



STAKEHOLDER ADVISORY GROUP

FINAL SUMMARY OF RECOMMENDATIONS
FOR THE COLORADO WOLF RESTORATION
AND MANAGEMENT PLAN

**Stakeholder Advisory Group
(SAG) to Colorado Parks and
Wildlife (CPW)**

September 2022

Contents

Introduction from the Stakeholder Advisory Group	3
About the Stakeholder Advisory Group	4
Report on Wolf Restoration Logistics Recommendations	6
Recommendations on Preventative, Nonlethal Wolf-Livestock Conflict Minimization	10
Comments to the Parks and Wildlife Commission on Proposed Wolf Hazing Regulation	15
Report on Livestock Compensation Recommendations	18
Report on Impact-Based Management Recommendations	47
Report on Ungulate Management Recommendations	69
Statement on Regulated Public Hunting of Wolves	77
Report on Outreach and Education	80
Report on Funding Recommendations	87
Appendix A: Stakeholder Advisory Group Members	91
Appendix B: Stakeholder Advisory Group Biographies	92
Appendix C: Stakeholder Advisory Group Meeting Dates and Locations	98
Appendix D: Stakeholder Advisory Group Charter	99

Note: Each of the sections following “About the Stakeholder Advisory Group” and prior to “Appendix A: Stakeholder Advisory Group Members” are the original Stakeholder Advisory Group reports released between November 2021 and August 2022. The reports are reprinted here as the final compilation of all of the SAG’s recommendations. The reports remain unaltered from their original versions, with the exception of a footer, “Final Summary of SAG Recommendations, Fall 2022, [page number] of 103.” The compilation of reports is organized thematically rather than by order of original report release dates.

The Stakeholder Advisory Group was convened by Colorado Parks and Wildlife and supported with third party facilitation from Keystone Policy Center.



KEYSTONE
POLICY CENTER

Introduction from the Stakeholder Advisory Group (SAG)

With the reintroduction of wolves, Colorado has an opportunity to restore its biodiversity while honoring the livelihoods and traditions of our diverse communities. The Colorado Wolf Restoration and Management Plan Stakeholder Advisory Group was convened to seek consensus among wolf advocates, ranchers, hunters, outfitters, and conservationists who were tasked to explore the social, economic, and scientific aspects of wolf reintroduction and management in an effort to benefit both wildlife and people.

This charge may have seemed impossible in a world of often polarized opinions. Over the course of 15 months of relationship-building, difficult conversations, and information gathering, the SAG ultimately reached consensus on a wide range of important issues that will guide CPW as wolves are returned to the state. Throughout, the SAG fostered civil discussion and understanding across differences, often resulting in strong convergence even on the most contentious issues.

In the SAG's attempts to reach consensus, members recognized that there are areas where interests and beliefs remained disparate and there was disagreement, as will be the case with the public. However, for Colorado's wolf program to be successful, there is a need to realize that there are real people affected by any decisions and recognize people have more in common than apart. Everything will have unintended consequences that need to be considered and can be lessened by having early conversations that lead to effective actions. Room needs to be made for individual perspectives and locally-based solutions that help resolve challenges and reduce divisions.

Across all topics, SAG members discussed the importance of achieving restoration of wolves with thriving ungulate populations, rural communities, and agricultural economies. Discussions emphasized utilizing science-based, adaptive, and impact-based management at the local level that involves leaving wolves wherever they are if they are not causing problems, minimizing conflict, and addressing issues on a case-by-case basis using a variety of management tools. SAG members also underscored the critical need for long-term funding as well as outreach and engagement to support wolf reintroduction and management.

Per the SAG's charter, consensus recommendations in this report 'will receive priority consideration by CPW.'

Accomplishments of the SAG include consensus on the following topics:

- A variety of [restoration logistics recommendations](#) provided by the Technical Working Group.
- [Preventative, nonlethal wolf-livestock conflict minimization](#).
- [Outcomes and principles for livestock compensation](#). The SAG also [developed and voted on eight compensation plan alternatives](#), reaching a high level of support for several of the alternatives regarding compensation ratios and production losses.
- [Impact-based management assumptions](#). The SAG also developed and reached consensus on a variety of elements for a [framework for impact-based management techniques](#) allowed during various phases of wolf management in Colorado.
- A [statement on regulated public hunting of wolves](#) including a recommendation that a decision on this topic **should not** be made in the restoration and management plan to be finalized in 2023.
- [Ungulate management recommendations](#) regarding strategies to manage ungulate populations and hunter opportunities in the context of wolf reintroduction and management.
- [Funding recommendations](#) to support and sustain a successful wolf restoration and management plan.
- [Outreach and education recommendations](#) to increase trust, transparency, and awareness as a component of a successful restoration and management plan.

About the Stakeholder Advisory Group (SAG)

This is a final summary and compilation of considerations and recommendations provided by the Stakeholder Advisory Group (SAG) for the Colorado Wolf Restoration and Management Plan process. **Per the SAG's charter, consensus recommendations in this report 'will receive priority consideration by CPW.'**

The report synthesizes the SAG reports on restoration logistics; livestock compensation; nonlethal conflict risk reduction; impact-based management; ungulate management and sportsperson opportunities; regulated public hunting; education, engagement, and outreach; and funding. The full-length reports for each topic are included as in chapters in this report.

The Colorado Wolf Restoration and Management Plan Stakeholder Advisory Group (SAG) offers a broad range of perspectives and experience to inform the social implications of wolf restoration and management strategies for the Colorado Wolf Restoration and Management Plan (hereafter, Plan). SAG members were selected through an open application process by Colorado Parks and Wildlife (CPW) for diversity in demographics, backgrounds, geographic regions, perspectives, and knowledge in order to constitute a vibrant, diverse and inclusive stakeholder voice in the planning process reflective of the issues and topics to be addressed in the wolf restoration and management plan. The SAG has a number of wolf proponents, sportspersons, scientists, ranchers, outfitters, and many other stakeholders who provide valuable and meaningful input to the agency's planning process. The SAG was conscientiously convened to represent the wide variety of perspectives that people in the state have on wolves; however, the SAG was not intended to proportionately represent the general population, rather to assure adequate representation from critical stakeholder groups. The SAG is comprised of 17 voting members and 3 non-voting members. See [Appendix A for the member list](#) and [Appendix B for SAG biographies](#). It also includes representation from the Southern Ute Tribe; however, this representation is not a substitute for government-to-government consultation.

The CPW-led planning process inclusive of the SAG was approved by the Parks and Wildlife Commission, which is the sole body responsible for creating and approving the Plan as directed by the statute (CRS 33-2-105.8). Colorado Parks and Wildlife (CPW) is responsible for writing the Plan. The Parks and Wildlife Commission (PWC) serves as the decision-making body responsible for approving the Plan. The SAG serves in an advisory capacity to Colorado Parks and Wildlife, offering non-binding input into the development of Plan content. The SAG is not a decision-making body and has no authority on wolf management policy, research, or operations.

The SAG strives to make decisions based on the consensus of all voting members, where possible. Where the SAG was able to achieve consensus, its input will receive priority consideration by CPW. Per the SAG charter, consensus is defined as general agreement that is shared by all the people in a group; it reflects a recommendation, option, or idea that all participants can support or abide by, or, at a minimum, to which they do not object. In other words, consensus is a recommendation, option, or idea that all can live with. See [Appendix D for the SAG charter](#).

