service. Three public meetings were held on the Western Slope of Colorado on March 14, 15, and 16, 2023, one public meeting was held in Golden, Colorado, on March 28, 2023, and a virtual public meeting was held on March 22, 2023. The majority of in-person public meetings were held in Western Colorado because that is where wolves will be released.

CONCERN STATEMENT 76: Commenters questioned why the EIS does not analyze the potential impacts of wolf reintroduction or why a separate EIS has not been completed to analyze wolf reintroduction. Commenters stated that since the Service has jurisdiction over the implementation of the ESA, including the conservation, transportation, release, and/or reintroduction of listed species under or in the absence of section 6 cooperative agreements, the EIS should address Colorado's wolf reintroduction. One commenter asked the Service to approve regulations that would require a NEPA assessment of the reintroduction. One commenter noted that the State should be required to complete an EIS because wolves reintroduced to Colorado would quickly disperse to federal lands in the state. One commenter stated that no gray wolves should be reintroduced until the NEPA process is completed for the reintroduction and a 10(j) rule is in place.

Representative Quote: The state of Colorado should not be allowed to establish a nonessential experimental population of Gray Wolves until a proper environmental impact study is completed in accordance with the National Environmental Protection Act (NEPA). Introducing an apex predator, such as Gray Wolves, onto the landscape after an absence of over 50 years is a process that must not be rushed or executed with haste. It must proceed in a deliberate and thoughtful manner, ensuring that all potential impacts are clearly considered and mitigation measures are identified. Colorado's current wolf introduction and management plan identifies multiple Gray Wolf release sites, all on Colorado state or private lands. This is an intentional decision to avoid

completing the required environmental impact studies for the release of Gray Wolves on federal public lands. However, it is evident that Gray Wolves will quickly move onto nearby federal lands, as the majority of western Colorado is made up of federal public lands. The state of Colorado must be required to complete an environmental impact study prior to the introduction of Gray Wolves. The completion of an environmental impact study will allow all stakeholders and decision makers to better understand the impacts of Gray Wolf introduction, prepare mitigation measures, and ensure a successful introduction effort.

Representative Quote: Please approve regulations that require an environmental impact assessment that will evaluate the total impact on all other species prior to allowing introduction of grey wolves.

Representative Quote: The reintroduction of gray wolves to Colorado's Western Slope is a complex issue that demands careful management and a full NEPA of the affect it will cause the state as a whole.

Representative Quote: The state of Colorado must be required to complete a National Environmental Policy Act (NEPA) study. The Colorado Parks and Wildlife (CPW) is charged with the plan to place wolves on the landscape. They claim they do not need to do NEPA since they plan to do the releases on private and state lands. However, as repeatedly referenced in the USFWS DEIS, the wolves will naturally and quickly disperse to other locations in Colorado ,including federal lands. References to the federal presence in this proposed introduction appear throughout the DEIS. "Development of the 10(j) rules is considered a major federal action requiring review under the NEPA Act of 1969." 2-4 refers to the dispersal distance which includes federal lands. 3-8 again refers to dispersal on and across federal lands. 3-9 refers to dispersal throughout the state. 25 confirms that CPW's wolf release is expected to include "high dispersal" across Colorado, including inevitably federal lands. 27 again refers to "wolves released. . . are more likely to disperse immediately from the release site." 39 "A large proportion of Colorado is composed of publicly owned Federal Lands (approximately 36%)" Further it states that "Bureau of Land Management manages approximately 35 per cent of public land in Colorado, much of which is located in the western portion of the State where reintroduction efforts for gray wolves will take place." CPW and USFWS's own documents openly state that wolves will be managed on federal lands, clearly requiring NEPA analysis. No wolves should be introduced until NEPA is completed and the 10(j) Rule is in place.

Response: The "Background" section of the FEIS (pages 1-3 and 1-4) details the unique nature of this planning effort and the State of Colorado's role as the entity performing the reintroduction of the gray wolf. The State has the ability to introduce the gray wolf without the participation of the Service, and therefore there is no federal nexus to the reintroduction that would prompt review under NEPA. Although wolves may disperse throughout the state, including onto federal lands, no federal management of wolves would occur; the sole presence of wolves on a federal property does not constitute a federal nexus under NEPA. Because NEPA is not required for the reintroduction, completion of NEPA for the 10(j) process is not a limiting factor for the State to begin reintroduction efforts.

CONCERN STATEMENT 77: A commenter noted the study area should be expanded to the maximum area where reintroduced gray wolves are expected to disperse within the foreseeable future.

Representative Quote: The action should have been assessed within the maximum area around reintroduction sites where wolves might be expected to range within the near and foreseeable future.

Response: This scope of this EIS is the management flexibility provided by the 10(j) rule, which would only be applicable within the State of Colorado. Therefore, the Service has determined that the State of Colorado, and not beyond, is the appropriate study area.

<p>CONCERN STATEMENT 78: A commenter noted that release and transportation of an endangered species outside its current range seems beyond the scope of typical section 6 cooperative agreements, in response to a statement in the DEIS that reintroduction of gray wolves in Colorado would be allowed under CPW's section 6 cooperative agreement.</p>
<p>Representative Quote: The DEIS states (pages 1-2) that the need for this action (the 10j rule) is to provide management flexibility to the Service and its designated agents for the management of gray wolves in Colorado. The DEIS further states (pages 1-4,1-5) that the State may reintroduce wolves with or without further action by the Service in compliance with the State's cooperative agreement under section 6 of the ESA; therefore, considering an alternative not to pursue active wolf reintroduction efforts is outside the Service's legal authority and outside the scope of the EIS. Release and transportation of an endangered species outside the current range of such species seem beyond the scope of typical Section 6 cooperative agreements. Instead, the release and associated transportation of an endangered species outside its current range is a specific provision of experimental populations established under Section 10(j) of the Endangered Species Act. Suppose the current Colorado Section 6 Cooperative Agreement contains requirements specific to authorizing the release and related transportation of endangered gray wolves within the state of Colorado. These provisions represent a significant federal action and should have been analyzed under NEPA. Without that analysis, the scope of the DEIS is deficient by not providing an analysis of the impacts associated with authorizing the release and transport of endangered gray wolves outside of their current range.</p>
<p>Response: The State of Colorado has proposed acquiring wolves from the northern Rocky Mountain source population. Because this population has been delisted under the ESA, authorization is not needed, and there is no conflict related to transporting and releasing wolves in Colorado by the State.</p>
<p>CONCERN STATEMENT 79: A commenter questioned the Service's use of data in a 2022 study by Ditmer et al. to determine the list of focal counties in the EIS. The commenter suggested that more detailed, site-specific analysis is needed for areas in the State's proposed release area. Another commenter suggested additional counties that should be added to the focal counties, including Pitkin, Summit, San Juan, and Hinsdale, because they "are within the dispersal area of the release zones."</p>
<p>Representative Quote: 3-3 "The focal counties have high ecological suitability for gray wolves, as determined by a 2022 study by Ditmer et al. The Service overlaid a map of Colorado counties on modeling of ecological suitability in summer and winter to determine the list of focal counties (Ditmer 2022)." The reliance upon Ditmer, et al is grossly inadequate. It does not provide the specificity needed to accurately assess impacts in the release area. More detailed, site-specific analysis is needed.</p>
<p>Representative Quote: 3-1 "The Service considered all potentially relevant resource areas for analysis in this EIS." Pitkin, Summit, San Juan, and Hinsdale counties need to be added to the focal counties for the EIS since they are within dispersal area of the release zones.</p>
<p>Response: The action analyzed as the preferred action in the FEIS, implementation of a 10(j) rule, is a programmatic state-wide action; therefore, the state-wide programmatic level of analysis is appropriate. Ditmer et al. (2022) is the best available science. Focal counties identified by the Ditmer study were used to focus the analysis, realizing that once released, wolves would quickly disperse and the implementation of the 10(j) would be a state-wide issue.</p>

<p>CONCERN STATEMENT 80: A commenter suggested that the Service pause the NEPA process until CPW has finalized the State's Wolf Restoration and Management Plan and include any changes in the reintroduction process and management of gray wolves in the FEIS. This commenter suggested that the EIS should again be released for public comment after final changes in the State Plan are incorporated.</p>
<p>Representative Quote: Generally, RMEF agrees with the adequacy of the proposed regulations and supports Alternative 1. However, RMEF recommends the USFWS pause the Final Rule and EIS until after CPW has finalized its wolf management plan in order to best assess potential impacts of a NEP and 10j designation in Colorado. Any changes to CPW's draft plan in the release site, number of wolves, donor state, timeline, etc. could affect the outcome of the proposed rule/EIS and should be reassessed and, again, open for public comment. Bills are currently being discussed in the Colorado legislature to allow for a reintroduction to occur after the initial deadline of December 31, 2023. This would allow more time for the USFWS to fully assess potential impacts based on CPW's final plan.</p>
<p>Response: The State Plan was finalized in May 2023; the rule and EIS will both be finalized after the State Plan. Where possible and respecting the differing authorities of the Service and the State, the Service has reviewed and incorporated consistency with the State Plan in the Service's final rule as appropriate. The final EIS will be available for public review for 30 days following the publication of the Notice of Availability in the <i>Federal Register</i> before the Record of Decision is issued.</p>
<p>CONCERN STATEMENT 81: Commenters suggested that the purpose and need for the proposed action should be revised to reflect the Service's statutory responsibilities to conserve endangered species and their habitats. Commenters suggested that the Secretary of the Interior must make the finding that the 10(j) rule is consistent with the purposes of the ESA and ensure the conservation of wolves and ecosystems in Colorado; therefore, these responsibilities should constitute the purpose and need for the proposed action.</p>
<p>Representative Quote: First, the section on the "Purpose and Need for Action" in the draft EIS wrongly premises the proposed rule on a "need" to "provide management flexibility to the Service and its designated agents. In fact, as we explain below, the foremost purpose and need must be the statutory responsibility to conserve endangered species the gray wolf and the Mexican gray wolf; moreover, the Fish and Wildlife Service is obliged in this rulemaking to conserve the ecosystems on which these wolf subspecies depend.</p>
<p>Representative Quote: The 10(j) rule must contain measures to meet the statutory intent to recover wolves from their present state of endangerment. Moreover, the Act requires the Secretary of the Interior invoking subsection 10(j) to make a finding that the 10(j) rule is consistent with the Act's purposes, which include conservation of the ecosystems on which endangered species depend. Because of that unequivocal direction from Congress, not only must the final 10(j) rule ensure the conservation of wolves in Colorado; it also must advance ecosystem conservation in Colorado and those twin mandates must constitute the overarching purpose and need for this rulemaking. The DEIS emphasizes the wrong factors in asserting: "The purpose of this action is to respond to Colorado's request to designate the gray wolf population that would be reintroduced to Colorado as experimental under section 10(j) and to further the conservation of the species. . . . The need for this action is to provide management flexibility to the Service and its designated agents . . . [to] reduce the regulatory impact." The DEIS's prejudicial statement as to the purpose and need for the action has led to an insufficient range of alternatives and a blinkered analysis of wolf conservation and ecosystem conservation, which in turn facilitated development of a deeply flawed proposed rule. All these legal errors must be corrected in the final EIS, starting with the misdirectional purpose-and-need-for-action statement.</p>

Response: The rule specifies that the establishment of an experimental population of a listed species must further the conservation and recovery of the species. As stated in the rule, the determination that the 10(j) rule is consistent with the purposes of the ESA and ensures the recovery of gray wolves is at the direction of the Secretary of the Interior.

CONSULTATION

CONCERN STATEMENT 82: The Navajo Nation requested government-to-government consultation and coordination with Tribes and the development of a Colorado wolf management group with CPW, the Service, impacted Tribes, and other groups.

Representative Quote: Navajo Nation wishes to see a Colorado Wolf management group developed with Colorado Parks and Wildlife, US Fish and Wildlife Service, impacted Tribes, and other groups who will receive regular updates regarding wolf reintroduction and management in Colorado.

Response: The Service is engaged in government-to-government consultation with all Tribes that requested consultation. Please see Chapter 5 of the FEIS for more information on Tribal consultation that has occurred and is ongoing. The Service will be working cooperatively with the State while wolves remain listed under the ESA. Requests for a working group would need the approval of all entities involved.

CONCERN STATEMENT 83: Commenters were supportive of the Service's collaboration with CPW and encouraged the Service to ensure the State Plan and rule are compatible. One commenter asked the Service to coordinate with the State Plan to avoid negative impacts to ungulates, livestock, and other wildlife. Another commenter suggested that the Service should integrate recommendations developed by CPW's Stakeholder Advisory Group and Technical Working Group into the rule. One commenter asked the Service to retain management authority and not improperly delegate authority to Colorado.

Representative Quote: SCI encourages the Service to continue its collaboration with the State of Colorado to implement the State's management plan for wolves, and to ensure the forced introduction of wolves does not negatively impact Colorado's elk, deer, sheep, moose, and other wildlife populations. SCI appreciates that the Service is willing to work with CPW to ensure the State has the flexibility to manage an increasing wolf population.

Representative Quote: FWS should look to the details in the final plan, scheduled to be approved in May 2023, for consideration in the final 10(j) rule to ensure both policies are compatible with one another and pursue continued public engagement opportunities that clearly communicate their regulatory expectations.

Representative Quote: Defenders also supported Colorado Parks and Wildlife's (CPW) extensive public engagement process, and we were selected by CPW to have a representative on their Stakeholder Advisory Group (SAG). We urge the U.S. Fish and Wildlife Service (FWS) to integrate the consensus recommendations developed by the SAG and Technical Working Group (TWG) where appropriate in this rule, as these teams represent diverse interests brought together voluntarily by CPW to seek areas of common ground for inclusion and equity in the Colorado wolf recovery effort.

Representative Quote: Ensure that the U.S. Fish and Wildlife Service retains enough management authority to fulfill its legal obligations to promote species recovery, including not improperly delegating all of its management authority to the State of Colorado.

Response: The Service has been consulting with the State of Colorado throughout the process and will continue to do so as the rule and EIS are finalized. Many of the recommendations from the various working groups have been incorporated into the rule, and the Service has reviewed the final State Plan while preparing the final rule and FEIS. Where possible and respecting the differing authorities of the Service and the State, the Service has reviewed and incorporated consistency with the State Plan in the Service's final rule as appropriate. The Service may authorize the State of Colorado, or any Tribe within the State that has a wolf management plan consistent with this rule, to assume the lead authority for wolf management under this rule within the borders of the nonessential experimental population area in the State or reservation as set forth in paragraph (a)(10) of this rule. The Service will use monitoring and reporting requirements stipulated in this rule to evaluate the State's progress toward achieving delisting criteria. If the Service determines that modifications to reintroduction protocols, wolf monitoring, or management activities are needed, the Service will coordinate with the State to ensure progress toward achieving recovery goals while concurrently minimizing wolf-related conflicts in Colorado. The Service retains authority to terminate any established Memorandum of Agreement if it determines management is not in accordance with this rule.

CONCERN STATEMENT 84: Commenters made requests for continued coordination with state and federal agencies. Commenters asked the Service to continue to involve and seek input from wildlife agencies in states neighboring Colorado. One commenter noted that the USDA would be an important partner for the Service in providing tools and resources to agricultural producers. Commenters also suggested forming agreements with neighboring states to return dispersing wolves to the 10(j) area to alleviate any burdens on the Mexican wolf recovery effort and to allow gray wolf restoration in Colorado where there would be more management flexibility.

Representative Quote: NPCA encourages the USFWS to work closely with the state of Colorado to ensure communities understand how wolves will be managed as well as the valuable role wolves play on the landscape. This should include working with state and other federal partners such as the U.S Department of Agriculture to provide tools and resources to agricultural producers to prevent conflicts.

Representative Quote: AZSFWC focuses primarily on issues within Arizona; however, this particular action by the Service could have enormous implications for Colorado's neighboring states to the south and west. It is essential that state wildlife agencies and stakeholders across this area are fully involved in the process and their concerns are addressed.

Representative Quote: I ask that USFWS continue to work closely with the state on establishing necessary federal-state agreements and determining the appropriateness of using the flexibilities of Section 10 of the ESA during the wolf restoration efforts.

Representative Quote: Though such relocations are authorized by the proposed rule, our experience is that they require substantial state and federal resources to conduct, and a large degree of policy and logistical coordination. While we recognize that the 10(j) rule does not contain the finalized gray wolf introduction strategy for Colorado, we encourage the Service to work with states and other federal agencies, including through federal permitting mechanisms, to assist in authorizing such relocations in a way that alleviates the burden on neighboring states and recovery programs, such as the Mexican wolf recovery effort. Such cooperation could include, but is not limited to, a multi-state or national 10(a)(1)(A) permit that would allow wildlife managers in Colorado to retrieve wolves that have left the 10(j) area, as is the current practice in the southwest's Mexican wolf management. In order to protect the public and multiple-use management on U.S. Forest Service Lands, we request the Service affirm its commitment to managing Colorado NEP wolves by working with state and federal agencies to return dispersing wolves to their designated 10(j) area so they can be recovered with the flexibility intended in this proposed rule.

Response: The Service has coordinated with state and federal cooperating agencies during development of the EIS and rule. This coordination has been detailed and updated in Chapter 5 of the FEIS. As part of a separate process, the Service is coordinating with the states of Colorado, Arizona, New Mexico, and Utah to develop a permitting approach to mitigate potential impacts on Mexican wolves from the State of Colorado's reintroduction effort. Based on input from these States, the Service has updated the analysis of potential cumulative impacts on Mexican wolves in the FEIS under, "Cumulative Impacts Analysis."

SOCIOECONOMICS

CONCERN STATEMENT 85: Commenters suggested that the estimates of livestock depredation should be revised to portray more realistic estimates or questioned the data used in the analysis. Commenters questioned if the analysis includes livestock in feedlots, which would be less vulnerable to depredations. Commenters also noted that the analysis in the EIS should assess projected losses in local areas rather than statewide. Commenters noted limitations associated with the data from Wyoming used in the analysis (i.e., that the total number of livestock used includes livestock in the Predator Zone, where depredations are not likely to be reported, and may artificially decrease the total number of projected depredations) and provided suggestions for revisions.

Representative Quote: Losses need to be compiled on a localized basis comparing the number of wolves to the number of livestock in a conflict area instead of on a statewide basis. The socioeconomic section of the EIS should prioritize the needs of those most directly affected, such as landowners, hunters, outfitters, and rural communities if wolf numbers are unchecked.

Representative Quote: 3) Lastly, I would like to point out the downward inventory trends of sheep and lambs in the Northern Rocky Mountain states since Yellowstone wolf reintroductions. Economic impacts considered in the EIS do not include the complete loss of business of family farms or the resulting decline in overall inventories impacting our industry's contribution to local and state economies. I have spoken to multiple producers in Montana, Idaho, Minnesota, Oregon and Wyoming and a common theme from them was that they themselves or their neighbors are no longer raising sheep because they "were unable to protect them." I realize this is anecdotal so I did some research on inventory trends in MT, ID, WY and compared it to inventories here in Colorado over the last 20+ years. I am attaching a graph using NASS reported inventory numbers from 2000-2023 (post-reintroduction to present) to demonstrate the shocking declines in sheep production in these states compared to the robust numbers we have in Colorado. Although there are likely several compounding factors at play that may be contributing to these declines, the EIS should include consideration of these potential impacts.

Representative Quote: Other Economic Considerations

The economic burden of wolf introduction will be borne by the rural communities where the wolves will take up residence. This includes direct and indirect costs to livestock producers and outfitters, whose businesses will be affected. This will lead to a trickle-down effect on local businesses as ranchers and outfitters have less income, and as hunters don't come to communities where game herds have been depleted. Statistics used in this proposal are questionable at best and should be updated and accurate. An example is the discussion of how few animals, relative to their entire population in all of Colorado, will be lost to wolf depredation. This should be region specific. Consideration must be made to the individual producer or community where the impacts occur. For example, two years ago we lost our entire yearling ram herd to mountain lions, which was a small percentage of sheep in the state but devastating to us. If wolf depredation leads to economic distress and the sale of ranches, open space will be lost as landowners sell to developers in these mountain communities. Section 3-22 should address an analysis of impacts.

<p>Representative Quote: 4-17 “However, to assess the possible impacts of the wolf population on livestock, the following equation was constructed to standardize depredation rates from a reference area outside Colorado (Wyoming) in relation to total livestock in the wolf range and wolf populations.” The concept of “standardizing depredation rates” is fatally flawed. Colorado’s habitat, wildlife populations, and livestock distribution is vastly different from the northern Rockies (Wyoming, Idaho, Montana). A large portion of Wyoming is managed as a predator zone, so livestock losses due to wolves often go unreported. Wyoming also has much more management flexibility to prevent depredation.</p>
<p>Response: The analysis in section 4.7, “Socioeconomic Resources,” has been revised to consider the data and comments on the methodology provided by agencies and members of the public. The socioeconomic impacts analysis considers potential impacts statewide and in the focal counties because the potential implementation of the 10(j) rule is a state-wide programmatic action, and site-specific analysis is not applicable to this action (although it may be applicable for the State’s action: wolf reintroduction). Analysis of the potential impacts of State’s reintroduction effort in combination with other actions is included in the FEIS under “Cumulative Impacts.” Section 4.7 of the FEIS notes that potential economic impacts on individual livestock producers as a result of depredation may be substantial. The total number of cattle included in the analysis does not include dairy cows or cattle on feedlots. Section 4.7 has been reviewed to ensure that sheep on feedlots are excluded from estimates of potential depredation under the no-action alternative to the degree possible based on available data.</p>
<p>CONCERN STATEMENT 86: Commenters stated that reintroduction of wolves would result in adverse socioeconomic impacts from decreases in ungulate populations, hunter participation, and hunting revenues, including revenues for local communities, Tribal communities, and CPW. Commenters noted that a socioeconomic impacts to outfitters and guides would be adverse and long term.</p>
<p>Representative Quote: As ungulate populations decrease, hunter participation and recruitment will predictably decrease, with the resulting significant decrease in revenues calling into question the very viability of the Colorado Parks and Wildlife agency who rely on elk, deer and other ungulate license sales to fund their operations.</p>
<p>Representative Quote: This could cause short and long-term adverse impacts to guides and outfitters who may need to adjust operations and leases for elk hunting.</p>
<p>Representative Quote: Wolf restoration poses an even greater risk to the Ute Mountain Ute Tribe's elk herds and livestock on its Tribal ranches located in Gunnison, La Plata, and Montezuma Counties, risks that are not shared by the SUIT. It's difficult to know what the long-term impacts wolf restoration will have on elk populations across the state, but the UMUT agrees with SUIT that "if ungulate populations decrease and it becomes necessary to limit hunting licenses, it is our strong opinion that any hunting license reductions within the Brunot Area must fall on the hunters licensed by the state. The Tribe(s) will continue to monitor game populations in the Brunot Area and any voluntary reductions in Tribal hunting licenses will be within the sole discretion of the Tribe(s). This is the only approach that is consistent with the intent of the 1874 Brunot Agreement."</p>
<p>Response: The analysis in section 4.7, “Socioeconomic Resources,” has been revised to consider the data and information provided by agencies, members of the public, and Tribes regarding short- and long-term, adverse impacts on guides and outfitters and declines in revenues for local communities and CPW.</p>

CONCERN STATEMENT 87: Commenters noted that wolves and other predators are responsible for a relatively small percentage of livestock deaths compared to non-predator causes of death including disease and weather conditions. Commenters provided data from the USDA on the causes of death for livestock.

Representative Quote: Our comments are focused on providing information about predator and nonpredator deaths of cattle in the US. Many people believe, incorrectly, that predators are the major cause of deaths of cattle. This is not true. The 2015 USDA report on cattle deaths provides a wealth of information about the causes of deaths of cattle and shows that livestock producers need not worry about the re-introduction of wolves to Colorado. Wolves are responsible for only a tiny percentage of cattle deaths. We have attached a screenshot of the nonpredator causes of cattle deaths in the US in 2015, taken from the USDA report. The report further documents that of all cattle deaths in 2015, 98% were non-predator deaths. For calves, the number was 89%.

Representative Quote: Livestock losses from wolves are rare in every jurisdiction in which they live, and livestock producers lose far more animals to maladies like disease, respiratory problems, and bad weather than to wolves.²⁰ Data from states in the Northern Rocky Mountains region shows that just a fraction of 1% of livestock losses are attributed to wolves each year.

Response: Data on livestock losses from all causes has been added to section 3.5 of the FEIS, “Socioeconomic Resources,” to provide a point of comparison for projected losses discussed in section 4.7.

CONCERN STATEMENT 88: Commenters noted that the reintroduction of wolves in Colorado would result in beneficial economic impacts, including revenues from increased tourism driven by wildlife viewing opportunities, increases in ungulate populations, reduced deer-vehicle collisions, and reduced agricultural damage from ungulates.

Representative Quote: Furthermore, wolf tourism will benefit local economies (37,38,39). Visitation to Yellowstone during 2005 was 2,835,651, but by 2017, park visits had risen 145% to 4,116,525. An estimate of the annual economic impact [of wolves], adjusted for 23% inflation over this period, is \$65.5 million annually (19)! 11. Wolves will NOT devastate the hunting industry. Data from the northern Rocky Mountains indicate that wolves have not caused harm to the big game hunting industry and that instead, elk populations have increased in those states since wolf reintroduction there! Since 1995, when 31 wolves were transported to Yellowstone and 37 to central Idaho, elk numbers have increased. Idaho had 103,448 elk in 1995, but by 2018, the population had grown to 110,300. Montana had 109,500 elk in 1995, which increased to 139,470 in 2018 and 141,785 by 2021. To qualify, predator-prey relationships are incredibly complicated. It cannot be said that in every case, more wolves mean more elk. Other factors may include habitat loss, fragmentation, disease, human hunting and poaching (19,41,42). However, if wolves were the “vicious killers that hunt for fun” that many believe they are, we would surely see a decrease in elk populations where wolves were present.

Representative Quote: Wolves also can help have hidden but important economic impacts that might not be seen until after removal like helping reduce deer-vehicle collisions (Raynor et. al., 2021). In a 2021 study it was found that counties that had a wolf presence saw on average a \$375,000 per year reduction due to deer-vehicle collisions (Raynor et. al., 2021). The study suggests it might be possible that wolves can help curtail damage to agricultural fields and the spread of Lyme disease by helping curtail deer overpopulation (Raynor et. al., 2021). Private landowners or those who would intentionally harass the NEP wolf population could also benefit with public spending to help cover the upfront costs to nonlethal and non-injurious methods (Kareiva et. al., 2022).

Representative Quote: Finally, the economic effect of wolves is almost certain to be more positive than negative. The most recent estimate from Yellowstone is that wolf-oriented tourism was responsible for more

than \$8 million dollars in the most recent economic analysis. Of course, that is a small part of total Yellowstone revenues, but it is still a significant amount of money.

Response: The impacts analysis in the FEIS sections 4.7, “Socioeconomic Resources,” and 4.9, “Cumulative Impacts and Other Considerations,” focuses on economic activities and sectors that could be affected by implementation of the proposed 10(j) rule (i.e., hunting and livestock production). The potential socioeconomic impacts of wolf reintroduction outside these areas (e.g., from an increase in tourism spending) are a potential consequence of the State Plan and are outside the scope of the Service's proposed action. Section 4.7 of the FEIS notes that elk populations and hunter harvest have not fallen in Montana, Idaho, or Wyoming following reintroduction of gray wolves but notes that wolves' impact on game species varies locally.

CONCERN STATEMENT 89: Commenters noted that reintroduction of wolves would result in significant economic impacts on livestock producers from depredation and the cost of implementing measures to prevent depredation, and on small businesses in rural areas. Commenters noted indirect impacts on livestock producers from the presence of wolves, including decreases in reproduction and weight gain and increased stress in livestock. One commenter suggested that allowing wolves on federally managed grazing allotments would violate existing lease agreements. One commenter noted that costs for measures to reduce or avoid depredations should be feasible for livestock producers. Commenters noted that costs may be significant for small operations and for rural communities. One commenter noted that these socioeconomic impacts may result in changes in land use at the county or regional level because livestock producers may be forced or choose to sell their ranches. One commenter noted that the conclusion that there would be no long-term impacts on livestock production overall in the state is inaccurate and based on data that were inappropriately extrapolated from states that are not similar to Colorado. One commenter requested that the Service consider impacts to communities in other states.

Representative Quote: The potential economic impact of wolf reintroduction in Colorado extends beyond the Aspen area to other parts of the state where ranching is a significant industry. Colorado is home to over 12,000 ranches, many of which raise livestock such as cattle, sheep, and goats. According to the Colorado Department of Agriculture, the livestock industry in Colorado contributes over \$4 billion annually to the state's economy and supports thousands of jobs. The reintroduction of wolves to Colorado could have significant economic impacts on ranchers throughout the state. As mentioned previously, wolves are known to prey on livestock, which can result in financial losses for ranchers. With rising costs in nearly every market in the United States, these losses can be particularly devastating for smaller operations or those with limited resources to absorb the costs. In addition to direct losses from predation, ranchers are highly likely to incur additional indirect costs associated with managing and preventing predation. Monitoring and protecting livestock will need to be increased which will bring with it higher labor costs. Adding to these costs will be implementing measures such as fencing, guard dogs, and other deterrents. These costs can be significant and may impact the financial viability of ranching operations. A real-world example of what this means in terms of value to small ranchers, according to a 2017 report by the USDA Economic Research Service, the average net cash farm income for cattle and calf operations in Colorado was \$41,000 per farm. This figure represents the income left over after expenses have been paid and does not account for non-cash expenses such as depreciation or the opportunity cost of unpaid family labor. A loss of just a few cattle per year could prove disastrous for these ranchers. Overall, the potential economic impact of wolf reintroduction on ranchers in Colorado is significant and underscores the need for careful consideration and planning around the reintroduction of wolves. It is important to work with stakeholders to develop effective strategies that balance the economic concerns of ranchers with the ecological benefits of wolf reintroduction.

Representative Quote: Within the guidelines there is no reference to landowners and land lease holders for loss of livestock or loss of breeding potential of livestock. It is not the number of cows that are kill by wolves but the 30% plus loss of reproduction, the lack of weight gain and the stress impacts that is caused by wolves. The

livestock will not go up into the forest where the grazing grass is because that is where the wolves are. This is in violation of the lease agreements the landowners have with the Federal Government. Leased ground cannot be considered part of the area in wolf reintroduction.

Representative Quote: 4-46 “While there would be a loss of ungulates and livestock, loss of either is not an irreversible or irretrievable commitment of resources because both are abundant, renewable resources. Labor associated with the implementation of proactive management to decrease the likelihood of livestock depredations may occur, or to address the consequences of depredation (such as building additional fencing, or paperwork associated with depredation claims); however, these impacts and commitments can be restored or returned to their prior condition with mitigation such as successful implementation of proactive measures or receipt of depredation compensation.” Compensation payments never cover the real costs of managing wolves. If a rancher must carve out time to manage wolves, he is taking time away from other management responsibilities. These inefficiencies subtract from annual income and are never compensated for so there is an irreversible and irretrievable loss. There is also the potential for irreversible and irreversible loss to other wildlife, hunters, outfitters, and local businesses. Therefore, it’s extremely important that the 10(j) with lethal take statewide be adopted.

Representative Quote: Management tools and requirements must be useful and feasible for the livestock producer and/or public land permittee. As a livestock producer, it is my responsibility to take care of my livestock. Nobody should have to sit back and allow their livestock to be tormented by wolves which lead to negative direct costs (death of a cow, calf, sheep, dogs, etc.) but also indirect costs such as those incurred by nervous, stressed livestock: reduced weight, conception, etc. Also, scared, nervous livestock will not use the range effectively. Instead, they will use protective measures such as staying bunched up and not dispersing to graze.

Representative Quote: I believe the process and introduction should utilize counties to analyze the full breadth of impact on rural communities and livestock operations. All sectors and businesses in rural Colorado will be impacted (livestock operation, hunting and outfitting, etc.). Please consider the impacts on other Western states and the livestock producers in those states.

Response: The analysis in section 4.7, “Socioeconomic Resources,” has been revised to consider the data and comments on the methodology provided by agencies and members of the public. The section discusses the potential indirect impacts on livestock, livestock producers, and local communities as a result of economic losses caused by the presence of wolves and wolf depredation. The socioeconomic impacts analysis also considers potential impacts statewide and in the focal counties; potential impacts on communities outside the focal counties are considered as part of the statewide analysis. The terms of lease agreements for grazing allotments on federal lands are outside the scope of the 10(j) rule and are therefore not addressed in the EIS.