Where consensus did not exist, or where it existed and a roll call vote was requested, a roll call vote was taken and the votes of individual voting members present for the vote were recorded along with a summary of the rationale for supportive and dissenting views. Votes taken were recorded for each SAG

member on a 1-5 consensus scale reflecting the following: 1) enthusiastically support; 2) support; 3) can abide by or live with/does not object; 4) object; and 5) strongly object. CPW and the PWC are encouraged to review and consider the details of each vote to understand nuances and insights in situations where consensus was not reached, and to better understand why members objected, supported, or could live with a particular idea.

SAG votes reflect level of support on an issue, not level of consensus; further, a majority or minority of votes does not indicate passage or failure of a recommendation. Because the SAG is an appointed stakeholder body rather than elected representatives, vote results are intended to help illustrate individual, stakeholder views and are not indicative of the proportion of those opinions in Colorado's general population.

The SAG met once monthly in-person from June 2021 to August 2022, including a joint meeting with the Technical Working Group (TWG) in December 2021 and virtually in January 2022. A total of 15 meetings were held with the SAG, inclusive of the SAG-TWG joint meeting. Meetings of the SAG were open to in-person public observation (virtual in the case of the January meeting) and each offered a public comment period. Meeting summaries were developed and published for each meeting. See [Appendix C: Stakeholder Advisory Group Meeting Dates and Locations](#) for a list of meeting dates and locations.

Report on Wolf Restoration Logistics Recommendations

Colorado Wolf Restoration and Management Plan Stakeholder Advisory Group (SAG) to Colorado Parks and Wildlife (CPW)

Report on Wolf Restoration Logistics Recommendations November 2021

This report summarizes Wolf Restoration & Management Plan Stakeholder Advisory Group (SAG) feedback regarding wolf restoration logistics. SAG feedback below is made in reference to the [Technical Working Group's \(TWG\) report and recommendations on restoration logistics](#), and particularly the 'Summary of TWG feedback' sections of that report.

The [summaries of the SAG's August 2021, September 2021, and October 2021 meetings](#) may also be referenced for further detail of SAG member perspectives, questions and suggestions to the TWG regarding clarification of the language and rationale of its report.

The SAG voting members have consensus in support of, and/or without objections to, the TWG's recommendations on the following:

Capture considerations:

- *Donor populations*
- *Capture methods at source*
- *Age ratios*
- *Color ratios*
- *Sex ratios*
- *Genetic considerations*
- *Animal reputation*
- *Disease issues at source sites*
- *What to do with injured animals at source site*
- *Transportation method from source to Colorado*

Animal handling considerations:

- *What to feed during period of captivity, **with the recommendation** that native ungulate meat should be preferred over carnivore logs.*
- *Where and how to hold animals prior to shipping and in Colorado*
- *Immobilization drugs to be used, **with the recommendation** that should a better, reversible drug other than Telazol become available, it should be considered.*
- *Collars/marks on animals initially reintroduced into the state*
- *Samples collected from animals*
- *Veterinarian care in captivity*
- *Disease testing and vaccine treatment*

Reintroduction considerations:

- *Reintroduction technique (hard vs. soft release)*
- *Time of year*

The voting SAG members also discussed the TWG’s recommendations on the following reintroduction considerations, and provided the following feedback:

- *Considerations for where wolves could be released.* SAG members recommended that the following factors also be considered, in addition to those discussed by the TWG: recreation in various forms and contexts; finer detailed spatial sensitivity to local livestock operations and potential acute social conflicts; need for direct engagement with immediately affected communities; and the Brunot Agreement lands (i.e., consideration of management and Tribal consultation needs; not, however, a recommendation to apply a spatial buffer to these lands; a spatial buffer to sovereign Tribal lands is discussed in the TWG report and was suggested by SAG members). It was also suggested that considerations for release sites include deer or elk population Data Analysis Unit (DAU) trends and whether they are below or above objective, as well as impacts on populations of other wildlife species of concern, beyond deer and elk, such as moose, bighorn sheep, lynx and sage grouse. There was not consensus (i.e., full support and/or no objection) for these recommendations; there was a range of support for the TWG recommendations with the above additions, along with various concerns and two formal objections that primarily addressed the process, timing, and/or implications of voting on this specific topic during the SAG October 2021 meeting. SAG members emphasized that their support for the considerations for where wolves could be released does not automatically imply support for specific release locations. There were also concerns that a 75 mile buffer from state and Tribal borders would overly constrain release locations that might otherwise be ecologically and/or socially suitable.
- *Number of release sites (and release areas).* SAG members did not vote on this topic. They discussed arguments for a smaller number of release sites including better ability to manage, concentrate resources, and minimize widespread conflict or social tension. Arguments for a greater number of release sites included maintaining the ability to be flexible in reintroduction; distributing reintroduction over a greater area rather than targeting a smaller number of communities; and the possibility that using multiple areas might better align with the intent of those who voted in support of wolf restoration. Comments cautioned against overly constraining locations and sites.
- *Pace of wolf reintroduction and when to stop and/or pause reintroduction.* SAG members did not vote on these topics. They suggested the importance of adaptive management to assess both the success of wolves and additional factors, including conflict minimization, ungulate population trends, and social attitudes. Arguments for a slow pace included listening to requests from the Western Slope to reintroduce wolves cautiously and slowly; to account for the presence of naturally migrating wolves in Colorado; and to ensure that staffing, financial capacity and ability to respond to conflict is not overwhelmed. Arguments for a medium or fast release pace included ensuring a critical mass of wolves; accounting for potential illegal mortality as well as other challenges to survival; minimizing genetic bottlenecks; avoiding loss of investment due to any of these factors; and consideration of when lethal management tools could become available as related to pace of introduction and the presence vs. rarity of wolves on the landscape; it was suggested that these arguments are similar to those for wolf reintroduction, in general. There was concern as to whether a ‘medium’ pace is a foregone conclusion because it is defined as being between slow and fast paces.

About the Stakeholder Advisory Group:

The Stakeholder Advisory Group (SAG) offers a broad range of perspectives and experience to inform the social implications of wolf restoration and management strategies for the Colorado Wolf Restoration and Management Plan. SAG members were selected by Colorado Parks and Wildlife for diversity in demographics, backgrounds, geographic regions, perspectives, and knowledge in order to constitute a vibrant, diverse and inclusive stakeholder voice in the planning process. The SAG is comprised of 17 voting members and 3 non-voting members. CPW is responsible for writing the Wolf Restoration and Management Plan. The Parks and Wildlife Commission (PWC) serves as the decision-making body responsible for approving the Wolf Restoration and Management Plan. The SAG serves in an advisory capacity to Colorado Parks and Wildlife, offering non-binding input into the development of plan content. The SAG is not a decision-making body and has no authority on wolf management policy, research or operations. The SAG strives to make decisions based on the consensus of all voting members, where possible. Where the SAG is able to achieve consensus, its input will receive priority consideration by CPW. Per the SAG charter, consensus is defined as general agreement that is shared by all the people in a group; it reflects a recommendation, option or idea that all participants can support or abide by, or, at a minimum, to which they do not object. In other words, consensus is a recommendation, option or idea that all can live with. Where consensus does not exist, a vote will be taken and the votes of individual members will be recorded along with a summary of the rationale for supportive and dissenting views.

Stakeholder Advisory Group Members:

Voting Members:

- Matt Barnes
- Donald Broom
- Jenny Burbey
- Bob Chastain
- Renee Deal
- Adam Gall
- Dan Gates
- John Howard
- Francie Jacober
- Lenny Klinglesmith
- Darlene Kobobel
- Tom Kourlis
- Brian Kurzel
- Hallie Mahowald
- Jonathan Proctor
- Gary Skiba
- Steve Whiteman

Ex Officio Members:

- Dan Gibbs, Executive Director, Colorado Department of Natural Resources
- Les Owen, Division Director, Colorado Department of Agriculture (*designee of Kate Greenberg, Commissioner, Colorado Department of Agriculture*)
- Dan Prenzlou, Director, Colorado Parks and Wildlife

Stakeholder Advisory Group report developed with third party facilitation from Keystone Policy Center.

Recommendations on Preventative, Nonlethal Wolf-Livestock Conflict Minimization

Colorado Wolf Restoration and Management Plan Stakeholder Advisory Group to Colorado Parks and Wildlife (CPW)

Recommendations on Preventative, Nonlethal Wolf-Livestock Conflict Minimization March 2022

This report summarizes consensus recommendations of the voting members of the Colorado Wolf Restoration and Management Plan Stakeholder Advisory Group (SAG) regarding preventative, nonlethal wolf-livestock conflict minimization.

Conflict minimization program principles: Overview

- Conflict minimization should be encouraged and explored as the first line of defense.
- Support both preventative and post-depredation non-lethal practice implementation; emphasize and implement proactive actions where possible and reactive actions as needed.
- Provide financial, technical, and operational assistance to promote and implement conflict minimization and risk reduction practices.
- Apply and update, as relevant, regulations to support non-lethal conflict minimization practices.
- Emphasize context specificity.
- Recognize that not all efforts will prevent loss, while encouraging and supporting implementation and innovation.
- Emphasize producer education and outreach, leveraging experiences and lessons of other producers.
- Provide sufficient agency capacity and funding for implementation.
- As necessary based on resources, prioritize support for those that have experienced losses or are likely to in the near future.
- Use public-private partnerships to support CPW in funding, education, and implementation for conflict minimization.
- Adapt the conflict minimization program over time as needed.

Funding & capacity

- **The conflict minimization program must be robustly and consistently funded for success.**
 - Establish and maintain separate funding sources for conflict minimization and compensation, while providing for adaptability of the program over time to assess and address needs for each.
 - Recognize that long-term funding will be necessary and while there are many potential opportunities, funding sources can be complex and challenging to secure, with competition for a variety of priorities.
 - Funding for each source will ideally be appropriated from taxpayer money (state and/or federal) and/or through multi-year public funds or grants (such as Great Outdoors Colorado (GOCO) and/or federal programs), as well as other sources such as NGOs and private organizations.
 - Sources should be additive to existing funding streams, provide longevity, and be insulated from political debates.
 - Establish a competitive grant or review program to review conflict minimization project proposals.

- Enable additional sources (NGOs, private organizations, etc.) to contribute to funding for conflict minimization.
 - Establish a conflict minimization fund and solicit or encourage external funding contributions early and/or prior to reintroduction while interest is high, so that it is available when needed in both the short- and long-term.
 - External organization funding should support projects and materials; state and federal funding should be used to fund agency staff positions, capacity and services.
 - Match funding mechanisms can be encouraged but should not be required; match could help to increase competitiveness but a requirement should not stand in the way of good projects.
 - Flexibility for external funding contributions is important.
- **CPW capacity should include both depth and breadth of expertise on wolf and large carnivore conflict minimization and management.**
 - Provide a wolf specialist(s) that offers coordination, leadership, consistency and emergency response across the state. The specialist should also broadly understand carnivore conflict minimization. CPW should fund this capacity.
 - Require training for all District Wildlife Managers (DWMs) to create a breadth of experience and insight for all carnivore damage and conflict minimization (bear, lion, wolf).
- **The economics of conflict minimization are a critical consideration for conflict minimization funding, implementation, and management, and will be context-specific.**
 - Economics and efficacy of tools should be considered to inform:
 - Funding needs and sources for the program.
 - Management approaches that consider feasibility of conflict prevention.
 - Economic considerations should be included in training for producers. Community-specific training and insights of resource economists and those with practical experience over time will be important.
 - The specific tools needed, and costs (material and labor) of implementation will vary by situation.
 - Conflict minimization plans ideally should holistically consider not only wolves, but the economics and resiliency of the ranch.

Delivery and implementation of conflict minimization tools

- **Incorporate producer perspectives and concerns in design and implementation of a program.**
 - Producers want to be proactive and preventative in protecting their livestock.
 - Conflict minimization can feel overwhelming to producers. Concerns include but are not limited to:
 - Capacity
 - Cost (to individuals and for the program as a whole)
 - Uncertainty over effectiveness of practices for specific circumstances
 - Interaction with other contracts, leases, and conservation strategies/requirements
 - Guard dogs and liability
 - There is a particular need to provide early support to producers in initial wolf release areas.
- **Success of conflict minimization depends on providing not just the tools and materials, but also support to producers through technical knowledge, training, funding, labor and capacity to effectively implement them.**

- There are details about the implementation for each tool that matter for success. It is important to have the support and insight of people who have experience and knowledge on how to implement and use these tools effectively.
 - Successful use of some tools and materials requires knowledge of both how and when to deploy them and also how and when to remove them. For example, fladry has a limited period of efficacy and should be lent out and reclaimed for use by multiple producers.
 - The costs and labor requirements of specific tools should be considered when anticipating the level of financial and capacity support that will be needed for conflict minimization.
- **Outreach and training should occur proactively and continuously, and should provide practical insights from producers.**
 - Training and shared learning should occur proactively and in an ongoing manner.
 - Training and messaging should be improved and adapted over time based on initial learnings and experiences.
 - Training should include producer-to-producer insights from those with on-the-ground experience.
 - Examples should include realistic, authentic perspectives on conflict minimization, including when it has and has not worked. Examples should include success stories as well as challenges beyond a limited set of case studies.
 - Training should include economic considerations (material and labor costs).
 - Customize training and outreach with personal and local/community scale approaches.
 - Include field demonstrations as part of training in order to provide hands-on, experiential learning about conflict minimization tools.
- **A community level approach can foster broader implementation of conflict minimization.**
 - Some conflict minimization practices are more effective at a community level, and community wide implementation can help to mitigate displacement of impacts among neighboring producers.
 - Under a community level approach, there are a variety of potential partners with community connections that can help to develop a proactive effort.
 - There are existing community cooperatives and structures used by producers to fund and support conflict minimization, and there are also other kinds of community cooperatives (e.g., conservation districts, watershed groups, etc.) that could provide a basis and structure for collaboration.
- **Producers have different relationships with different agencies and organizations; leverage these relationships for success and do not rely on a single messenger.**
 - Consider the role of and potential for resources to support U.S. Department of Agriculture Animal and Plant Health Inspection Service - Wildlife Services (USDA APHIS-W), Colorado Department of Agriculture (CDA), Colorado State University (CSU) Extension and other organizations in conflict minimization.
 - Consider the role of both wildlife and agricultural expertise.
 - A diversity of expertise and public and private sector organizational representation can be beneficial in providing information and training.
- **There is a need for better understanding of how implementation of conflict minimization tools and strategies on federal lands interacts with federal land management expectations, policies, permit requirements and allowances.**
 - There may be opportunities for policy level state or regional discussion on these issues; however, decisions are often specific to allotment conditions and modifying permits is difficult.