CONCERN STATEMENT 90: One commenter noted that the costs associated with the proposed reintroduction are unacceptable impacts that are expected to continue once wolves are on the landscape. The commenter suggested that these costs should be addressed in the 10(j) rule.

Representative Quote: While we are aware that costs are most directly an issue for CPW and the State of Colorado, the Organizations are concerned that the experiences with costs of the reintroduction are highly relevant to the 10j scope of management authority allowed in the designation and process. These are unacceptable impacts that have already attempted to be remedied within the short timeframe since passage of Prop 114. We can see no reason why these issues would just stop once wolves are on the ground, but rather we expect to see impacts become more apparent at a faster rate.

Response: The costs of reintroduction and management of gray wolves in Colorado are addressed in the State Plan and are the responsibility of CPW and the State of Colorado. The rule includes provisions that likely would help mitigate the costs of the State's wolf reintroduction and management program by reducing livestock depredations and, subsequently, reducing required compensation to livestock owners.

CONCERN STATEMENT 91: Commenters expressed support for lethal or nonlethal measures to prevent livestock depredation based on the costs of the measures. One commenter suggested that the management flexibility allowed under alternative 1, including lethal take, would reduce agency management costs and costs for livestock producers. Another commenter provided data related to a program using nonlethal livestock protection methods in Idaho and discussed how the program was less costly than lethal take.

Representative Quote: xii - Socioeconomic Resources: The management flexibility provided with Alternative 1 will also reduce agency costs for wolf management. Non-lethal deterrents are expensive, and over time lose their efficacy. Lethally removing depredating wolves not only benefits the overall wolf recovery program so other wolves can avoid conflict, but it reduces agency management cost, and the financial and emotional burden on producers.

Representative Quote: Ironically, while the state of Idaho appears to be waging war on its wolves, we have an existing model in coexistence that has worked well in Blaine County in one of the only regions of the state where wolf trapping and snaring is not allowed: the Wood River Wolf Project (Project) area. IWCN is the fiscal manager of the Project, which is a 16-year demonstration study of nonlethal methods to determine if wolves and the most vulnerable livestock sheep can coexist on the same landscape. The Project has helped protect an average of 20,000 sheep in our 1100 sq km area that is largely composed of mountainous terrain on national forest land. As you know, sheep are the most vulnerable of all livestock to large predators. Our project area is among the most rugged and remote areas of the state where livestock is allowed to graze. Of the 20,000+ sheep in our project area, our average loss of sheep to wolves is 4.7 sheep per year. During our 16-year history, only one wolf was purposely killed to control sheep attacks, yet packs of wolves have been left largely undisturbed because our nonlethal methods are highly effective at minimizing sheep losses. Our peer reviewed paper has been submitted and can be accessed online here: Adaptive use of nonlethal strategies for minimizing wolf-sheep conflict in Idaho | Journal of Mammalogy | Oxford Academic (oup.com). Other cattle producers are documenting significant reduction or no losses to wolves due to proactive nonlethal measures. Yet, the State of Idaho is willfully ignoring this viable alternative that provides better protection for livestock at a far lower cost than the millions of dollars it is spending to kill wolves. Is the State of Idaho ready to admit that it is succumbing to anti-wolf hysteria and even fostering the unwarranted hatred of wolves rather than fulfilling its duty to responsibly manage all wildlife?

Response: The rule allows a range of nonlethal and lethal take strategies to prevent livestock depredation. Livestock producers may implement various strategies based on their needs and circumstances, subject to the requirements for permitting, reporting, and documentation in the rule and State law.

NEW ALTERNATIVES

CONCERN STATEMENT 92: Commenters requested that the alternatives included in the EIS address dispersal of gray wolves outside the experimental population boundary, either through capture and relocation of wolves that disperse outside the boundary or by allowing some degree of dispersal. Commenters identified the potential for livestock depredation in other states and impacts on Mexican wolves as reasons for capturing and relocating dispersing wolves. One commenter asked that the final rule recognize the eligibility of livestock producers in neighboring states for compensation under federal programs in the event of livestock depredation.

Some commenters suggested that wolves that leave the boundary should be allowed to disperse to support establishment of wolf populations in neighboring states, with some commenters suggesting the only exception should be if dispersal of wolves would pose unacceptable impacts on the Mexican wolf. One commenter suggested tracking gray wolves that disperse outside the boundary to understand factors that may cause wolves to disperse outside Colorado.

Representative Quote: The proposed rule and DEIS anticipate wolf dispersal across the entire state of Colorado. It is also extremely likely that gray wolves will disperse into neighboring states that lack wolf restoration or management plans and where they are listed as a federally endangered species (e.g., New Mexico, Utah, Nebraska, etc.). It would be a disservice to neighboring states to not proactively address this potential conflict in the current proposed rule. Accordingly, our organizations request that the USFWS work closely with adjoining and nearby states to address the likelihood of reintroduced gray wolves dispersing from Colorado, and consider the approach taken with Mexican wolves in Arizona and New Mexico. There, wolves identified as experimental dispersers would generally be translocated back to their NEP geographic boundary by the USFWS or an authorized agent. As was done within the associated rule and EIS in that case, we'd support USFWS issuing a research and recovery permit (similar to TE0915518 dated 04/04/2013) to authorize removal of gray wolves identified as having dispersed from the geographic boundary of the Colorado NEP, and a decision to either maintain those wolves in captivity, translocate them to areas of suitable habitat within the NEP geographic boundary, or transfer them elsewhere.

Representative Quote: Section 10 designations often allow for reintroduced species that breach designated boundaries to be either relocated back to the boundary area or be put in a captive breeding program. Wolves currently remain listed in all states bounding Colorado except Wyoming and parts of Utah. The recovery of wolves nationwide is frustrated by these efforts to prevent natural dispersal beyond these boundaries, which typically are established based on political jurisdictions rather than suitable habitats. Wolves that emigrate from Colorado should be allowed to proceed unmolested in the interest of establishing viable populations in neighboring states.

Representative Quote: Restrict removals and relocations back of wolves who leave the experimental population area to the sole circumstance of preventing too much introgression of northern wolves genes into the U.S. Mexican wolf population and only in such instances after a science-based finding that the prospective introgression of northern genes from the wolf to be removed would be detrimental to conservation of Mexican wolves.

Representative Quote: Between the state of Wyoming and Colorado, Wyoming has much more relaxed rules regarding the gray wolf. One of these issues is permitted "take. Wyoming is one of the states with the most natural habitat for the wolves that still reside in their current/historical range as a species. There are no mechanisms in place with this EIS to control wolf populations from migrating from Colorado back into Wyoming. With gray wolf intergroup interactions usually being aggressive, "the loss of adult group members may reduce the competitive strength of the group, and failure to defend against intruders may result in the loss of resources, territory, and the lives of group members" (Cassidy et. al.). This is prevalent because without knowing the exact outcome of the 10(j) experimental habitat, the wolves could find that the area is not suitable for them and migrate back into Wyoming. Migration increases the probability of interpack interactions and issues with incidental "take" due to differences in state laws. Overall, there needs to be implementation of tracking the Colorado wolf populations for both their safety and understanding if the 10(j) experimental areas in Colorado are a viable option for the species.

Response: The rule does not address capture and relocation of wolves that leave the 10(j) boundary; however, throughout this process, the Service has coordinated with state and federal cooperating agencies during development of the EIS and rule. This coordination has been detailed and updated in Chapter 5 of the FEIS, including coordination to address potential impacts on the Mexican wolf. Coordination with surrounding states related to potential impacts to the Mexican wolf are further discussed under Concern Statement 84.

Suggestions related to wolf tracking and dispersal are components of the reintroduction effort and would be addressed by the State of Colorado as part of its State Plan.

CONCERN STATEMENT 93: Some commenters noted the range of alternatives addressed in the EIS is too narrow, and commenters suggested additional alternatives that should be considered to support the conservation of reintroduced gray wolves in Colorado or to limit or prohibit lethal take. Alternative regulatory tools suggested including use of Safe Harbor Agreements or a statewide 10(a)(1)(A) permit while maintaining the species' endangered status in Colorado. Commenters also suggested considering alternative versions of the rule that would prohibit all lethal take, lethal take on public lands, or lethal take in the absence of nonlethal management strategies. Multiple commenters suggested the Service should retain management authority over reintroduced wolves in Colorado. One commenter suggested that the Service should expand the geographic area of the northern Rocky Mountains distinct population segment to encompass Colorado in recognition of the dispersal of individual wolves into Colorado from the northern Rocky Mountains region. Some commenters requested that the Service include provisions for ecosystem protection in Colorado in the range of alternatives. Commenters also requested that the Service consider alternatives that include education and financial incentives for livestock producers and rural communities to increase social tolerance for wolves.

Representative Quote: Another reasonable alternative to 10(j) designation that should be considered is the use of Safe Harbor Agreements. Safe Harbor agreements are voluntary agreements between the Service and nonfederal landowners that provide assurances that penalties will not accrue in the event of unintentional/incidental take of a listed species in the context of day-to-day business operations (Congressional Research Service 2021). These achieve all of the purported benefits of a 10(j) "experimental, nonessential" rule without the conservation penalty of removing consequences for intentional take.

Representative Quote: Protecting wolves on public lands, which should be a refuge, a safe place for them, which belong to wildlife and all Americans, should be your focus in creating the EIS. What actions are you taking to fulfill your legal requirement to assure wolves have the safe environment that they are entitled to via the EIS? A 10(j) should be off the table because it lacks the call to keep habitat protected for wolves.

Representative Quote: There is going to have to be a long-term commitment to using non-lethal measures, regarding wolf, livestock conflicts for ranchers and farmers. Of course, ranchers, farmers, should receive federal reimbursement for any proven livestock attacks.

Representative Quote: Finally, offering education to ranchers and helping them mitigate wolf attacks on their livestock would help substantially. Offering ways for ranchers to protect their farms and protect wolf populations is the best outcome. One way to protect livestock is the EPA using their resources to plant carcasses within their habitats, as wolves generally come to livestock if they are having a hard time finding wild game. Another way is to have heavier hunting regulations to keep the elk and moose populations thriving for wolves.

Representative Quote: Third, the DEIS fails to consider an adequate number of alternatives to its proposed action, and/or fails to justify why additional alternatives were not considered in more detail. For example, the Service should have considered an alternative in which the Draft Rule contained no lethal take provisions or contained provisions disallowing lethal take on federal public lands, or disallowing any take if non-lethal coexistence techniques and practices were not first employed. Additionally, the DEIS fails to properly consider an alternative that used a Section 10(a)(1)(A) permit instead of a Section 10(j) rule to foster the goals and objectives of the state mandated reintroduction effort.

Response: The FEIS considers variations on statewide permits issued by the Service (see FEIS, page 2-3) and describes why they were not carried forward for detailed analysis. As noted in the FEIS, the limited and narrow

provisions for lethal take would allow for species conservation while reducing the regulatory burden associated with species introduction. The no-action alternative provides the option where there would be no lethal take, but this was not selected as the preferred alternative and was determined not to meet the purpose and need. The Service believes the combination of lethal and nonlethal take under the 10(j) rule would provide the needed management flexibility. The northern Rocky Mountains population of gray wolves is not listed under the ESA; therefore, expanding this population is not a feasible alternative. Suggestions related to ecosystem protection, financial compensation, and education are related to the wolf reintroduction process and would fall under the scope of the State Plan, not the 10(j) rule.

CONCERN STATEMENT 94: Commenters suggested additional provisions or elements that should be included in the 10(j) rule. These included a prohibition on baiting wolves, recognition of the State of Wyoming's authority to manage wildlife species under its jurisdiction, a preference for relocating wolves that chronically depredate livestock, authorizing the use of trapping to support monitoring or translocation of wolves, requiring use of radio collars for monitoring, and allowing flexibility to manage the wolf population to maintain numbers once it reaches a certain target goal. Commenters suggested the Service identify a population goal for gray wolves in Colorado and/or establish limits on lethal take until reintroduced gray wolves meet certain population targets. Another commenter requested an addition to the 10(j) rule to forbid killing of wolves if they are not at an abundance that is serving to "meaningfully limit" coyote populations.

Representative Quote: 4-22 "Compared to lethal removal, the translocation of wolves away from conflict sites showed advantages and disadvantages." Because of Colorado's limited habitat, avoiding conflicts will be very difficult, so problem wolves should be lethally removed and not relocated. 4-22 "In the earliest periods of wolf recovery, when promoting the formation of new packs was a high priority, soft releasing and translocating family units may be beneficial ways to reduce homing behavior, although initially more expensive." This is another reason the 10(j) should authorize trapping to assist with radio-collaring and monitoring.

Representative Quote: The needed supplemental draft environmental impact statement and final rule should respectively analyze and consist of the following provisions: (1) A proscription on killing wolves to the extent that such killings would inhibit or slow attainment of a growing wolf population of at least 750 animals with genetic connectivity to wolf populations north and south; (2) a proscription on killing wolves to the extent that such killings would inhibit trophic cascades and specifically conservation of riparian habitats, pronghorn, swift fox, black-footed ferret, and Canada lynx; (3) a proscription on killing wolves that injure or kill livestock solely on public lands; (4) a proscription on killing wolves that kill livestock in instances in which the same wolves had previously scavenged on non-wolf-killed livestock carrion; and (5) approval for introducing Mexican gray wolves into southwestern Colorado.

Representative Quote: the Colorado gray wolf 10(j) rule must be that the killing of wolves cannot be allowed to curtail the abundance, distribution or density of wolves to the extent that wolves do not serve to meaningfully limit coyote numbers.

Representative Quote: In order to effectively conserve the future experimental population of wolves in Colorado, the final rule should define conservation goals, including the number of wolves inhabiting Colorado, and other aspirational conditions, that would represent a population no longer in danger of extirpation. The supplemental draft environmental impact statement should explain the basis for these conservation goals.

Response: The rule includes limited and narrow provisions for lethal take in response to conflicts, which the Service believes provides needed management flexibility. The rule does not specify methods or practices that must be used and prohibits certain activities in limited circumstances. Language has been added to the rule

stating that baiting is not an allowed practice. Reintroduction and management goals, mechanisms, and protocols, including population targets, fall under the State Plan and are not within the scope of the 10(j) rule.
CONCERN STATEMENT 95: Multiple commenters suggested that the Service assess introducing Mexican wolves to Colorado in conjunction with the State's reintroduction of gray wolves, or that connectivity between gray wolves and Mexican wolves be allowed to support genetic diversity in the wild population of Mexican wolves.
Representative Quote: The draft 10(j) rule must be modified to ensure wolves in Colorado are reintroduced and conserved using an ecosystem-based approach that ensures the return of healthy and self-sustaining populations across suitable habitat, while promoting ethical human-wolf coexistence. Wolf populations should be allowed to flourish to ensure the restoration of the full ecological benefits the species brings to ecosystems. As recommended by wolf biologists who advise Mexican wolf recovery, the Colorado 10(j) management rule should include the introduction of a subpopulation of Mexican gray wolves in the southern region of Colorado. Such a subpopulation would be able to connect to the existing population within the Mexican wolf experimental population area and would provide this critically endangered subspecies with much-needed genetic diversity and resilience.
Representative Quote: 2. We need to allow Mexican gray wolf connectivity with Colorado's gray wolves. The biggest threat to Mexican Grey Wolves is the lack of genetic diversity (1). Mexican Grey wolves are also poached at atrocious rates. Mexican Grey Wolves should be reintroduced to southern CO so that they can breed with the Grey Wolves. I have heard the argument, "Canis lupus is much larger and more vicious than Canis lupus nubilus (the Great Plains Wolf) and therefore this reintroduction of Canis lupus into CO is unnatural and irresponsible." While the Great Plains wolves are typically smaller than the Canadian Grey Wolves, no wolf is "vicious." However, if Mexican Grey Wolves and Grey Wolves began to breed, we may see a CO wolf population that is smaller in stature and therefore increase wolf support from the public. If we reintroduce Mexican Grey wolves into southern CO, we could begin to tackle the two biggest threats to Mexican Grey wolves: lack of genetic diversity and poaching.
Representative Quote: The draft 10(j) rule for the reintroduction of wolves into Colorado must be modified to insure wolves (both gray and Mexican) are restored to the native habitat in such a way that they can flourish and provide Colorado with all the ecological benefits these animals bring to the natural environment.
Representative Quote: I strongly urge FWS to allow Mexican gray wolves connectivity with Colorado gray wolves.
Response: The State of Colorado explored options for which subspecies to reintroduce and decided gray wolf was the appropriate subspecies (see the State Plan and processes for this analysis and decision). Section 2.3.3 of the FEIS discusses why the suggested alternative to introduce Mexican wolves in Colorado was not evaluated in detail. Additionally, introduction of Mexican wolves in Colorado falls outside the Service's stated recovery strategy in the revised recovery plan for Mexican wolves (see page 201 of the <i>Final Supplemental EIS Proposed Revision to the Regulations for the Nonessential Experimental Population for Mexican Wolves</i> for further information). Potential cumulative impacts to the genetic integrity of the Mexican wolf are discussed in the FEIS under "Cumulative Impacts Analysis."
CONCERN STATEMENT 96: Commenters suggested expanding the scope of the optional provision related to ungulates to allow management flexibility to address unacceptable impacts on other species as these impacts are identified or to allow management of wolves to address other conflicts related to ungulates (e.g., if wolves

cause ungulate herds to mingle with livestock herds, displace ungulate herds into road rights-of-way causing impacts to public safety, or to address unacceptable impacts on ungulate herds following severe weather conditions).