About the Stakeholder Advisory Group

The Colorado Wolf Restoration and Management Plan Stakeholder Advisory Group (SAG) offers a broad range of perspectives and experience to inform the social implications of wolf restoration and management strategies for the Colorado Wolf Restoration and Management Plan. SAG members were selected by Colorado Parks and Wildlife (CPW) for diversity in demographics, backgrounds, geographic regions, perspectives, and knowledge in order to constitute a vibrant, diverse and inclusive stakeholder voice in the planning process. The SAG is comprised of 17 voting members and 3 non-voting members. CPW is responsible for writing the Wolf Restoration and Management Plan. The Parks and Wildlife Commission (PWC) serves as the decision-making body responsible for approving the Wolf Restoration and Management Plan. The SAG serves in an advisory capacity to Colorado Parks and Wildlife, offering non-binding input into the development of plan content. The SAG is not a decision-making body and has no authority on wolf management policy, research or operations.

The SAG strives to make decisions based on the consensus of all voting members, where possible. Where the SAG is able to achieve consensus, its input will receive priority consideration by CPW. Per the SAG charter, consensus is defined as general agreement that is shared by all the people in a group; it reflects a recommendation, option or idea that all participants can support or abide by, or, at a minimum, to which they do not object. In other words, consensus is a recommendation, option or idea that all can live with. Where consensus does not exist, a vote will be taken and the votes of individual members will be recorded along with a summary of the rationale for supportive and dissenting views.

Stakeholder Advisory Group Members:

Voting Members:

- Matt Barnes
- Donald Broom
- Jenny Burbey
- Bob Chastain
- Renee Deal
- Adam Gall
- Dan Gates
- John Howard
- Francie Jacober
- Lenny Klingsmith
- Darlene Kobobel
- Tom Kourlis
- Brian Kurzel
- Hallie Mahowald
- Jonathan Proctor
- Gary Skiba
- Steve Whiteman

Ex Officio Members:

- Dan Gibbs, Executive Director, Colorado Department of Natural Resources
- Les Owen, Division Director, Colorado Department of Agriculture (*designee of Kate Greenberg, Commissioner, Colorado Department of Agriculture*)
- Dan Prenzlów, Director, Colorado Parks and Wildlife

Stakeholder Advisory Group report developed with third party facilitation from Keystone Policy Center.

Comments to the Parks and Wildlife Commission on Proposed Wolf Hazing Regulation

CPW WOLF RESTORATION & MANAGEMENT PLAN STAKEHOLDER ADVISORY GROUP

COMMENTS ON PROPOSED WOLF HAZING REGULATION

December 22, 2021

SUBMITTED to THE PARKS AND WILDLIFE COMMISSION

Regulation Issue Paper:

<https://cpw.state.co.us/Documents/Commission/2021/November/Item.19-W-10-Issue-Hazing.pdf>

Key Concepts:

- We support hazing of wolves as tool to reduce the potential for livestock depredation by wolves, and we also support the prohibition on causing injury to wolves.
- The regulation should make it clear that allowable activities are intended to reduce the immediate threat to livestock. Pursuing wolves for extended time or distance defeats the purpose of training wolves to avoid livestock, greatly increases the likelihood of harm to the wolves, and must be prohibited.
- Inadvertent injury or death caused by hazing could occur. The draft regulation considers such harm as a violation. Some SAG members feel that such unintended harm should not be considered a violation of the law; others feel that it should be a violation.
- Livestock guardian animals can potentially injure or kill wolves. The Mexican gray wolf program has language that addresses such circumstances and does not hold the guard animal's owner liable for an illegal take under those circumstances. The wording from the Mexican gray wolf 10(j) rule is as follows: "Take of Mexican wolves by livestock guarding dogs, when used in the traditional manner to protect livestock on Federal and non-Federal lands, is allowed."
- Most of the techniques permitted by the proposed regulation would clearly not cause injury to wolves. All permitted hazing techniques should be evaluated for their potential to cause injury to wolves with that information provided to the Commission for its consideration. The Commission should be provided with any information or evaluation of the potential for injury specifically from rubber bullets and rubber buckshot. Some SAG members feel that methods that have a high potential for injury should not be permitted.
- Aircraft use by the public should not be permitted for wolf hazing, but it may be a tool for agency use in limited circumstances.
- Horses should be included in the same category as vehicles (e.g., ATVs) to ensure that hazing by range riders or other employees or agents is a legal method. As Commissioner May noted at the November 18 Commission meeting, range riders moving wolves away from livestock could be viewed as a form of hazing and if so, should be explicitly included as an allowable technique; we suggest doing so by adding "horses" to the same section as ATVs and vehicles.

Our suggested specific modifications to the proposed regulation include:

- Adding “employees and agents” to “livestock owners” (Section 1) to make it clear they are authorized to use the hazing techniques.
- Adding “livestock guard animals” (Section 1) so that hazing to prevent injury to those animals by hazing wolves is permissible.
- Adding “including horses” after “ATVs and vehicles...” in Section 1.a.iv so that horseback hazing is specifically permitted.
- Inserting “...but not limited to...” after “such as” in Section 1.a.v to clarify that scare techniques other than those listed are permitted.

SUBMITTED BY THE VOTING MEMBERS OF THE COLORADO PARKS AND WILDLIFE WOLF RESTORATION & MANAGEMENT PLAN STAKEHOLDER ADVISORY GROUP:

- | | | |
|----------------|--------------------|--------------------|
| • Matt Barnes | • Dan Gates | • Brian Kurzel |
| • Donald Broom | • John Howard | • Hallie Mahowald |
| • Jenny Burbey | • Francie Jacober | • Jonathan Proctor |
| • Bob Chastain | • Lenny Klingsmith | • Gary Skiba |
| • Renee Deal | • Darlene Kobobel | • Steve Whiteman |
| • Adam Gall | • Tom Kourlis | |

Report on Livestock Compensation Recommendations

Colorado Wolf Restoration and Management Plan Stakeholder Advisory Group (SAG) to Colorado Parks and Wildlife (CPW)

Report on Livestock Compensation Recommendations February 2022

This report summarizes Wolf Restoration and Management Plan Stakeholder Advisory Group (SAG) feedback on livestock compensation elements and alternatives discussed and developed between October 2021 and January 2022. Discussions resulted in:

- General consensus on desired outcomes and principles for a livestock compensation plan.
- Development, discussion, and voting on eight compensation plan alternatives.