Representative Quote: The Service has provided similar broad protections around wolverines in Colorado and we would ask for language at least as strong as that previously provided in possible 10j designations for the Wolverines. Weaker recreation protections have been provided for the Mexican Gray wolf in Arizona and New Mexico 10j efforts and it has been our experience that these protections have not proven to be strong enough, as even with these protections every time there is a planning effort, trails have to be reviewed for the protection of Mexican wolves. We would ask the Service to apply the “unacceptable impacts” standard proposed for ungulates far more broadly than to just ungulate populations as unacceptable impacts will range far outside just this issue.

Representative Quote: The Organizations would like to thank the Service for moving the public concerns raised around possible impacts from wolf predation on ungulates forward as a concern that would be addressed with the optional management authority. While we are aware that this optional management authority is only proposed to be applied to ungulates in the Proposal, we believe expansion of this type of management authority will be a significant benefit in the case where wolves are impacting other wild species such as Lynx, domestic herd animals and domestic pets. We are aware that these types of concern have not been documented well, we are also aware that this issue has not been well researched either. We believe that this authority is critical to mitigating unintended impacts, should they be found. The Organizations are aware that this optional management authority still requires a public engagement analysis process and decisions for utilization of this optional management authority and we believe this review process will provide significant protections for all species possibly impacted.

Representative Quote: Wolves are opportunistic predators and their impacts to the imperiled Gunnison sage-grouse is unknown. The 10(j) should provide management flexibility if wolves are negatively impacted by other wildlife species. 4-35 “Reintroduction of wolves has not resulted in the disappearance of lynx elsewhere, including at Yellowstone National Park (Murphy et al. 2006).” Colorado has less available habitat than other areas in the northern Rockies, making it difficult for other species to disperse to avoid wolf depredation. The impact of wolves on lynx in Colorado is unknown.

Representative Quote: The Service should also consider allowing intentional take to prevent unacceptable impacts to other species, not just ungulates.

Response: Comment response 12 addresses how the ungulate provision is incorporated into the final rule, applying only to reservation lands of the Southern Ute Indian Tribe and the Ute Mountain Ute Tribe. Allowing for take of wolves to address potential impacts on other wildlife species or to address other concerns related to ungulate populations would not be consistent with the State Plan; therefore, these options are not considered in detail in the FEIS.

ECOSYSTEMS

CONCERN STATEMENT 97: Commenters suggested that the rule and EIS should be revised to discuss biodiversity concerns related to the reintroduction of the gray wolf in Colorado. Commenters discussed the ecosystem effects that have been attributed to gray wolves and provided data sources. Many commenters discussed the concept of trophic cascades and noted that predators affect the behavior and abundance of prey species, which can have more widespread ecosystem impacts. Potential effects mentioned included improving the condition of riparian areas, increasing habitat for other special status species, reducing disease transmission

in ungulates, and mitigating climate change by creating carbon sinks. Commenters noted that lethal take would reduce or affect the ecosystem benefits provided by reintroduced wolves.

Representative Quote: How do wolves mitigate climate change? First, they are keystone species that complete and support the food web. Intact food webs are more resilient to environmental changes (31). Second, wolves will control the location and number of deer and moose populations, which will increase the amount of CO₂ stored in plants. Wolves have created massive carbon sinks that keep CO₂ from our atmosphere. Researchers estimated an increase in CO₂ storage between 46 and 99 million metric tons as a result of the presence of wolves. This amount of CO₂ is equivalent to tailpipe emissions from between 33 and 71 million cars (40)!

Representative Quote: It is commonly understood that the absence of apex predators, such as the wolf, has caused imbalances to those ecosystems that evolved with them.⁴ to better understand the baseline environmental conditions and to measure the impacts of each of the alternatives, we recommend discussing in Chapter 3, Affected Environment, how the environment in Colorado has been impacted by the absence of wolves. Providing this baseline will help the reader understand the impacts of the alternatives to Colorado's ecosystems and environment.

Representative Quote: I support the U.S. Fish and Wildlife Service's creation of a new rule under section 10(j) of the Endangered Species Act to advance the restoration of gray wolves in Colorado. Functioning ecosystems require that all species participate in the manner subscribed by Nature. Removing (a) species impacts the balance of the system. The gray wolf has been part of this system for thousands of years and need to remain in numbers dictated by the system

Representative Quote: Unfortunately, the draft environmental impact statement only barely mentions the scientific findings on wolves' positive effects on their ecosystems elsewhere, in particular wolves' influences on other species of animals and plants through trophic cascades. And the fact that the DEIS does not contain meaningfully different alternatives precludes its analysis of how wolves' roles in ecosystems would be affected by different types of management. The supplemental DEIS that is required through this DEIS's inadequacy should evaluate how the authorized killing of wolves under different circumstances reflected in different alternatives -- would affect their ecosystems. In particular, the killing of wolves would harm four species that are negatively affected by high coyote densities since wolves kill coyotes, suppress their numbers, and limit their densities; with greatly constrained levels of wolf-killing, those species -- black footed ferret, swift fox, Canada lynx and pronghorn. Other rare and imperiled species would also benefit from wolves and conversely be harmed by unconstrained killing of wolves, including wolverines that feed on carrion provided by wolves, and Chapin Mesa milkvetch whose range is constrained in part by high levels of elk herbivory along with other sensitive native plants in Colorado affected by high densities and/or sedentary behaviors of elk, cattle and other ungulates, and animals affected by overgrazing of riparian areas.

Response: The Service recognizes the growing volume of scientific literature pertaining to wolves' role as apex predators/keystone species, continued exploration of "top-down versus bottom-up" ecosystem regulation and trophic cascades, and even potential indirect impacts on climate change. The Service also recognizes the importance of predators in maintaining or restoring ecosystem health and that gray wolves are an apex predator. In addition to resources cited in the DEIS, the Service reviewed resources mentioned or provided as part of public comments during the public review period for the rule and DEIS. Section 4.9.2, "Cumulative Impacts Analysis," in the FEIS has been updated to include additional citations as appropriate.

ENVIRONMENTAL JUSTICE

CONCERN STATEMENT 98: One commenter suggested that the term "environmental justice" should be deleted from the EIS and the analysis combined with the socioeconomics analysis. The commenter suggested that the

term "environmental justice" should not be used because it is suggestive, emotional language that "has no mooring in sound science."

Representative Quote: xiii Environmental Justice: The "Environmental Justice" category label should be deleted, and the analysis comments combined with the "Socioeconomic Resources" section. "Environmental Justice" is highly charged, emotional, and subjective trigger language that has no mooring in sound science and serves to undermine management principles anchored in fact and reason versus emotional rhetoric.

Response: Environmental justice is addressed in the FEIS, and the term is consistent with federal policy, including Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority and Low-Income Populations*, and Executive Order 14096, *Revitalizing Our Nation's Commitment to Environmental Justice for All*. The methodology for the environmental justice analysis in the FEIS follows recommendations in the 2016 report by the Federal Interagency Working Group on Environmental Justice, *Promising Practices for EJ Methodologies in NEPA Reviews*.

CONCERN STATEMENT 99: One commenter asked if education and outreach, specifically using Spanish-language materials, was provided for environmental justice groups of concern that included a high percentage of people of Hispanic, Latino, or Spanish origin. The commenter recommended the Service conduct predator awareness training for minority livestock producers, to include nonlethal methods for avoiding depredation, and suggested this training may reduce depredations for livestock producers who may be disproportionately affected.

Representative Quote: The Draft EIS contains an environmental justice analysis of the proposed action in Chapters 3 and 4 (pp.3-27 3-37 and 4-24 4-28). We appreciate the information that the Service has provided in its analysis of the baseline conditions and potential impacts to communities that experience environmental justice concerns. The Draft EIS states that "minority environmental justice communities within the agricultural population group of concern were identified using the "meaningfully greater" analysis. If the percentage of minority producers or producers of Hispanic, Latino, or Spanish origin exceeds the percentage at the state level by more than 5 percent, these communities are considered environmental justice communities. Six counties in the state, including two focal counties, are home to producers of Hispanic, Latino, or Spanish origin that meet the threshold for environmental justice communities" (p. 3-35). It is not clear whether outreach to these specific ranching operations has occurred and whether any Spanish-language materials were developed to provide information to these smaller ranching operators that might have limited English proficiency. We recommend that education and outreach will include Spanish-language materials to ensure communication is sufficient in communities with significant portions of Spanish speaking residents. It is also unclear whether these Spanish-language materials will include assistance navigating the administrative process to receive depredation compensation, which can be cumbersome for these impacted communities. Finally, we recommend rancher-predator awareness training, which includes training on non-lethal methods for avoiding depredations, which may be useful to reduce depredations for disproportionately impacted operators, among others.

Response: CPW's Wolf Restoration and Management Plan includes objectives and policies for education and outreach to target audiences, including the agricultural community and sportspersons and outfitters. Educational materials produced and distributed by the State will address concerns over wolf-livestock conflicts, including methods to prevent conflicts and wolf-ungulate interactions. As part of this program, the State has produced a Spanish language guide for livestock producers and owners to reduce depredations (<https://cpw.state.co.us/learn/Pages/CON-Wolf-Management.aspx>, Colorado Wolf Management Resources). The Service will continue to coordinate with the State on education and outreach efforts by providing technical expertise to address questions and concerns related to the 10(j) rule.

TRIBAL RESOURCES

CONCERN STATEMENT 100: Commenters requested that the Service consult with Tribal representatives from Colorado to incorporate traditional ecological knowledge into the planning process.
Representative Quote: USFWS should consult with tribal representatives and indigenous voices from Colorado and draw on and use traditional ecological knowledge to effectively guide the development of the 10(j) management rule and other wolf policies.
Representative Quote: Native American tribes should also have a say in the implementation of the plan, since their knowledge and beliefs about wolves and the ecosystems is much older than ours.
Representative Quote: Our Ute people are the original and longest continuous inhabitants of what is now the state of Colorado and maintain historical as well as contemporary interests all over the state to this day. We request that our comments be strongly considered and included in the establishment of a nonessential experimental population of the gray wolf in Colorado and final environmental impact statement.
Response: The Service has been consulting with Tribes from Colorado and across the region regularly. Chapter 5 of the FEIS has been updated to further detail this coordination.
CONCERN STATEMENT 101: Commenters noted the taking of a wolf would be considered the taking of a sacred animal by the Global Indigenous Council.
Representative Quote: While the Ute peoples' opinions are considered as they do not support the reintroduction of the wolves, the Global Indigenous Council does support this, and by allowing take of a sacred animal, this is violating their beliefs (Richardson, 2020).
Response: Throughout the planning process, the Service has coordinated with Tribes throughout the region, including conducting government-to-government consultation (see Chapter 5 of the FEIS). Information provided by these Tribes related to their views on the wolf and its presence on their Tribal lands was included in the DEIS, and further information obtained during the public comment period has been incorporated into the FEIS.
CONCERN STATEMENT 102: Commenters requested that the EIS reflect there should be no wolves in the Tribal Reservation and Brunot Agreement Area. They requested a no wolf buffer south of I-70 to ensure Tribal rights are protected.
Representative Quote: Under Chapter 3.4.3 Tribal Cultural Resources Treaty rights and reservation must be revised to reflect the Southern Ute Indian Tribe stipulating "no wolves" within the Tribal Reservation and the Brunot Treaty Area. The USFWS must provide a "no wolf" buffer south of I-70 to ensure tribal rights are protected.
Response: The ability of Tribes to manage wolves on their lands is addressed in the FEIS (see section 4.8.3). As stated there, ". . . Tribes would be able to conduct wolf management to address depredation of livestock and impacts on ungulate populations from wolves on Tribal reservation lands as designated agents of the Service within the experimental population boundary on reservation lands. Tribes would be required to obtain prior approval from the Service before implementing certain management actions as outlined in Chapter 2." Further,

as noted under Concern Response 12, the rule has been modified to allow the Southern Ute Indian Tribe and the Ute Mountain Ute Tribe to manage wolves in relation to ungulate impacts on reservation lands.
CONCERN STATEMENT 103: A commenter asked for the Service to GPS collar all wolves so that they can be removed from Tribal lands where they are not desired. The commenter also requested the Service remove any wolf from Tribal lands where they are not desired at no cost to the Tribe.
Representative Quote: Navajo Nation wishes to have all wolves collared with GPS tracking units so as to ensure any individual that wanders into Navajo lands is quickly located and removed.
Representative Quote: Navajo Nation does not want wolves to establish on Navajo Lands. As such, any wolf that comes onto Navajo Nation shall be removed as quickly as is possible. Navajo Nation expects this effort to be coordinated by US Fish and Wildlife Service and/or Colorado Parks and Wildlife at no charge to the Nation.
Response: The management of wolves, including collaring, would occur in accordance with the State Plan, with the State of Colorado serving as a designated agent. The Service is engaged in government-to-government consultation with the Navajo Nation and will continue to discuss these concerns at this level to reach a resolution.

SPECIAL STATUS SPECIES

CONCERN STATEMENT 104: Commenters asked for the Service to evaluate impacts of the rule on special status species more thoroughly. Specific concerns about impacts to special status species included wolves preying on lynxes and competing with them for food sources and predation on the Greater sage-grouse, Columbian sharp-tailed grouse, and Gunnison sage-grouse. Additionally, commenters noted that ranchers have worked with the Service, CPW, the Forest Service, and the Bureau of Land Management to protect lower elevation sagebrush habitats for Gunnison sage-grouse and worried about predation on grouse species. A commenter asked the Service to consider adding flexibility to the rule to protect species of special concern if they are negatively affected by the reintroduced wolves.
Representative Quote: The EIS conducted in the draft does not account for environmental impact to species such as Lynx. The Lynx is currently listed as endangered with the ESA. Colorado's lynx reintroduction program has proven marginally successful. Wolves and lynx Compete for food sources and wolves have been shown to cause predation impact on Lynx themselves.
Representative Quote: Lethal management of gray wolves that are having a significant impact on other species of concern (i.e., Gunnison Sage Grouse and Greater Sage Grouse) should be added to the final rule. At the very least, attention to and investigation of the impacts needs to be further explored instead of being characterized as “not likely.”
Representative Quote: “Potential environmental impacts would be the same as those described under the no-action alternative because management flexibility for reintroduced wolves under alternative 1 would not include provisions for the take of wolves for the purposes of protecting or managing species of special concern. Therefore, alternative 1 is not likely to result in adverse effects on species of special concern.” Based on the reference to the “no action” alternative this section is wrong. The 10(j) should provide flexibility to protect ungulate species, other prey species, and other wildlife species of special concern if they are negatively impacted by the presence of wolves.

Representative Quote: In addition, including the northern half of Gunnison County would overlap wolf habitat with Gunnison sage grouse (endangered) habitat. Ranchers in the Gunnison Basin have worked hard with USFWS, CPW, the Forest Service, and the BLM to protect lower elevation sagebrush habitats. In heavy snow winters like 2023, wolves would inevitably be limited to predation in these lower elevation sagebrush habitats and prey on Gunnison sage grouse as well as elk, deer, and livestock. There is no literature available on Gunnison sage grouse or Greater sage grouse that shows the effect wolves would have moving elk or deer around when sage grouse are lekking in March (proposed time of wolf release).

Response: The FEIS addresses potential impacts of the rule on special status species. Potential impacts of wolf reintroduction on Canada lynx and Gunnison sage-grouse (and other ground-nesting birds) through predation and competition are described in the cumulative impact analysis. This analysis was based on a review of the best available scientific literature. The rule does not include provisions for the take of wolves for the purposes of protecting or managing species of special concern. However, declines in Canada lynx and grouse populations have not been documented because of previous wolf reintroductions elsewhere in North America and are not anticipated to result from the reintroduction of wolves in Colorado. The FEIS notes that predation and competition are not driving factors in the decline of Canada lynx or sage-grouse (both Gunnison and greater sage-grouse) populations (main drivers include habitat loss, fragmentation, and degradation), nor are they considered barriers to recovery success for either of these species.

GRAY WOLF IMPACTS

CONCERN STATEMENT 105: Commenters expressed concerns that the lethal take permitted in the rule could negatively affect gray wolves and hinder their recovery in Colorado. A commenter noted that given the small initial number of wolves slated for reintroduction, any lethal take of wolves could impact recovery. Commenters also expressed concern about how lethal take could create pack instability and lead to pack dissolution. Other impacts of lethal take on gray wolves that commenters cited were disturbances to hunting patterns, territory isolation, behavior, genetic diversity, and social structure. Commenters noted that wolves have complex social patterns that include non-breeder altruism and cooperative hunting—characteristics that can be disturbed by removal of small numbers of wolves. Commenters asked the Service to consider additional research on potential numbers of wolves that would be lethally taken in Colorado and to reevaluate how lethal take has affected wolves in Idaho, Montana, and Wyoming without federal protections.

Representative Quote: In a recent study, “Human-caused Mortality Triggers Pack Instability in Gray Wolves,” researchers confirm the devastating effects that human killing of wolves has on pack-level biological processes which impact pack persistence and reproduction (17). Earlier research confirms the negative impacts of breeder loss on social structure, reproduction and population growth in social canids such as gray wolves, detailing the setbacks packs suffer including pack disintegration, when a breeding wolf is lost from a pack (18). Gordon Haber, wolf biologist in Denali National Park for 43 years, wrote in his 2013 book, *Among Wolves*, “For wolves, shooting and trapping causes significant impacts” lasting long after numbers have recovered on wolf family social structure, behavior, hunting patterns, distribution, territories, genetic variations, and mortality patterns of survivors and recolonizers. Wolf social organization and success are based on two evolutionary strategies that are rare among vertebrates: (1) Cooperative breeding/rearing non-breeders altruistically attend the breeding pair, as well as cooperatively nurse, babysit, teach, guard, and raise pups; and (2) cooperative hunting adults cooperate in stalking and killing prey” (20). In sum, Human killing of wolves destroys the fabric of wolf families and their survivability undermining wolf conservation.

Representative Quote: The DEIS should consider available science regarding the potential numbers of wolves and prey that will be killed in Colorado. I've prepared reports and articles that provide background information and analyses that predict the numbers of wolves that might populate Colorado, and the numbers of prey

animals they will kill (Cronin 2020a, 2020b, 2020c, 2023a, 2023b). Please consider these references as part of my comments.

Representative Quote: The Proposed Rule asserts that re-eradication is not possible under a 10(j) rule because of the assumption that "purposeful eradication is no longer a tool used for wolf management. Based on the elimination of purposeful eradication, and the fact that gray wolves are protected under State and Federal laws, we do not anticipate the original cause of wolf extirpation from Colorado to be repeated." Proposed Rule at 32. However, the present examples of Idaho, Montana, and Wyoming make clear that, absent federal protections, there is considerable political pressure to re-institute state-sponsored campaigns of purposeful eradication, and plenty of evidence that illegal poaching increases after the full protections of the ESA are lifted (Santiago-Avila et al. 2020).

Representative Quote: Given the identical lack of any restrictions on wolf killings in response to predation on livestock, and the state control that would be granted under authority of Alternative 1, loss of genetic diversity from the founding population will occur in Colorado as well. Such losses will only rarely be mitigated by introgression of northern wolves' genes into the Colorado wolf population, given the widespread wolf killing and lack of regulations restricting such killing throughout 84% of Wyoming, and encompassing the entirety of southern Wyoming. A small, isolated population of wolves in Colorado, subject to killing and with limited and declining genetic diversity, would likely become extirpated and likely also not be able to contribute meaningfully to the representation, redundancy and resilience that the Service cites (but didn't bother to really examine) as its anticipated benefit to overall conservation of endangered gray wolves from Alternative 1.

Response: Overall, the social structure of gray wolf packs is adaptable. Breeding members can be replaced from either within or outside the pack, and pups can be reared by another pack member should their parents die (USFWS 2020). Consequently, wolf populations can overcome severe disruptions, such as intensive human-caused mortality or disease as long as immigration from either within the affected population or from adjacent populations (or both) occurs (Bergerud and Elliot 1998, pp. 1554–1559; Hayes and Harestad 2000, pp. 44–46; Bassing et al. 2019, entire). The Service acknowledges that breeder loss can and will occur in the future to some degree regardless of the presence of human-caused mortality and that the loss of any individual will have some effect on pack dynamics. As noted in Concern Statement 93, the FEIS details how the limited and narrow provisions for lethal take would allow for species conservation while reducing the regulatory burden associated with species introduction.

CONCERN STATEMENT 106: Commenters suggested that some of the comparisons to other wolf reintroductions in the rule and DEIS were incorrect. A commenter noted that the Northern Rocky Mountains and Yellowstone National Park have key differences in land use from Colorado, including large areas that are free of livestock and larger areas of winter range for elk. They asserted that wolves' success in the Northern Rocky Mountains could be attributed to ample elk for prey and to the lack of lethal take in response to livestock predation in areas without livestock. A commenter also said that the DEIS's reference to low levels of lethal take in Oregon and Washington was misplaced because the data was collected during initial monitoring years and because wolves in Colorado would be more likely to prey on livestock and be lethally taken. The commenter predicted that levels of lethal take would be similar to levels experienced by Mexican wolves in Arizona and New Mexico. A commenter also suggested that research in the Northern Rocky Mountains and Alaska indicating that wolves could withstand high levels of human-caused mortality were not applicable to Colorado because their wolf populations were larger and more established. The commenter asked the Service to evaluate in the EIS the relevance of the data on the effects of human-caused mortality in the Northern Rocky Mountains and Alaska to wolves in Colorado.

Representative Quote: The analysis for Alternative 1 discusses wolf numbers and distribution, stating "in the long term, the allowable take provisions under alternative 1 would be unlikely to reduce the number of wolves in Colorado because wolf populations are able to sustain relatively high rates of human-caused mortality (see section 3.2.1 for discussion on mortality)." EPA reviewed Section 3.2.1 of the Draft EIS, which includes the following: "Wolf populations have demonstrated strong resilience to mortality because of the compensatory nature (see definition in Appendix A, Glossary) of natural and human-caused mortality factors and because of wolves' high reproductive potential (Fuller et al. 2003). The range of sustainable human-caused mortality rates varies due to biological and ecological conditions of specific habitats and wolf populations. Previous research in Minnesota and Alaska indicated that wolves could withstand human-caused mortality rates up to 28 percent before a population decline is detected (Fuller 1989; Adams et al. 2008), while modeling the effects of human-caused mortality on northern Rocky Mountain wolf population growth estimated a sustainable rate of 45 percent (Gude et al. 2012)" (pp. 3-9 3-10). The Alaskan and Northern Rocky Mountain populations are more established with a much greater number of wolves than Colorado. Therefore, for Colorado, there is a question as to what rate of human-caused mortality would have the potential to have a significant impact on the ability of the rule to further the conservation of the species and to achieve the population targets in the Draft CPW Wolf Reintroduction Plan. We recommend evaluating in the Final EIS the extent to which data on the effects of human-caused mortality on wolf populations in Alaska and the Northern Rockies are relevant to future introduced Colorado populations, and what that evaluation indicates regarding the ability of introduced Colorado populations to withstand human caused mortality.

Representative Quote: The draft environmental impact statement acknowledges that, under alternative 1, legal killings of wolves could impede the ability to establish a self-sustaining population and projects that "wolf numbers in Colorado during the first five years are likely to be similar to reported wolf numbers in Oregon (average of 37 wolves in 2009 & 2013) and Washington (average of 27 wolves in 2008 & 2012)" because "lethal control actions in Colorado are likewise anticipated to be similar to Oregon and Washington, during their respective initial monitoring years, where 3 percent and 2 percent, respectively, of the known wolf numbers were lethally controlled. Nonetheless, the DEIS is optimistic that "in the long term, the allowable take provisions under alternative 1 would be unlikely to reduce the number of wolves in Colorado because wolf populations are able to sustain relatively high rates of human-caused mortality. The DEIS's short-term projection based on Oregon and Washington numbers, and the DEIS's accompanying long-term reassurance about the demographic effects of Alternative 1 on wolves, are each misplaced. Colorado's wolves will likely prey on livestock and be subject to ensuing federal and state wolf killing (in addition to private illegal killings) at rates similar to those experienced by Mexican gray wolves during their initial reintroduction to Arizona and New Mexico.

Representative Quote: Citing in the proposed rule and draft environmental impact statement the robust wolf numbers achieved through the Service's reintroduction of wolves as an experimental nonessential population to the northern Rocky Mountains is not predictive as a model to project Colorado's upcoming wolf demography under Alternative 1. That is because of a difference in land use and a difference in management: First, the northern Rockies is blessed with two extensive areas with little or no domestic livestock grazing & 2.2 million acres in Yellowstone National Park and a similar extant in central Idaho encompassing the Frank Church & River of No Return Wilderness Area, each an order of magnitude larger than any livestock-free area found in Colorado, for example Yellowstone is an order of magnitude greater in size than the 267,000 acres of Rocky Mountain National Park (and that comparison does not even account for the far-greater proportion of Yellowstone National Park and in particular central Idaho compared to Rocky Mountain National Park, comprising winter range for the elk that constitutes wolves' primary prey). Within those livestock-free areas in the northern Rockies, wolf numbers increased, and from within them dispersing wolves emanated, even as wolf numbers were (and are) perennially reduced through killings in response to livestock predation almost everywhere else in the northern Rockies.

Response: In drawing comparisons to other wolf reintroductions in the rule and FEIS, the Service used data from the most similar areas and reintroduction scenarios available. Oregon and Washington are most similar to Colorado in that there are few areas that do not have livestock grazing on the landscape. Furthermore, Colorado

is home to the largest population of elk in the country, providing ample prey availability, similar to conditions in the northern Rocky Mountains. Assuming that lethal control measures will be higher in Colorado compared to eastern Oregon and Washington is speculative.

CONCERN STATEMENT 107: Commenters proposed corrections to the rule and DEIS related to gray wolf impacts. Proposed corrections included:

(1) Asking the Service to remove “sport hunting” from the rule section titled “Actions and Activities in Colorado that May Affect Introduced Gray Wolves.” The commenter noted that the inclusion of sport hunting could create confusion because regulated hunting would not be considered while wolves are federally listed and the 10(j) rule is in effect.

(2) Requesting reevaluation and correction of the descriptions of potential wolf depredation incidents in the DEIS. Commenters asserted that two of the depredations in Jackson County were on dogs, and the third was on livestock. They also said that CPW has not conclusively determined the cause of the calves’ deaths in the 2022 incident near Meeker and asked the Service to include CPW’s position on the events in the EIS. Another commenter asserted that the investigation into the depredation near Meeker had found no evidence of wolf involvement.

(3) Changing the number of wolves in the group in north-central Colorado from seven individuals to two individuals based on information from March 2023.

Representative Quote: In the section entitled Actions and Activities in Colorado that May Affect Introduced Gray Wolves, we share the following comments. In the second paragraph of that section, controllable sources of mortality are discussed. The inclusion of “sport hunting” in this section is inappropriate, because while federally listed, the condition under which 10(j) designation is relevant, sport hunting (i.e., regulated hunting) is not considered. This term should be removed from the document to eliminate potential confusion on this issue.

Representative Quote: In the section entitled Habitat suitability/prey availability (Within the Likelihood of Population Establishment and Survival heading), it is stated that there is, “a single group of at least seven wolves presently in north-central Colorado”. This is referenced earlier in the document, but qualified as known to be true in September 2022. We currently have confirmed only 2 animals in that group, as of March 2023. This information should be corrected in the final rule.

Representative Quote: Page 3-9 of Chapter 3 states “three separate wolf depredation incidents on cattle were confirmed on a ranch in Jackson County, Colorado, between December 2021 and January 2022 (CPW 2021c, 2022d), and an investigation is ongoing (as of December 2022) of a potential depredation on White River National Forest lands near Meeker in October 2022 (CPW 2022e). See section 3.5 for a more detailed discussion of the socioeconomic impacts of depredation.” According to available information two of the confirmed Jackson County depredations were on dogs, and one on livestock. Additionally, in February 2023 CPW concluded the investigation into the October 2022 incident in Meeker that it could not determine the exact cause of the death of the calves and found no evidence wolves were in the area at the time of the incident. Further, Carter Niemeyer, a former U.S. Department of Agriculture-Wildlife Services district supervisor and a retired U.S. Fish and Wildlife Service wolf-livestock conflict specialist, as well as a current member of CPW’s Technical Working Group on wolf restoration, issued a report in February 2023 concluding that the evidence in Meeker is inconsistent with wolf attacks. We recommend the Service revise the Final EIS to correct the errors in the case of the Jackson County depredations and include the current CPW position on the incident in Meeker. We also recommend the Service correct the reference to Section 3.5 for the depredation impact analysis. The correct citation is Section 4.7.

<p>Representative Quote: On page 3-9 of the DEIS, reference is made to an investigation on the White River National Forest Lands near Meeker, Colorado. This investigation has concluded with no evidence of wolves being involved. This should be corrected in the Final EIS.</p>
<p>Response: Phase 4 as originally proposed in the State Plan has been removed from the final plan. References to sport hunting have been removed from the rule. Information on the number of wolves known to reside in Colorado and depredation events has been updated in the FEIS.</p>
<p>CONCERN STATEMENT 108: A commenter noted that the analysis of the no-action alternative and alternative 1 in the DEIS is not clear about which alternative would be more beneficial to wolf conservation.</p>
<p>Representative Quote: The Draft EIS states the no action alternative "is expected to be the most beneficial for wolves from a purely biological standpoint because it would limit any take on wolves that are reintroduced or that disperse naturally into the state. However, illegal human-caused mortality may be highest under this alternative (Olson et al. 2015)" (p. 4-4). Then for Alternative 1 it states, "In the long term, it is not expected that allowable take under alternative 1 would have a measurable impact on the population" (p. 4- 5). These two statements appear to be at odds with one another and, therefore, it is unclear if Alternative 1 is more beneficial to the wolf and would further conservation of the species compared to the no action alternative. It appears in its analysis of impacts the Service concluded that illegal take is expected to be higher under the no action alternative and that lethal take is necessary for management of the wolves by preventing illegal take and decreasing livestock depredation. The Draft EIS includes numerous citations to scientific literature supporting this position.</p>
<p>Response: The purpose and need of the FEIS is not focused on providing conservation benefits. Therefore, the analysis in the FEIS addresses impacts on the species overall.</p>
<p>CONCERN STATEMENT 109: One commenter asked the Service to revisit the analysis of alternative 1 in the FEIS where the text states, "Alternative 1 could have adverse environmental impacts to individual wolves through regulated take but is not expected to hinder recovery or have population-level effects in the long term." The commenter asserted that lethal take of individual problem wolves would not have adverse impacts on the environment.</p>
<p>Representative Quote: "Alternative 1 could have adverse environmental impacts to individual wolves through regulated take but is not expected to hinder recovery or have population-level effects in the long term." Killing an individual wolf is not an environmental impact to the wolf. The environment is habitat and surroundings in which the wolf lives. The removal of individual problem wolves will not have an adverse impact on the environment.</p>
<p>Response: The FEIS analysis does not assert adverse impacts to the environment overall, but instead adverse impacts at the individual level. The "take" of a wolf is considered an adverse impact, but as noted in the analysis, this impact would be at the individual level and not at the population level.</p>

MEXICAN WOLF IMPACTS

<p>CONCERN STATEMENT 110: Commenters stated that any reintroduction of the northern gray wolf may jeopardize recovery of the Mexican wolf, and the Service should ensure that State trust authorities for the</p>
--

recovery of the Mexican wolf are not harmed by the proposed reintroduction. Commenters requested that the Service complete a more robust analysis of potential impacts on Mexican wolves in the EIS. Commenters noted that the EIS does not clarify how gray wolves that leave the experimental population boundary would be returned to prevent impacts on the genetic integrity of the Mexican wolf. Commenters requested that the Service identify all available tools and outline a specific plan for returning gray wolves that leave the experimental population boundary to prevent impacts on Mexican wolves. Some commenters requested the Service issue a 10(a)1(A) permit allowing the capture and return of gray wolves that disperse beyond the boundary. Commenters additionally suggested advising the State of Colorado not to proceed with the gray wolf reintroduction due to potential impacts on Mexican wolves or taking action to maintain a buffer outside the experimental population boundary between gray wolves and Mexican wolves.