Contents

Outcomes, Principles and Recommendations Across All Alternatives	2
SAG Vote Results on Livestock Compensation Plan Alternatives	3
Summary of SAG Discussion of Livestock Compensation Plan Alternatives	5
Cross-cutting discussion themes	5
Alternative 1: Current CPW game damage program	6
Alternative 2: 2004 Wolf Working Group recommendations	6
Proposed new confirmation standard for Alternatives 3, 4, and 5	7
Alternative 3: Simple compensation ratio for missing livestock	8
Alternative 4: Itemization for compensation of production loss and missing livestock	9
Alternative 5: Producer chooses between simple compensation ratio (Alternative 3) OR itemization (Alternative 4)	10
Alternative 6: Outcome-based compensation in addition to ex post (pay for performance)	11
Alternatives 7a and 7b: Outcome-based compensation parallel to ex post alternative 1 or 2 (pay for performance/practices)	12
Appendix A: Detailed Table of Livestock Compensation Plan Alternatives	14
Appendix B: About the Stakeholder Advisory Group	27

Outcomes, Principles and Recommendations Across All Alternatives

Desired outcomes of a livestock compensation plan

- Livestock owners are fairly compensated for losses and are not financially harmed.
- Conflicts are minimized.
- Wolves are restored.
- Trust and support are built across communities.

Principles of a livestock compensation plan

- Build trust, transparency, relationships, and good will with agricultural communities.
- Be consistent, equitable, fair, and robust.
- Value both fair compensation and personal responsibility.
- Be simple and straightforward.
- Provide opportunity for choice and options.
- Recognize different kinds of grazing contexts.
- Promote conflict minimization.
- Support with sustainable funding and capacity.
- Use State-Federal partnerships and public-private partnerships where appropriate for implementation and funding.
- Emphasize education and outreach.
- Maintain fiscal responsibility.

Education and outreach

- Education and outreach are important components of the delivery and communication of a livestock compensation program.
- Incorporate education and outreach for producers to ensure awareness and understanding of the program and administrative processes.
- Incorporate education and information for the public.

Conflict minimization & risk reduction program elements

SAG members recommend that any compensation plan be implemented in conjunction with a robust conflict minimization program. Some compensation plan alternatives considered by the SAG directly incentivize producers' use of nonlethal conflict risk reduction techniques. The SAG recommends a conflict risk reduction program with the following elements:

- Provide financial, technical, and operational assistance to promote and implement conflict minimization and risk reduction practices.
- Apply and update, as relevant, regulations to support nonlethal conflict minimization practices.
- Support both preventative and post-depredation nonlethal practice implementation; emphasize and implement proactive actions where possible and reactive actions as needed.
- Emphasize context specificity.
- Recognize that not all efforts will prevent loss, while encouraging and supporting implementation and innovation.
- Emphasize producer education and outreach, leveraging experiences and lessons of other producers.
- Provide sufficient agency capacity and funding for implementation.
- As necessary based on resources, prioritize support for those that have experienced losses or are likely to in the near future.
- Use public-private partnerships to support CPW in funding, education, and implementation.

SAG Vote Results on Livestock Compensation Plan Alternatives

SAG members developed and discussed eight compensation plan alternatives. Descriptions of and SAG feedback for each alternative are provided in the subsequent sections of this report. SAG members voted at their January 2022 meeting to indicate their preferred alternative as well as their level of support or objection on a consensus scale defined in the SAG charter. The votes of individual members are included in the table on the next page.

In summary:

- **There was not consensus support for any one alternative** (i.e., all members in support of or without objection to an alternative).
- **SAG-developed alternatives for ex post (*after the fact*) compensation had the greatest number of voting SAG members supporting or not objecting:**
 - *Alternative 4: Itemization for compensation of production losses and missing livestock* (15/17 SAG members supporting/not objecting)
 - *Alternative 3: Simple compensation ratio for missing livestock* (14/17 SAG members supporting/not objecting)
 - *Alternative 5: Producer chooses between simple ratio (Alternative 3) or itemization (Alternative 4)* (13/17 members supporting/not objecting)
 - **Alternative 5 had the highest number of SAG members selecting it as their preferred alternative** (11/17 members preferred it over all other options; no other option was preferred by more than 2 SAG members).
- **SAG-developed alternatives for ex ante or outcome-based compensation had a majority of voting SAG members supporting or not objecting:**
 - *Alternative 6: Outcome-based compensation in addition to ex post Alternative 1* (11/17 SAG members supporting/not objecting)
 - *Alternative 7a: Outcome-based compensation parallel to ex post Alternatives 1 and 2* (9/17 SAG members supporting/not objecting)
 - *Alternative 7b: Outcome-based compensation parallel to ex post alternatives 3, 4, and 5* (9/17 SAG members supporting/not objecting)
- **Existing ex post compensation alternatives had the lowest number of voting SAG members supporting or not objecting:**
 - *Alternative 1: Current CPW game damage process* (8/17 SAG members supporting/not objecting)
 - *Alternative 2: 2004 Wolf Working Group recommendations* (7/17 SAG members supporting/not objecting)

Summary of SAG Discussion of Livestock Compensation Plan Alternatives

An overview of each alternative is provided below, followed by a summary of SAG feedback (rationale for support, opposition, and additional considerations).¹ Appendix A includes a more detailed description of each alternative, inclusive of a description of the method of confirmation of depredation events; compensation and eligibility for missing losses, indirect/production losses, ex ante compensation; and additional considerations.

Each alternative assumes the SAG-developed desired outcomes, principles, and conflict minimization and education elements described above. In addition, the alternatives assume the following regarding program administration and funding:

- The livestock compensation program is administered by CPW's game damage program.
- Funding is through appropriations as enumerated in 33-2-105.8 C.R.S.
- Colorado Department of Agriculture has exclusive jurisdiction over depredating animals per 35-40-101 C.R.S.
- Administration and funding for ex ante/outcome-based alternatives 6, 7a, and 7b are to be determined.
- The livestock compensation program should be periodically evaluated and updated if needed (specific recommendations for evaluation of certain alternatives are also offered in the detailed appendix).

Cross-cutting discussion themes

The following cross-cutting themes emerged during SAG member discussions of the alternatives (these themes were recurrent, although not necessarily reflective of full consensus):

- Emphasis on desired outcomes and principles (e.g., fairness and no financial harm, nonlethal conflict minimization, wolf restoration, trust and relationships, simplicity, choice, personal responsibility, funding and fiscal responsibility, etc.; see page 2).
- Importance and interpretation of existing statute.
- Emphasis on basing compensation on best available science.
- Need for a robust conflict minimization program along with a compensation plan.
- Recognition of different values and perspectives regarding grazing, wildlife and public lands.
- Interest in compromise and collaboration across different perspectives.
- Concern regarding the impact of a compensation plan (whether perceived as too generous or too conservative) on producer tolerance and/or public trust.
- Recognition of the range of economic losses caused by wolves to producers.
- Recognition of the role of working lands in supporting habitat and biodiversity.
- Concern regarding unduly blaming wolves for livestock losses and/or creating perverse incentives; concern with lack of discussion of positive impacts of wolves.
- Recognition that details of specific alternatives will need to be further developed.
- Recommendation for periodic evaluation of any compensation plan.
- Interest in further consideration of outcome-based compensation options in the future.
- Interest in harmonization of compensation programs for different predators.
- Likely need to develop new intergovernmental agreements or memoranda of understanding with Tribes to address sovereignty and jurisdiction-related issues such as participation in the State's compensation program and Tribal leadership and/or partnership in investigations of losses on Tribal lands.