Representative Quote: It is important to point out that recovery of the Mexican wolf is required of the U. S. Fish and Wildlife Service under the Endangered Species Act and any federal action that jeopardizes Mexican wolf recovery is contrary to both the Service’s mission and the Act itself. It is also important to affirm that Arizona is outside the historical range of the Northern wolf and any introduction, intended or otherwise, is an unacceptable action on the part of the Service. As has been stated by Department staff on a number of occasions, the concept that the release of wolves in Colorado is a state action and that the establishment of a 10(j) as solely a separate federal action is a fundamentally flawed approach to an action that is certain to fail legal challenge. In the Department’s response to this request for comment, the agency will provide abundant examples of the inextricable tie between the establishment of the proposed 10(j) rule and the release of wolves. Logic should clearly point to the fact that without the release of wolves in Colorado, there is no need for a 10(j) rule and vice versa. Mexican wolf recovery under the established 10(j) population throughout the subspecies historical range will continue to be the focus for the Commission and the Department. The Service must recognize that any action that jeopardizes Mexican wolf recovery and conservation must ensure that State trust authorities for recovery of Mexican wolf and management of wolves within Arizona, are not harmed by establishment of an NEP within the State of Colorado.

Representative Quote: One of the clear flaws in the current draft of the EIS is the lack of clarity in how wolves leaving the 10(j) area would be returned to Colorado and not allowed to establish within the historical range of the Mexican wolf. The Service must ensure the genetic integrity of the Mexican Wolf isn’t diluted by naturally dispersing wolves that are allowed to establish outside the NEP. The Service must ensure that establishment of the NEP in Colorado, and future recovery efforts do not create unlawful consequences in Arizona and unravel progress made in Mexican wolf recovery.

Representative Quote: AZSFWC is on record supporting recovery of the Mexican wolf within its historic range, an effort that represents tens of millions of dollars and decades of effort by state wildlife agencies, the Service, the government of Mexico, and numerous stakeholders. The dispersal of larger, behaviorally dominant Gray wolves into Arizona, and the inevitable genetic mixing, poses an unacceptable, existential threat to the Mexican wolf.

Representative Quote: The draft environmental impact statement (DEIS; USFWS 2023, p. 4-36) erroneously concludes there will be minimal impact from larger northern wolves on the genetic integrity of Mexican wolves. The Department therefore requests the Service do a more robust analysis of the impacts of introducing and establishing an experimental population of northern gray wolves on the ESA listed Mexican gray wolf population.

Response: Additional information on potential cumulative impacts on the Mexican wolf has been added to the FEIS in the section, “Cumulative Impacts Analysis.” To maintain separation between northern gray wolves and Mexican wolves and protect Mexican wolf genetic integrity, the Service is coordinating with the State of Colorado and the States of Arizona, New Mexico, and Utah through a separate process to develop a permitting approach to mitigate potential impacts on Mexican wolves from the State of Colorado’s reintroduction effort.

<p>This permitting approach is a separate action from the 10(j) rule. The decision by the State to reintroduce or not reintroduce the gray wolf is outside the scope of the Service’s rulemaking and the EIS.</p>
<p>CONCERN STATEMENT 111: Commenters suggested that reintroduced gray wolves be allowed to mix with Mexican wolves either in a zone of intergradation in Colorado or New Mexico and Arizona to increase the genetic diversity of Mexican wolves.</p>
<p>Representative Quote: 2. ALLOW MEXICAN GRAY WOLF CONNECTIVITY WITH COLORADO’S GRAY WOLVES. Mexican gray wolves are in urgent need of genetic rescue (1). Mexican gray wolves should be allowed to freely enter Colorado to enable increased genetic diversity.</p>
<p>Representative Quote: They need to be allowed to mix with the Mexican Grey Wolves so that genetic diversity can provide for good future growth of the packs.</p>
<p>Representative Quote: The Colorado rule does not even consider the restoration and reintroduction of Mexican gray wolves in Colorado, and the Service’s lack of critique in the DEIS and draft 10j is a grave abdication of duty to ensure the Mexican wolf’s survival as a subspecies.</p>
<p>Representative Quote: Mexican Grey Wolves (<i>Canis lupus Baileyi</i>) are extremely endangered and desperately need genetic diversity (1). This rule mentions nothing about the Mexican Grey Wolves (MGW) The MGW need to be able to connect with the Grey Wolves in CO or else their subspecies is likely to go extinct due to genetic depression (1). This means that the wolves in CO should be considered fully endangered.</p>
<p>Response: Addressing genetic diversity in the Mexican wolf is outside the scope of this rulemaking. Discussion of potential cumulative impacts on the Mexican wolf, specifically with regard to maintaining the genetic integrity of the listed entity, has been added to the FEIS in the section, “Cumulative Impacts Analysis.”</p>
<p>CONCERN STATEMENT 112: One commenter suggested that the experimental population boundary for the Mexican wolf should be expanded to the north based on the potential historical range for this subspecies and the small number of individuals in the wild in the U.S. and Mexico. This commenter suggested that the EIS take a harder look at the status of Mexican wolf recovery in the description of the program in the “Cumulative Impacts” section, rather than describe the Recovery Plan and the effects of the gray wolf reintroduction on the Mexican wolf recovery program. The commenter also suggested the Service consider potential impacts under the rule to Mexican wolves that disperse into Colorado.</p>
<p>Representative Quote: The DEIS’s reliance on the number of Mexican wolves in the wild as a measure of the population’s growth ignores the best available science that shows it is the genetics not the numbers of Mexican wolves that matter. The Mexican wolves are descended from just seven founders, and they suffer high degrees of inbreeding. As the population grows in number (241 in 2022), the ability to influence the overall diversity with additional genes is reduced. Thus, the growth of the population alone is not evidence of its stability, it’s simply more inbred wolves on the landscape. It is unclear if the geographic expansion cited in the DEIS (at 4-32) includes occupied habitat in Mexico or not, but the Service cannot be relying on Mexico to support Mexican wolf recovery. As of August 2022, Mexico had only 13 collared wolves alive in the wild (Anderson, personal communication, April 18, 2023), and two of those were actually living in the United States and one has since been killed. So, there are a maximum of eleven collared wolves in Mexico, which hardly accounts for a robust binational recovery. Additionally, the current northern boundary on the Mexican wolf recovery area (Interstate 40 in Arizona and New Mexico) is scientifically inadequate. “There is no scientific support for the decision to limit recovery to an arbitrary geographic area bounded by a highway. Genetic analysis of historic Mexican wolf</p>

specimens showed that the range of the subspecies likely extended beyond the initial range that was assumed by earlier scientists (Leonard et al. 2005). Other research has identified areas well to the north of the current distribution as essential to the subspecies (Carroll et al. 2014). Rather, in notes from the recovery planning process, the Interstate 40 boundary was justified for “geopolitical reasons” (USFWS 2016). “The 2017 Recovery Plan limits recovery efforts to the areas to the south of Interstate 40 based on a description of the species’ historic range derived from limited morphological analyses (Heffelfinger et al. 2017). This perspective is not consistent with more recent molecular genetic analyses of Mexican wolf specimens, which suggest a broader historic distribution of Mexican wolves (Hendricks et al. 2016, 2017, Hedrick 2017). “Allowing the Mexican wolf to recover in additional places north of Interstate 40 (e.g., the north rim of the Grand Canyon, the San Juan Mountains, and southern Utah) would provide greater representation to ensure the recovery of the Mexican wolf in a variety of ecosystems across the likely historic range that was formerly occupied by either Mexican wolves or closely related, but now extirpated gray wolves. This broader geographic view of recovery is supported by scientific literature and aligns well with the larger purpose of the Endangered Species Act to protect the ecosystems upon which endangered species depend (Carroll et al. 2006).

Representative Quote: The DEIS’s summary of the Mexican wolf reintroduction in the cumulative impacts section fails to provide an accurate assessment of the Mexican wolf recovery. DEIS at 4-31. It essentially takes the aspirational Recovery Plan as the current status of the program, without accounting for the actual critical differences between the goals of the project and the current, on-the-ground realities. There is no actual analysis of the effectiveness of the current Mexican wolf 10j designation, or how this could be affected by the Colorado rule. Moreover, a statewide 10j for gray wolves in Colorado would preclude Mexican wolf recovery in Colorado, but the Service here has failed to take a hard look of the impacts of that restriction.

Representative Quote: The DEIS does mention gray wolves as having been documented coming from the north into Arizona and New Mexico (DEIS at 4-36) but fails to consider dispersal in the opposite direction. With a statewide NEP, any wolves in Colorado would be treated the same way, and Mexican wolves would effectively lose the Endangered Species protections they have now when they disperse from the MWEPA.

Response: Additional information regarding the Mexican wolf and potential impacts has been added to the FEIS in the section, “Cumulative Impacts Analysis.” The decision to modify the 10(j) boundary for the Mexican wolf is outside the scope of analysis for this effort.

OTHER WILDLIFE

CONCERN STATEMENT 113: Commenters stated that reintroduction of gray wolves without management flexibility would result in severe decreases in ungulate populations. Commenters also noted that potential impacts on ungulate populations or the current conditions of these populations must be considered in development of the rule or analyzed in more detail in the EIS. Specific areas suggested for further analysis included ungulate population and hunting license trends, indirect impacts as a result of changes in ungulate behavior, and potential impacts on ungulates in the focal counties. One commenter suggested that ungulate populations in Colorado are no longer sufficient to support a population of gray wolves and the reintroduction should be reconsidered. One commenter suggested that illegally reintroduced species, such as moose, should not be considered a sustainable source of prey for reintroduced gray wolves.

Representative Quote: As noted in CPW’s draft management plan, gray wolves will be reintroduced onto private lands due to a lack of resources to comply with a full NEPA analysis. Nevertheless, further analysis is needed, and should be included in the final 10(j) rule because wolf reintroduction at the scale proposed will have significant impacts on ungulate herds and other wildlife. We appreciate the inclusion of the concerning trends in Colorado’s mule deer statewide population and individual herds, and consideration of select big game population trends under the “Habitat Suitability/Prey Availability” section of the proposed rule. However, we

recommend the USFWS incorporate additional analysis to bolster the DEIS and properly inform decision making. Specifically, we ask that USFWS compare ungulate herd population trends to trends in big game hunting license applications and hunting opportunity. For example, while the state's elk population may appear to be stable at a high level, USFWS acknowledges that elk calf:cow ratios are problematically low in some areas. This was not identified as a potential concern in the DEIS or analyzed. The DEIS and proposed rule also overlook the fact that in an ongoing attempt to try to moderate the consequences of habitat fragmentation and problematically low elk calf:cow ratios and recruitment rates, CPW has already reduced the number of limited cow elk licenses available to hunters by 68,000 licenses since 2004 to try to stabilize elk herds. In the comments submitted to the Colorado Parks and Wildlife Commission by CWCP regarding their draft Wolf Restoration and Management Plan, we asked CPW to do more to estimate herd sizes and conditions, and hunter satisfaction in the areas where wolf introduction is planned. Doing so would create a valuable baseline from which the USFWS, CPW, and the Parks and Wildlife Commission could evaluate conditions post gray wolf reintroduction.

Representative Quote: Severe depredation on Colorado's wild herds and other species from moose to Bighorn sheep -- must be a consideration for future management decisions. These wildlife species are also valuable and beloved.

Representative Quote: Protection vs. Management of this non-essential species is paramount to saving our elk, deer, recovering Moose, Bighorn sheep and mountain goat populations. A forced introduction of non-native wolves (McKenzie Grey's from the Vanadian Yukon area) was done in Yellowstone Park in the mid 90s with DISASTOROUS results to the elk herds there (which we had spent 25 years building up) as shown by the attached chart metric comprised of the elk population decline numbers from the USFWS. To not learn that ALL wildlife needs to be managed with science (vs. protecting a serious Apex predator in a prey rich environment) from this forced introduction and cause and effect metric, would be a huge, grave mistake. Part of this same wolf population has now migrated into adjacent states (Montana, Wyoming, Idaho, Washington, Oregon and Colorado) and reducing the carrying capacity of both wild ungulates and livestock now in those states. For the sake of our wildlife, PLEASE ALLOW Colorado to manage these wolves.

Representative Quote: The inclusion of an illegally introduced non-native animal species (Moose) in the calculation of food source for the wolf populations is not scientific protocol. This illegal presence cannot be assured for the future, nor can it be counted towards a supporting food source

Response: The impacts from the reintroduction of wolves by the State of Colorado to other wildlife is described in the FEIS in the section, "Cumulative Impacts Analysis." This analysis notes that it is unknown if the presence of wolves would influence ungulate population dynamics but cites studies that indicate long-term, adverse impacts are not anticipated. The issue of whether ungulate populations are sufficient to support reintroduction is directly related to the State planning effort and outside the scope of this analysis.

CONCERN STATEMENT 114: Commenters noted that reintroduction of gray wolves in other parts of the country has contributed to improvements in the health of ungulate herds or ungulate population numbers. Commenters suggested areas of the analysis, including discussing the potential impacts on hunting, that should be revised to consider an improvement in the health of ungulate herds or ungulate population numbers.

Representative Quote: Indeed, since the reintroduction of wolves in northern states, the elk and deer herds are larger and healthier than they were before the reintroduction. The wolves remove weak, diseased and older animals in those herds, actually strengthening them.

Representative Quote: In Idaho, hunters' success remains above the ten-year average and last year marked the eighth year in a row where elk harvest eclipsed 20,000, which has happened only one other time dating back to the 1930s indicating that wolves are clearly not a threat to elk or hunter success. To the contrary, a healthy wolf population would be an asset to combatting Chronic Wasting Disease which is beginning to appear in deer herds in Idaho. IDFG plans to cull ungulates where CWD has appeared, but wolves provide additional and perhaps even more effective influence on reducing diseases from elk and deer herds. Current and longer-term elk and deer populations and hunting success levels do not justify a cap of only 500 wolves in Idaho

Representative Quote: Whereas under the No-action alternative, "A decline in hunting applications could lead to decreased wildlife revenue for CPW" (page xii and throughout), hunting applications could actually increase if the elk and deer herds are improved by a reduction in chronic-wasting disease. To date, the Colorado Parks and Wildlife Commission has been markedly unsuccessful in limiting this disease in Colorado, if they are trying to do so. Accordingly, the speculative statement (page x and throughout), "The lack of flexibility for the management of reintroduced wolves could result in short or long-term, adverse impacts to prey populations because the Service and its designated agents would not have the ability to manage wolves for the purposes of managing other wildlife populations for conservation," is in error because prey populations could, in fact, become healthier and increase.

Response: The impacts from the reintroduction of wolves by the State of Colorado on other wildlife is described in the FEIS in the section, "Cumulative Impacts Analysis." This analysis notes that it is unknown if the presence of wolves would influence ungulate population dynamics but cites studies that indicate long-term, adverse impacts are not anticipated. Available data are not conclusive regarding the likelihood of wolf predation to improve the health of ungulate populations over the long term.