¹ SAG meeting summaries from October 2021 through January 2022 may also be referenced for additional discussion of livestock compensation plan elements and alternatives. SAG discussions were also informed by feedback of the Technical Working Group (TWG) to Colorado Parks and Wildlife regarding the technical merit of potential compensation plan elements; see separate TWG report.

Alternative 1: Current CPW game damage program

Overview

CPW's current game damage program used for big game, including carnivores such as black bear and mountain lion, provides 100% Fair Market Value (FMV) for confirmation under a preponderance of evidence standard.

SAG feedback (individual comments, not necessarily reflecting consensus):

Rationale for support for Alternative 1

- Consistency with the existing program is fair and easily administered.
- Support for a program that compensates for verified death and injury and not additional losses and/or unverified losses.
- Wolves should be treated similarly to bears and mountain lions regarding compensation programs. Compensation for unverified losses and/or other losses (above that provided in Alternative 1 or 2) may create conditions where wolves receive undue blame for losses.

Rationale for opposition to Alternative 1

- Alternatives 1 and 2 do not recognize the real economic challenges faced by the agricultural community and do not account for all losses that wolves have been documented to cause, such as missing livestock and production losses. Some suggest that the law requires that these other losses must be covered.
- This alternative does not support outcomes of building trust and keeping livestock producers from being financially harmed. Concern that a compensation plan that is too conservative will impact social tolerance of wolves by producers.

Additional considerations for Alternative 1

- CPW's existing game damage program could be a baseline for compensation, and the other alternatives could be additions to gain social support from the agricultural community.
- Consider the importance and interpretation of existing statute in selecting a compensation program for wolf depredation.
- Regardless of the original intent of the law or the existing program, recommendations developed through the wolf management and planning process may help establish new precedents for livestock compensation due to wolves.
- There is interest in receiving an official attorney general's office opinion about the interpretation of 33-2-105.8 with regards to the State needing to "pay fair compensation to owners of livestock for any losses of livestock caused by gray wolves."

Alternative 2: 2004 Wolf Working Group recommendations

Overview

The 2004 Colorado Wolf Management Working Group developed recommendations to compensate for confirmed losses due to wolves at 100% FMV and at 50% FMV for probable losses.

SAG Feedback (individual comments, not necessarily reflecting consensus):

Rationale for support for Alternative 2

- Support for the concept of compensating probable losses in addition to confirmed losses.
- Support for a program that compensates for verified death and injury and not additional losses and/or unverified losses, generally consistent with the compensation program for bear and mountain lions.

Compensation for unverified losses and/or other losses (above that provided in Alternative 1 or 2) may create conditions where wolves receive undue blame for losses.

Rationale for opposition to Alternative 2

- Alternative 2 cannot be harmonized with Colorado's existing game damage program because it proposes a different standard for verification.
- While compensating for probable losses due to wolves, this alternative does not fairly compensate producers for all losses, such as missing livestock and production losses, due to wolves.
- Concern that a compensation plan that is too conservative will impact social tolerance of wolves by producers.

Additional considerations for Alternative 2

- Alternative 2 requires definitions and standards for verification for 'confirmed' and 'probable' losses. There are questions as to whether probable losses are already effectively covered within the existing preponderance of evidence standard.

Proposed new confirmation standard for Alternatives 3, 4, and 5

Overview

Alternatives 3, 4 and 5 propose a new standard for the confirmation or verification of depredation events. Specifically, the proposal is for 100% FMV for a depredation event (death or injury) for livestock (including guard and herding animals) that the investigating officer reasonably determines is the result of a wolf depredation, resolving any unknowns in the producer's favor.

SAG feedback on the proposed alternative confirmation (individual comments, not necessarily reflecting consensus):

Rationale for support for new confirmation standard

- The new standard was proposed by some SAG members based on producers' input to them that proving loss and entitlement for compensation for disturbed carcasses and missing animals is impossible under a preponderance of evidence standard because disturbed, scavenged, or lost animals cannot fulfill the burden of proof required of producers.
- The alternative standard was suggested to mitigate the burden of proof, avoid penalizing producers, and resolve unknowns in their favor regarding disturbed/scavenged carcasses and missing animals.
- The new standard was also suggested to keep the process simple for CPW, to maintain positive relationships between CPW and producers, and to enhance social acceptance of predators on the landscape.
- The new standard would allow investigators flexibility to address varying scenarios of depredation investigation and confirmation, offering a more practical approach to allow investigative officers to make a reasonable determination based on their training and experience, including about disturbed carcasses or missing animals.

Rationale for opposition to a new confirmation standard

- Opposition to compensation of full market value (or greater, in the case of a compensation ratio) on less than a preponderance of evidence standard (which requires greater than 50% certainty).
- The new standard may create conditions where wolves receive undue blame for losses.
- The new standard would be inconsistent with the confirmation standard for bears and lions and may impact the ability for compensation programs for wolves and other depredators to be harmonized in the future.

Additional considerations regarding an alternative standard

- A new standard for determining wolf depredation requires additional legal scrutiny and potential statutory change independent of a compensation plan.
- The new standard could be considered in the specific circumstance that CPW or APHIS-WS are not able to respond to a claim in a timely manner.

Alternative 3: Simple compensation ratio for missing livestock

Overview

SAG members developed an alternative to compensate for depredations (death and injury) at 100% FMV confirmed according to the proposed new standard above *and* to compensate for missing livestock (sheep, calves and yearlings) up to a capped compensation ratio. Under the alternative, there must be a depredation event due to gray wolves to claim missing livestock, and the number claimed cannot exceed actual documented livestock loss. A two-tiered approach would provide a higher ratio for producers that employ nonlethal conflict mitigation measures. Compensation for confirmed depredation of livestock (including guard and herding animals) is for any livestock; the compensation ratio for missing animals is only for sheep, calves, and yearlings.

SAG feedback (individual comments, not necessarily reflecting consensus):

Rationale for support for Alternative 3

- Support for compensating for losses that wolves have been documented to cause, including missing livestock.
- Support for a compensation ratio that could account for some additional production losses.
- Support for a simple option for compensation without being overly burdensome to agency capacity or producers.
- Support for two tiers of a compensation ratio to incentivize the use of nonlethal conflict minimization tools.
- Supports outcomes of building trust with the livestock community and keeping livestock producers from being financially harmed.
- Support that the approach compensates for actual losses to the producer because claims are limited to actual documented missing livestock.

Rationale for opposition to Alternative 3

- A ratio may be too generous; some losses are the cost of doing business.
- The alternative may result in compensation for losses that are not due to wolves and may cause wolves to receive undue blame for missing livestock.
- A compensation ratio will create perverse incentives such that sick or injured livestock may be allowed to be taken by large game predators in order to claim a missing livestock compensation ratio; this in turn may disincentivize nonlethal mitigation of conflict and does not achieve desired outcomes.
- Producers should be responsible for verifying the location of livestock to avoid and confirm all losses.
- Nonlethal conflict minimization and mitigation tools are not adequately valued in this alternative as they are not required to receive the lower ratio.
- Compensation for loss on public lands should consider that public lands grazing lease costs are low, with impacts to the environment.
- Does not adequately compensate for production losses.

Additional considerations for Alternative 3

- The rates originally proposed by SAG members were a ratio of 5 for sheep and calves (2.5 for yearlings), increased to a ratio of 7 for sheep and calves (3.5 for yearlings) if the producer employs nonlethal conflict mitigation measures. These rates were proposed based on a literature review specific to "missing" animals (resulting in an average of 5 and a maximum of 7 using six studies that referenced specific numerical values for missing animals or detection rates); review of other states' programs; and consideration for building relationships and tolerance for wolves.
- SAG discussion resulted in revising the proposal to include a two-tier ratio without specified rates, with the recommendation that compensation ratio rates should be determined by a team of experts based on the best available science.
- There is concern about the limited amount of literature on compensation ratios and disagreement among studies regarding appropriate compensation rates. There is concern about basing compensation ratios on other states' programs, such as Wyoming.
- A compensation ratio could also be used to account for some production losses. The ratio might under limited circumstances account for some production losses, such as in cases where some missing livestock may not be due to wolves and producers may still claim them according to eligibility and the proposed cap. However, the ratios discussed (7 and below) were based on studies that only consider missing livestock; one study suggests that compensation ratios would need to be 2 to 3 times larger than the 7:1 ratio used in Wyoming to offset indirect/production impacts.
- Consider an average statewide deduction to account for other losses not caused by wolves and potentially covered by the ratio.
- As an alternative to requiring that a depredation occur in order to claim missing livestock, consider using affidavits or contracts to verify presence of wolves in a herd.
- The use of the term "compensation ratio," rather than "multiplier," better conveys the limitations of compensation within a predetermined cap.
- There is concern that verification of nonlethal conflict mitigation practices to confirm eligibility for a higher ratio could result in a 'check the box' exercise; CPW officers could verify practices onsite when investigating depredations.

Alternative 4: Itemization for compensation of production loss and missing livestock

Overview

SAG members developed an alternative to compensate for depredations (death and injury) at 100% FMV confirmed according to the proposed new standard above *and* to compensate for itemized missing livestock and production losses. Missing livestock claimed (sheep, calves and yearlings only) cannot exceed actual documented livestock loss and would factor in a baseline (pre-wolf reintroduction) loss rate. General considerations are provided for how a producer might itemize production losses (losses unaccounted for by direct depredation, such as decreased weaning weights and decreased conception rates) with reference to baseline data. The alternative suggests that a depredation incident is required to itemize losses, however other eligibility criteria could be considered. Conflict minimization practice implementation is not a requirement but could be considered as an additional incentive for compensation.

SAG feedback (individual comments, not necessarily reflecting consensus):

Rationale for support for Alternative 4

- Support for compensating for losses that wolves have been documented to cause, including missing livestock and additional production losses. Fair compensation includes direct and indirect losses.
- Provides an opportunity for producers to prove and be compensated for actual impacts and losses due to wolves, including depredation, missing livestock (without a cap on the actual number of missing

livestock that can be claimed), and verified production losses such as decreased weaning and/or conception rates.

- The alternative best compensates the losses that occur once wolves are depredating livestock by paying the difference between the normal cost of doing business prior to wolf depredation and the additional losses that occur following wolf depredation.
- Supports outcomes of building trust with the livestock community and keeping livestock producers from being financially harmed.

Rationale for opposition for Alternative 4

- Lack of simplicity for producers and for agency staff.
- Potential fiscal impacts of a program that allows compensation for all missing livestock and production losses due to wolves.
- Compensation of production losses is too generous; some losses are the cost of doing business.
- Nonlethal conflict mitigation tools are not adequately valued in this alternative.
- The alternative may result in compensation for losses that are not due to wolves (including those due to other predators and to other conditions such as climate change); this may cause wolves to receive undue blame for livestock impacts.

Additional considerations for Alternative 4

- Examples provided within the alternative for how a producer might itemize losses are general considerations; details would need to be further refined. Some concerns were offered regarding how to construct baseline averages (including how many years are included; the role of drought years in the average; and the impact of operational size on interannual baselines).
- Consider inclusion of mature cattle, goats and other livestock in itemizing missing livestock.
- Some losses, such as loss of forage, were considered by some as outside the scope of a compensation program; others supported that they could be addressed through the stipulation for consideration of other losses on a case-by-case basis.

Alternative 5: Producer chooses between simple compensation ratio (Alternative 3) OR itemization (Alternative 4)

Overview

SAG members developed an alternative to compensate for depredations (death and injury) at 100% FMV confirmed according to the proposed new standard above *and* to allow producers to choose between receiving a simple compensation ratio for missing livestock (Alternative 3) or itemizing to claim missing livestock and production losses (Alternative 4).

SAG feedback (individual comments, not necessarily reflecting consensus):

Rationale for support for Alternative 5

- Provides producers with choices to better meet different needs and capacity to itemize losses.
- See rationales for Alternatives 3 and 4 regarding support for compensating for missing livestock and production losses via compensation ratio or itemization.

Rationale for opposition to Alternative 5

- See rationales for Alternatives 3 and 4 regarding opposition to compensating for missing livestock and production losses via compensation ratio or itemization.

Additional considerations for Alternative 5

- A compensation ratio may not need to be as high nor as precise in reflecting missing livestock rates when combined with the opportunity to instead itemize losses.

Alternative 6: Outcome-based compensation in addition to ex post (pay for performance)

Overview

SAG members developed an alternative to compensate producers for depredations at 100% FMV for confirmation under a preponderance of evidence standard (current game damage program; Alternative 1) *and* to provide conservation performance payments for wolf survival, independent of direct or indirect impacts. Conservation performance payments would be allocated by algorithm, based on a points system considering wolf pack home ranges, overlap with ranches and livestock exposure/risk, wolf survival to end of year, and implementation of nonlethal preventative conflict minimization practices.

SAG feedback (individual comments, not necessarily reflecting consensus):

Rationale for support for Alternative 6

- This alternative creates a market-like program that incentivizes desired outcomes: wolf restoration and presence on the landscape, maintenance of working lands and wildlife habitat, livestock production, and implementation of nonlethal conflict minimization.
- Provides compensation both for confirmed depredations and additional economic support for the outcomes noted above. See rationale for support for Alternative 1 for ex post compensation.
- Incentivizes prevention of conflict without requiring any specific strategies or tools.
- Incentivizes finding carcasses in time to get them investigated and compensated for confirmed depredations.
- Economic approaches suggest that it is more effective to reward the outcomes that society values (both livestock and wolves staying alive) than to pay for undesired outcomes (i.e., depredation and loss).

Rationale for opposition to Alternative 6

- The outcome-based alternatives lack social and economic certainty to garner adequate buy-in at the outset of reintroduction.
- The lack of economic data needed to appropriately and meaningfully fund pay for presence limits the potential effectiveness of the strategy.
- Concern about fairness in distribution of pay for presence funds vs. the actual impacts; wolves could be present but not depredating in some operations while they are present and depredating in others.
- The alternative does not compensate for all losses that wolves have been documented to cause, such as missing livestock and production losses. Some suggest that the law requires that these other losses must be covered. See rationale for opposition to Alternative 1 for ex post compensation.
- Would require increased agency capacity and monitoring.