IMPACT TOPICS

CONCERN STATEMENT 115: One commenter asked the Service to include an analysis of the best available science on the benefits wolves can provide to ecosystems and how those benefits can mitigate the causes and effects of climate change. They also requested a description of anticipated climate change impacts in the planning area and a discussion of how climate change could impact the affected environment and environmental consequences of each alternative. They noted that climate change could exacerbate impacts of lethal take and change the rule's ability to advance wolf conservation. The commenter suggested using the Council on Environmental Quality's Interim Climate Guidance for NEPA, particularly the section titled "Considering the Effects of Climate Change on the Proposed Action," to guide the analysis. The commenter also recommended referencing the National Fish, Wildlife, and Plants Climate Adaptation Strategy for information on climate change analysis, resiliency, and adaptation measures. The commenter pointed out that Colorado is already experiencing the effects of climate change and encouraged the Service to examine how the impacts of 10(j) rule might be altered by climate change in the EIS. One commenter asserted that wolves could help mitigate climate change by depredating ungulates and asked for the possible positive impacts to be evaluated.

Representative Quote: The Draft EIS states "under all alternatives, the provision of a regulatory framework to provide management flexibility to the Service and its designated agents would not affect climate change" (p. 4-46). Other than a response to public comments discussing some of the benefits wolves provide to the ecosystem that have the potential to mitigate the cause and impacts of climate change (see Appendix C, p. 27), there is no other discussion of these benefits in the Draft EIS and it is unclear if these benefits were considered and utilized in the analysis. We recommend the Final EIS include in its analysis the best available science regarding the benefits wolves provide to the ecosystem that have the potential to mitigate the cause and impacts of climate change. Climate change has the potential to impact the affected environment and the environmental consequences of each of the alternatives; therefore, we recommend analyzing this in the Final EIS. Climate change has the potential to impact the resources, issues and environmental consequences

discussed in the Draft EIS, including but not limited to wolf health, distribution, population numbers, habitat, predator-prey dynamics, environmental justice, and tribal issues. It might exacerbate the impacts of lethal take and impact the ability of the rule to further the conservation of the wolf. EPA recommends the EIS include a discussion of reasonably foreseeable climate change impacts in the planning area and the potential effects those impacts will have on the affected environment, direct, indirect, and cumulative effects of the alternatives, and resiliency and adaptation. In February 2023, the Council on Environmental Quality issued the Interim Climate Guidance for NEPA and recommended agencies should consider applying the guidance to on-going NEPA processes if doing so would inform the consideration of alternatives or help address comments raised through the public comment process. EPA recommends the Service utilize this guidance in the EIS, specifically Section V, Considering the Effects of Climate Change on the Proposed Action, which may be the most useful for a project such as this. Climate change is already having detectable impacts on the ecosystems of the West, and future changes (warmer temperatures, more frequent and severe drought, and reductions in snowpack, stream flows and water availability) could affect wolves or their prey, and to the degree that these changes limit prey abundance, decreased wolf densities may be expected. We note that future climate projections for Colorado include historically unprecedented warming during this century, increased drought intensity, and highly uncertain summer monsoon rainfall. It is with these things in mind we recommend the Service utilize the National Fish, Wildlife, and Plants Climate Adaptation Strategy in its climate change analysis, development of the range of alternatives, and resiliency and adaptation measures to minimize the adverse impacts of any 10(j) rule that may be adopted.

Representative Quote: Predators also mitigate causes of climate change by moderating ungulate populations that cause carbon sinks.

Response: The Service recognizes that climate conditions are changing; however, it does not believe that climate change will affect the gray wolf to a measurable degree. The issue of climate change has been added in the FEIS under “Issues Considered but Dismissed from Detailed Analysis.” Variations in environmental conditions (such as drought, fire, and prey fluctuations) and episodic threats (e.g., disease) are characteristic of wild populations of most species, including gray wolves. Gray wolf populations that are genetically robust will be more likely to recover from episodic threats (USFWS 2012, 2020b). Based on the above, the Service does not expect measurable cumulative impacts on gray wolves in Colorado from changing climate conditions and the limited take that would be allowed under the 10(j) rule.

CONCERN STATEMENT 116: Commenters requested analysis of additional topics in the EIS, including:

- Recreation, including impacts on local economies and revenue from the recreational hunting and outfitting industry.
- Effects on the mining, oil and gas, and timber industries.
- Impacts on the livestock industry, particularly related to grazing patterns.
- Potential for wolves to disperse to New Mexico and possible damages caused by the wolves in the state.
- A review of consistency with the Mesa County Resource Management Plan.

One commenter suggested that all of the issues dismissed from detailed evaluation in the EIS should be analyzed in detail.

Representative Quote: States where wolves are present are impacting livestock and grazing patterns and distribution of livestock grazing across the landscape. This very real impact needs to be included in the final document and conveyed to the USFS and BLM so that permittees are not penalized for wolf impacts going forward.

<p>Representative Quote: The DEIS does not address potential impacts on the mining, oil and gas, and timber industries (e.g., Section 3.5.2). Precedent indicates that lawsuits with speculative claims of impacts on wolves will attempt to restrict these industries. The EIS can help prevent such lawsuits with proactive assessments.</p>
<p>Representative Quote: Recreation should absolutely be considered and discussed in the EIS because locals familiar with the areas where wolves will be located understand the increased risk of spending time in the wilderness with the introduction of wolves. Hikers, horseback riders, and others will often have their pets with them, and this is an attraction to wolves. We believe there will be situations where the recreation will definitely be impacted either by perception and/or real encounters with wolves. Therefore, recreation will be reduced which impacts our local economy and citizen’s freedom to enjoy the wilderness.</p>
<p>Representative Quote: We see nothing in your proposed rule that discusses the likelihood that these wolves will move into NM or of the damage they will cause. There should be. What is your response?</p>
<p>Response: Table 3-2 in section 3.1.1 of the FEIS has been revised to briefly address issues identified in public comments, including recreation (aside from potential effects on hunting and outfitters and guides) and the mining, oil and gas, and timber industries. The Service has dismissed the resources and issues discussed in table 3-2 from detailed analysis because they would not be affected by the Service’s proposed action to provide management flexibility for gray wolves that would be reintroduced to Colorado. In response to other concerns raised under this concern statement, section 4.9.2, “Cumulative Impacts Analysis,” in the FEIS has been revised to discuss potential socioeconomic impacts on livestock producers as a result of changes in grazing patterns from wolves on the landscape and potential socioeconomic impacts in other states from reintroduced wolves dispersing outside Colorado. Considerations related to consistency with the Mesa County Resource Management Plan have been noted in section 4.9.3, “Regulatory Compliance and Consistency with Approved State or Local Plans or Laws.”</p>
<p>CONCERN STATEMENT 117: Commenters asked the Service to consider evaluating the impacts of wolves causing ungulates with chronic wasting disease to disperse into new habitats and potentially spread the disease. A commenter also requested an analysis of how wolves could act as disease vectors by transporting prions via their digestive tracts. Commenters also requested the Service address other disease risks that may be caused or exacerbated by wolves, including Echinococcus and Hydatid Disease.</p>
<p>Representative Quote: 3-2 Biological Resources Ecosystem Dynamics: “While the introduction of wolves by the State could result in potential changes in vegetation communities, watersheds, water quality, and other ecosystem dynamics due to changes in wildlife populations, providing management flexibility through a regulatory framework is not expected to result in impacts to ecosystem dynamics. These impacts are further discussed in cumulative impacts.” The EIS needs to evaluate the impact of wolves dispersing ungulates that are infected with chronic wasting disease; and the need for control measures to stop wolves from pushing infected animals into new habitat. Additionally, wolves may act as a vector transporting prions in their digestive tract to previously uninfected habitat.</p>
<p>Representative Quote: Under Chapter 2.3.3 Human health and Safety was not analyzed. CCA has scientific evidence that disease carried by wolves are a real and present danger to human health and the livestock industry. CCA will require the USFWS to complete an “Infectious Disease Study” on Canadian gray wolf Echinococcus Canadensis and present their findings to the state of Colorado and local county health officials prior to release of wolves. CCA has attached as backup a “bulletin entitled” Canadian Gray wolf Vector of Echinococcus canadensis for the USFWS review.</p>

Response: Potential changes in the geographic extent of diseases or disease vectors as a result of the presence of gray wolves on the landscape would be a potential consequence of the State's plan to reintroduce wolves and would not be influenced by issuing and implementing the 10(j) rule; therefore, it is outside the scope of the 10(j) rule and FEIS. Potential disease risks to humans and other wildlife species as a result of wolf reintroduction are addressed briefly in section 3.1.1 (table 3-2) of the FEIS. The discussion in table 3-2 has been expanded to address the concerns raised by commenters.

CUMULATIVE IMPACTS

CONCERN STATEMENT 118: Commenters noted that the presence of wolves would result in indirect impacts on the Gunnison sage-grouse as a result of displacement of existing predators that may prey on sage-grouse and add to the predation pressure on this species.

Representative Quote: 5. The Western Slope of Colorado is habitat for the threatened Gunnison Sage Grouse and Greater Sage Grouse. The EIS indicates that it is not likely that wolves will negatively impact grouse, what is not delineated is the impact on current predators that will be displaced by the presence of wolves. While we agree the introduction areas for wolves do not initially overlap sage grouse habitat, other predators, especially coyotes and foxes, will be forced into those areas and will have a significant impact. This movement and new territory for existing predators will add to the existing current predation pressure on the sage grouse. Specifically, the potential exists for predator species like coyotes, foxes, raptors, and corvids to impact sage grouse to a greater degree.

Response: Potential impacts of wolf reintroduction on Gunnison sage-grouse are described in the cumulative impact analysis. As noted in the FEIS, Gunnison sage-grouse populations in Colorado have declined sharply since 1980 in the absence of wolves, and the main drivers are considered to be habitat loss, fragmentation, and degradation. The FEIS acknowledges that there could be localized impacts from predation but notes that declines in Gunnison sage-grouse populations have not been documented as a result of previous wolf reintroductions elsewhere in North America (either directly or indirectly) and are not anticipated to result from the reintroduction of wolves in Colorado. As described in concern response 104, the FEIS notes that predation and competition are not driving factors in the decline of sage-grouse (both Gunnison and greater sage-grouse) populations, nor are they considered barriers to recovery success for either of these species.

CONCERN STATEMENT 119: Commenters noted potential impacts that may result in surrounding states as gray wolves disperse outside Colorado, including impacts on ungulate populations from predation.

Representative Quote: Dispersal, and/or establishment of Northern gray wolves in Arizona, which is outside of historical range in Arizona also has the potential to negatively impact ungulate populations. The Service must safeguard against unacceptable impacts to these species, species under full Commission and Department responsibility, in the establishment of the Statewide NEP in Colorado.

Response: Impacts of wolf dispersal are not a result of the 10(j) rulemaking but of the State's reintroduction effort. As noted above in Concern Statement 110 and in Chapter 5 of FEIS, the Service continues to coordinate with the States of Arizona, Colorado, New Mexico, and Utah to address potential impacts, including continued coordination to develop a permitting process to mitigate potential impacts.

CONCERN STATEMENT 120: One commenter noted revisions to the State Plan will need to be captured in the FEIS, particular the removal of phase 4 in the draft State Plan, which would have allowed hunting of wolves.

Representative Quote: On page 4-31 of the DEIS, Phase 4 of the state plan is described. This phase has been removed from the Revised Draft that was presented to the Parks and Wildlife Commission in April 2023. A revised Table 3 will appear in the Final plan, anticipated to be presented and approved by the Commission in May 2023.

Response: The FEIS has been updated to address changes to the State Plan.

OTHER

CONCERN STATEMENT 121: Commenters expressed concerns regarding funding for the management of reintroduced gray wolves. One commenter noted, in response to language in the rule stating that the rulemaking would not impose a cost of \$100 million or more in any given year on local or State governments or private entities, that costs below this amount could still significantly or uniquely affect local governments. Multiple commenters noted that the Service is ultimately responsible for the success of the reintroduction and requested that the reintroduction be paused until a long-term funding source is established. Commenters requested that the Service complete a federalism assessment pursuant to the provisions of Executive Order 13132 with input from organizations representing local governments in Colorado and the local governments most likely to be affected. Another commenter suggested that the Service ensure it is adequately funded to manage wolves that disperse outside the experimental population boundary.

Representative Quote: 57 (rule) “(1) This proposed rule would not “significantly or uniquely” affect small governments. We have determined and certify pursuant to the Unfunded Mandates Reform Act, that, if adopted, this rulemaking would not impose a cost of \$100 million or more in any given year on local or State governments or private entities.” Our federal government is fundamentally flawed if agencies believe that a cost of not more than \$100 million in any given year on local or State governments or private entities would not “significantly or uniquely” affect small governments.

Representative Quote: 5. Finally, the Service should ensure they are adequately staffed and funded, in conjunction with the state of Colorado, so any costs associated with the management of Gray wolves dispersing outside the 10(j) area, and possibly into Arizona, are not the burden and responsibility of the Arizona Game and Fish Department.

Representative Quote: Forced reintroduction of wolves into Colorado should not be executed by the USFW as it is a complete waste of Federal taxpayers dollars due to current, ongoing natural dispersal of wolves from the NRM packs. USFW should not expend any resources in support of the misguided decision by Colorado voters and Colorado should be solely responsible for all activities and funding related to reintroduction to Colorado.

Representative Quote: 7. Funding is a significant long-term deficiency of the implementation of this plan. As the USFWS is ultimately responsible for the success of the program, we adamantly urge the management of wolves NOT to be delegated to the state and NO further wolves are to enter Colorado until a long-term, sustainable, and permanent funding source is in place.

Response: The costs of reintroduction and management of gray wolves in Colorado are addressed in the State Plan and are the responsibility of CPW and the State of Colorado.

<p>CONCERN STATEMENT 122: Commenters requested additional actions related to or by other federal agencies in response to the State Plan. One commenter requested that the Service decision documents and interagency agreements specify that reintroduced gray wolves will not be provided additional protections as sensitive species on lands managed by other federal agencies, including the Bureau of Land Management (BLM) and US Forest Service (USFS). Commenters requested that other federal agencies, including the BLM, USFS, and National Park Service, update their resource management plans to address potential impacts from the proposed reintroduction before publication of the FEIS.</p>
<p>Representative Quote: Additionally, we believe the USFWS agency and respective decision documents provide assurances the NEP wolves from Colorado do not get additional protection as a sensitive species under other federal agencies, such as the Bureau of Land Management or the US Forest Service. As an example, the Medicine Bow and Routt National Forests are contiguous landscapes between Wyoming and Colorado. WDA strongly opposes the NEP gray wolf status on the Routt National Forest having the same status or protection for persistence and viability as a sensitive species on the Medicine Bow National Forest. WDA suggests considering memorializing this into Memorandums of Understanding or some other agreed upon legal document prior to the release of any gray wolves into the State of Colorado.</p>
<p>Representative Quote: Under chapter 3.4.4 "Government to Government Consultation" the following Federal Agencies must update their "Resource Management Plan" for wolf reintroduction. These plans must be updated prior to any wolf release in Colorado. - United States Department of Interior "BLM" - United States Department of Agriculture "USFS" - Rocky Mountain National Park</p>
<p>Representative Quote: Federal land management agencies (BLM, Forest Service, Park Service) should amend their wildlife plans and assess impacts of wolves on wildlife and livestock prior to approval of a final EIS. As stated in the DEIS (Page ii) "wolves can disperse long distances and may eventually occur throughout the state and will in all likelihood occur on federal lands.</p>
<p>Response: Actions planned for or undertaken by the Service or other federal agencies that are not directly related to this 10(j) rulemaking, including revision of existing land use or resource management plans, are outside the scope of the proposed action and are not addressed in the EIS.</p>
<p>CONCERN STATEMENT 123: Commenters questioned or recommended changes to the language and maps in the rule. These changes include specifying that a reference to "previous reintroduction efforts" refer to efforts in other states, replacing the terms "we," "us," and "our" throughout the rule with the U.S. Fish and Wildlife Service or Service, and correcting the proposed deadline for State reintroduction in the preamble. Multiple commenters requested that the Service update the map of the State's proposed release sites to show currently proposed release sites. One commenter additionally requested the Service include the percentage of federally managed land in the release areas and distance to other federally managed lands outside the release areas. One commenter asked why the Service is planning to prepare annual reports to evaluate progress toward achieving State downlisting and delisting criteria, questioning if the State is planning to downlist or delist wolves in Colorado.</p>
<p>Representative Quote: In relation to the 10(j) rule... Moffat County encourages a word search to replace "we," "our," and "us" throughout the entire 10j proposed rule and replace those words with "US Fish and Wildlife Service" or "The Service." We specifically noticed the need for this technical correction on pages 21 and 22. The entire document should be word-searched.</p>
<p>Representative Quote: Page 40: In conjunction with previous reintroduction efforts, implementation of this proposed rule, if finalized would reflect continuing success in recovering gray wolves through longstanding</p>

cooperative and complementary programs by a number of Federal, State, and Tribal agencies. In particular, the stakeholder engagement process developed by CPW in support of its Gray Wolf Restoration and Management Plan development is broadly based and includes a diverse array of stakeholders in the State, which has helped to address potential adverse effects to gray wolves through Federal, State, or private actions. Therefore, Federal, State, or private actions and activities in Colorado that are ongoing and expected to continue are not likely to have significant adverse effects on gray wolves within the proposed NEP area. Comment: There have been no previous reintroduction efforts in Colorado, so the statement referring to previous reintroduction efforts does not apply. The concluding statement appears to be intentionally naive in assuming that agreements made before wolves are reintroduced into Colorado will be honored. Recommendation: That it be made clear that “reintroduction efforts” refers to other states, not to Colorado.

Representative Quote: In the preamble, under Proposed Reintroduction Areas and Release Sites, there are a couple of points that need clarification. It is stated that all release sites will be located west of the Continental Divide, and north of Highway 50, as outlined in Figure 3 of the proposed rule. The map depicted in Figure 3 of the proposed rule has major discrepancies from where the proposed reintroductions may take place, as it excludes areas west of the Continental Divide, but south of Highway 50. We request that the map in the final rule accurately reflects the area under consideration in our Draft Plan to reduce confusion. In the same paragraph, the Preamble states that CPW will release 10-15 wolves each year for up to 3 consecutive years. In accordance with our Draft Plan, this may be conducted for up to 5 years, and perhaps longer, depending on the success we have in reintroducing animals to the state. The legend in Figure 3 should be corrected to reflect this. This timeline is also described in the last paragraph in the Effects on Wild Populations section and should be corrected.

Representative Quote: 39 (of the rule) “A large proportion of Colorado is composed of publicly owned Federal lands (approximately 36 percent; Congressional Research Service 2020). Public lands include National Forests, National Parks, National Monuments, and National Wildlife Refuges, which comprise approximately 63 percent of all public lands in Colorado. In addition, the Bureau of Land Management manages approximately 35 percent of public land in Colorado, much of which is in the western portion of the State where reintroduction efforts for gray wolves will take place (figure 3).” The percentage of public lands should be given in the release zones, and the Western Slope. Furthermore, the distance between the proposed release sites and federal lands should be disclosed.

Representative Quote: Page 61: 5. Annual report “To evaluate progress toward achieving State downlisting and delisting criteria, the Service will summarize monitoring information in an annual report by Colorado Parks and Wildlife. Comment: Has the State of Colorado sought to downlist or delist wolves in Colorado? Did not the passage of Proposition 114 say just the opposite?

Response: The Service’s responses to the comments summarized under this concern statement are provided below:

- The Service’s use of the words “we,” “our,” and “us” is appropriate and consistent with previous 10(j) rules.
- The reference to “previous reintroduction efforts” refers to wolf reintroductions that have occurred within the United States and is appropriate as stated.
- Changes in the final State Plan have been reviewed and incorporated in the Service's final rule as appropriate.
- The Service is proposing annual reports be submitted to evaluate progress toward achieving State downlisting and delisting criteria because the proposed 10(j) nonessential experimental population will be limited to the State of Colorado. The State Plan discusses the phases of the wolf reintroduction effort and criteria that would need to be met before the State would consider delisting the species.

<p>CONCERN STATEMENT 124: Commenters noted that the Service must use the best available science in determining the presence of suitable habitat for gray wolves in Colorado and developing the 10(j) rule. Commenters suggested that computer models should not be considered “best available science” in determining habitat suitability and potential wolf occupancy. One commenter noted that the Service must base actions under the ESA on evidence supported by the best scientific and commercial data available.</p>
<p>Representative Quote: 33 (of the rule) “Models developed to assess habitat suitability and the probability of wolf occupancy indicate that Colorado contains adequate habitat to support a population of gray wolves, although the number of wolves that the State could support varies among the models.” Computer models designed to project wildlife population growth or potential habitat are at best inaccurate and speculative. Computer models should not be considered the best available science.</p>
<p>Representative Quote: When acting under the ESA, an “agency must base its actions on evidence supported by the best scientific and commercial data available.” <i>San Luis & Delta-Mendota Water Auth. v. Jewell</i>, 747 F.3d 581, 60102 (9th Cir. 2014) (citations omitted). Under this standard, an agency is prohibited “from disregarding available scientific evidence that is in some way better than the evidence [it] relies on.” <i>Id.</i> at 602 (quoting <i>Kern Cnty. Farm Bureau v. Allen</i>, 450 F.3d 1072, 1080 (9th Cir. 2006)). In other words, “FWS ~cannot ignore available biological information.” <i>Id.</i> This requirement applies equally to agency action under Section 10(j). See <i>Ctr. for Biological Diversity v. Jewell</i>, No. CV-16-00094-TUC-JGZ, 2018 WL 1586651, at *5 (D. Ariz. Mar. 31, 2018) (“[A]n experimental population may only be released if the Secretary finds the release will ~further the conservation of [the] species.’ . . . The Secretary is required to make this determination using the best scientific and commercial data available.” (citations omitted)). The increased “management flexibility” provided to the agency under Section 10(j) does not “override[] the duty to use the best available science.” <i>Id.</i> at *16. Failure to abide by this standard similarly renders a rule promulgated under Section 10(j) invalid. <i>Id.</i> at *19 (“[T]he agency’s decision [under Section 10(j)] without consideration of the best available information was arbitrary and capricious.”); <i>id.</i> at *21 (“[A]dopting a decision made 17 years prior without explanation does not satisfy the agency’s duty to base its decision on the best available science.”). As such, a 10(j) rule must be based on and reflect an understanding of the best available information at the time of its promulgation.</p>
<p>Response: The Service used a number of resources in the analysis of impacts, as noted in the FEIS References section. References suggested during the public comment period were also reviewed and incorporated into the FEIS as appropriate. Per the NEPA implementing regulations, 40 CFR §1502.23, “Agencies shall ensure the professional integrity, including scientific integrity, of the discussions and analyses in environmental documents. Agencies shall make use of reliable existing data and resources. Agencies may make use of any reliable data sources, such as remotely gathered information or statistical models.” Based on these regulations, the use of models is appropriate.</p>
<p>CONCERN STATEMENT 125: One commenter requested that the Service revise the 10(j) rule to allow wolf hunting when authorized by State or Tribal authorities. One commenter noted that allowing hunting when allowed by State or Tribal authorities would allow the State to manage an overly abundant wolf population.</p>
<p>Representative Quote: The 10(j) rule should allow wolf hunting when authorized by State or Tribal authorities. Finally, to provide full management flexibility for State and Tribal authorities, the 10(j) rule should authorize wolf hunting when those authorities implement a wolf hunting season. If Colorado’s wolves are still listed under the ESA when the State or Tribal authorities establish a hunting season, the wolves’ federally listed status should not preclude a hunt. Indeed, allowing wolf hunting in such a situation is consistent with the ESA’s definition of “conservation,” which recognizes that regulated hunting may be used to manage abundant</p>

populations of a species. See 16 U.S.C. § 1532(3) (defining “conservation” to include “the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this Act are no longer necessary,” which, “in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved, may include regulated taking). The Service should ensure that the State has sufficient flexibility to properly manage an overly abundant wolf population, especially if the gray wolf is delisted under State law before it is “again” delisted under federal law.

Response: The hunting of wolves is not included in the finalized State Plan as a management option. Importantly, hunting of wolves is not allowed while the species is listed and this 10(j) rule is in effect. If wolves are delisted, management of the species, including hunting, becomes the responsibility of the State. According to the State Plan, the State “currently takes no position as to whether the Parks and Wildlife Commission has the statutory authority to reclassify wolves as a game species” upon removal from the State Threatened and Endangered List.

PAPERWORK REDUCTION ACT

CONCERN STATEMENT 126: Commenters requested that in the section of the rule related to the Paperwork Reduction Act, text be edited to read “The report, due by June 30 of each year, will describe wolf conservation and management activities that occurred in Colorado each calendar or biological year up until 5-years post reintroduction.”

Representative Quote: In the Paperwork Reduction Act section, number 5 ‘Annual Report’, the last full sentence should read: “The report, due by June 30 of each year, will describe wolf conservation and management activities that occurred in Colorado each calendar or biological year up until 5-years post reintroduction”.

Response: The wording provided in the rule related to the annual report is considered appropriate.

ESSENTIAL OR NONESSENTIAL

CONCERN STATEMENT 127: Commenters expressed a preference for reintroduced gray wolves to be designated an essential experimental population based on the reported ecosystem effects of wolf populations, desires to restore a native species, and perceived risks to wolves in Colorado or across the species’ range if the population is designated nonessential. One commenter noted reintroduced wolves in Colorado would be relatively genetically isolated from other populations of the species as rationale for designating reintroduced wolves as essential. One commenter suggested that the nonessential designation should be timebound and lifted once biodiversity standards have been met. Commenters also stated that the nonessential population designation has had adverse effects on the recovery of the Mexican wolf in New Mexico.

Representative Quote: What’s most important to me in bringing wolves back to Colorado, is that they are Protected and able to build a population without fear of being hunted. Why else would we bring them back? The fact that you call this “a Nonessential Experimental Population” shows me that you are already on the wrong track. Wolves are absolutely essential to healthy ecosystems. There’s nothing Experimental about it. They were here for thousands of years before being hunted to near extinction by humans.

Representative Quote: The proposed geographic boundary of the NEP comprises the entire state of Colorado, a significant portion of the gray wolf’s historic range. That means the regulations decided upon to manage the NEP will not just impact the wolves that are reintroduced to Colorado; these regulations will also impact the lives of wolves that disperse into the state naturally. Designating the entire state’s population of wolves “non-

essential” puts Colorado’s current and future gray wolves at risk of being fully extirpated from this important part of their historic range in the future.
Representative Quote: Second, I propose adding a clause in the Review and Evaluation of the Success or Failure of the NEP section of the proposed rule for the sun setting of the NEP designation for the gray wolf in Colorado once specific biodiversity standards have been met. Factors like health of ungulate herds (concerning population and disease) and erosion on riverbanks should be taken into account when deciding the appropriate time to sunset the NEP designation. These biodiversity factors can be added to the annual and 5-year summary reports. When these biodiversity standards are met and it can be said that the intentions of Proposition 114 have been satisfied on behalf of the voters, the NEP designation should be lifted with the exception of “take provisions” for intentional harassment, incidental, threats to livestock and scientific purposes.
Representative Quote: Mexican gray wolves (<i>Canis lupus bailey</i>) have suffered BECAUSE they were labeled “experimental, nonessential.” The reintroduction program has struggled to attain minimum viable populations. One of the most salient reasons for this is the large numbers of Mexican wolves killed because of being accused of killing livestock. Many of these lethal removals have turned on fraudulent claims by ranchers. The system under which the Livestock Indemnity Program issues compensation to ranchers for purported losses to Mexican wolves appears to actively incentivize the inflation of livestock losses to wolves, as these inflated numbers (and lax agency accountability in investigating them) lead to inflated payments to unscrupulous ranchers. The problem was the provisions of the rule that capped the number of reintroduced animals and created more flexibility to manage human-wolf conflicts in response to opposition to the reintroduction from certain states and private landowners. LESSON: DON’T MAKE THE SAME MISTAKE WITH COLORADO WOLVES
Response: The Service has explained its determination in the “Is the Proposed Experimental Population Essential or Nonessential” section of the rule. The proposed population is not considered essential to the continued existence of the species based on the best available scientific and commercial data.
CONCERN STATEMENT 128: One commenter suggested that the determination to establish the reintroduced population of gray wolves as “essential” or “nonessential” should be analyzed under the NEPA process and stated the NEPA document fails to take a “hard look” at this issue. Specifically, the commenter stated the DEIS does not look at the impact of the rule on Mexican wolves and does not consider whether potential benefits may exist in allowing a zone of integration between Mexican wolves and gray wolves. The commenter also stated that the EIS does not consider the impacts of lethal take that would be allowed under the rule on the remainder of the listed entity (gray wolves) in the lower 44 states.
Representative Quote: Second, the DEIS fails to meet NEPA’s “hard look” mandate on multiple accounts. The Service should take a hard look at whether its determination that the proposed experimental population is “essential” or “nonessential” to the species continued existence. The impacts of this determination should be fully analyzed via the NEPA process. The DEIS also fails to take an adequately hard look at the impacts of the Draft Rule on Mexican wolves, including by failing to consider whether potential benefits may exist in allowing for a zone of intergradation between Mexican wolves and gray wolves via the reintroduction effort, or whether provisions of the Draft Rule may harm the Mexican wolf recovery effort. The DEIS also fails to take a hard look at the impacts of the Draft Rule’s excessive lethal take allowance on the remainder of the listed entity (the Lower 44 State population).
Response: In the “Is the Proposed Experimental Population Essential or Nonessential” section of the rule, the Service explains its determination and the rationale behind this determination. Additional information regarding potential genetic impacts on Mexican wolves as a result of the State’s reintroduction effort has been added to the FEIS in the section, “Cumulative Impacts Analysis,” based on input provided by cooperating agencies and the

Service's Mexican Wolf Recovery Program. Additional discussion of potential impacts on the remainder of the listed entity in the lower 44 states from implementation of the rule has been added to the same section of the FEIS.

REQUESTS FOR EXTENSION

CONCERN STATEMENT 129: One commenter asked for an additional 60 days to provide comments on the DEIS. The commenter noted the length of the document and requested more time for research before submitting comments.

Representative Quote: The Colorado wolf introduction DEIS is 270 pages long. Like the majority of the livestock producers, outfitters and the general public who will be most affected, the CMDA Board of Directors is a voluntary organization. While our main task is the evaluation of how this release will ultimately affect our wildlife, we are not oblivious to the ones who will be paying the most personal costs. This time period to complete needed research is creating a hardship upon our organization, and the general public as a whole. The 60 day comment period on the DEIS is not enough time allowed to sufficiently review all its content and formalize a comprehensive response with our concerns and questions. We humbly ask for an additional 60 days to compile a complete and precise comment.

Response: The Service is unable to extend the public review period because of the December 31, 2023, deadline set by Colorado Revised Statute 33-2-105.8. The State of Colorado requested the Service issue a 10(j) rule for the population of gray wolves that would be reintroduced to Colorado by the end of calendar year 2023, and the Service must hold to its timeline to complete this request.

REFERENCES

Bassing, S.B., D.E. Ausband, M.S. Mitchell, P. Lakacs, A. Keever, G. Hale, and L. Waits

2019 "Stable pack abundance and distribution in a harvested wolf population" *The Journal of Wildlife Management* 83(3): 577-590.

Bergerud, A.T. and J. P. Elliott

1998 "Wolf predation in a multiple-ungulate system in northern British Columbia" *Canadian Journal of Zoology* 76: 1554-1559. Accessed July 12, 2023. Available at: [https://idahoforwildlife.com/files/pdf/tomBergerud/bergerid%20amd%20elliot%2098%20\(1\).pdf](https://idahoforwildlife.com/files/pdf/tomBergerud/bergerid%20amd%20elliot%2098%20(1).pdf)

Hayes, R.D., A.S. Harestad

2000 "Demography of a recovering wolf population in the Yukon" *Canadian Journal of Zoology* 78: 44-46. Accessed July 12, 2023. Available at: <https://wrrb.ca/sites/default/files/Hayes%202000%20Demography.pdf>

U.S. Fish and Wildlife Service (USFWS)

2020 Gray wolf biological report. Information on the species in the lower 48 United States. October 13, 2020.