Additional considerations for Alternative 6

- Continue developing outcome-based alternatives for the future. Outcome-based compensation could be considered as future program alternatives when more Colorado-specific wolf-livestock compensation and socioeconomic costs and benefits are available.
- Like all alternatives, cost will increase with wolf population, however individual wolf value can decrease with population increase.

Alternatives 7a and 7b: Outcome-based compensation parallel to ex post alternative 1, 2, 3, 4, or 5 (pay for performance/practices)

Overview

SAG members proposed an alternative to compensate for nonlethal conflict mitigation practices under which producers could bid competitively to opt out of a parallel ex post program. The producer bid would include proactive practices as well as the amount the producer would accept to opt out of ex post; proposals would be reviewed by a board and ranked based on wolf presence, risk, practices, and bid. This alternative can be complementary to other financial and technical assistance programs for nonlethal conflict minimization. The approach was suggested by an economist and is based roughly on the competitive bidding process in the USDA Conservation Stewardship Program.

The distinction between Alternatives 7a and 7b is the parallel ex post program from which the producer bids to opt out. In 7a, the parallel ex post compensation program is either Alternative 1 or Alternative 2 (compensation for confirmed death or injury). In 7b, the parallel ex post compensation program is Alternative 3, 4, or 5 (inclusive of compensation for confirmed death or injury, missing livestock, and some production losses).

SAG feedback (individual comments, not necessarily reflecting consensus):

Rationale for support for Alternative 7a and/or 7b

Arguments supporting both options

- The alternative creates a market-like program that incentivizes desired outcomes: wolf restoration and presence on the landscape, maintenance of working lands and wildlife habitat, livestock production, and implementation of nonlethal conflict minimization.
- Economic approaches suggest that it is more effective to reward the outcomes that society values (both livestock and wolves staying alive) than to pay for undesired outcomes (i.e., depredation and loss).
- Incentivizes prevention of conflict, including creative and pooled practices, without requiring any specific strategies or tools.

Arguments supporting Alternative 7a only

- Providing Alternative 1 or 2 as the parallel ex post program keeps costs lower and provides a stronger incentive for a producer to bid to opt out in order to receive funding for preventative practices.
- See Alternatives 1 and 2 for rationale for support for these ex post compensation programs.

Arguments supporting Alternative 7b only

- Providing Alternative 3, 4, or 5 as the parallel ex post program gives the producer a choice to opt in or out of a program that compensates for missing livestock and production losses.
- See Alternatives 3, 4, and 5 for rationale for support for these ex post compensation programs.

Rationale for opposition to Alternative 7a and/or 7b

Arguments opposing both options

- The outcome-based alternatives lack social and economic certainty to garner adequate buy-in at the outset of reintroduction.
- The lack of economic data needed to appropriately and meaningfully fund this alternative limits the potential effectiveness of the strategy.
- Increased burden of agency staff in tracking wolf activity and reviewing bid proposals.

- Concern about fairness in distribution of pay for performance/practice funds vs. the actual impacts; wolves could be present but not depredating in some operations while they are present and depredating in others, including those that implement conflict minimization.

Arguments opposing 7a only

- See Alternatives 1 and 2 for rationale for opposition to these ex post compensation programs.

Arguments opposing 7b only

- See Alternatives 3, 4, and 5 for rationale for opposition to these ex post compensation programs.
- Providing Alternative 3, 4, or 5 for the ex post compensation program is more costly; the funding for the pay for performance program would need to be scaled to match the funding of the ex post program.
- By covering additional losses (missing livestock, production losses) in the ex post option, the alternative decreases the incentive for producers to opt out of ex post and to implement preventative practices.

Additional considerations for the Alternatives 7a and 7b

- Continue developing outcome-based alternatives for the future. Outcome-based compensation could be considered as future program alternatives when more Colorado-specific wolf-livestock compensation and socioeconomic costs and benefits are available.
- Available funding would need to be adequate to incentivize opting out of ex post.
- Like all alternatives, cost will increase with wolf population; ranking of bids should evolve as wolf population spreads.

Appendix A: Detailed Table of Livestock Compensation Plan Alternatives

Program Components	Alternative 1: Current Game Damage Process (i.e., preponderance of evidence standard):
Confirmation of depredation events	<p>Depredations compensated at 100% FMV for confirmation under preponderance of evidence standard if no sales receipts/contracts.</p> <p>Livestock injured/killed by wolves will be compensated up to fair market value of animal or \$5k limit.</p> <p>CPW/WS-APHIS has investigative authority.</p>
Compensation rate for missing livestock?	No compensation for missing livestock, closest is running age ewes (1.5 times lamb price).
Eligibility requirements for claiming/compensating missing livestock?	No compensation for missing livestock.
Compensation amount for other ('indirect') losses (i.e., pregnancy and weaning?)	N/A
Eligibility for 'indirect' loss compensation?	N/A
Ex ante program components?	N/A
Eligibility for ex ante?	N/A
Additional considerations? (phasing, program evaluation, etc.)	
Documented Peer Reviewed Case Studies	

Program Components	Alternative 2: 2004 Wolf Working Group's Recommendations (100% FMV for confirmed, 50% FMV for probable):
Confirmation of depredation events	<ul style="list-style-type: none"> * Confirmed kills paid at 100% FMV (up to 5k/head). * Probable kills paid at 50% of market value. * Livestock injured/killed by wolves will be compensated up to fair market value of animal or \$5k limit. * CPW/WS-APHIS has investigative authority.
Compensation rate for missing livestock?	No compensation for missing livestock, closest is running age ewes (1.5 times lamb price).
Eligibility requirements for claiming/compensating missing livestock?	No compensation for missing livestock.
Compensation amount for other ('indirect') losses (i.e., pregnancy and weaning?)	N/A
Eligibility for 'indirect' loss compensation?	N/A
Ex ante program components?	N/A
Eligibility for ex ante?	N/A
Additional considerations? (phasing, program evaluation, etc.)	Requires definitions for 'confirmed' and 'probable.'
Documented Peer Reviewed Case Studies	

Program Components	Alternative 3: Simple Compensation Ratio for Missing Livestock (Stand alone)
Confirmation of depredation events	<p>*100% FMV for depredation event (death or injury) that the investigating officer reasonably determines is the result of a wolf depredation resolving any unknowns in the producer’s favor.</p> <p>*Document level of confidence (based on criteria TBD, e.g., highly confident, confident, reasonably confident) it was clear evidence to help inform other management options.</p> <p>*Livestock (including guard and herding animals) injured/killed by wolves will be compensated up to fair market value of animal or \$5k limit (per statute 33.3 - 101a) - this limit needs to be updated if necessary.</p> <p>*CPW/WS-APHIS has investigative authority.</p>
Compensation rate for missing livestock?	<ul style="list-style-type: none"> • A or B Compensation ratio for missing sheep & calves. • (.5)A or (.5)B Compensation ratio for missing yearlings. • Proposed 2-tier compensation ratio: <ul style="list-style-type: none"> • Compensation ratio of A for missing sheep and calves ((.5)A for yearlings). • Increased to compensation ratio of B for missing sheep and calves ((.5)B for yearlings) if the producer employs conflict mitigation measures. • Rate A and B should be two different rates determined by best available science. • Initially proposed rate: A = 5 and rate B = 7: see references for rationale.
Eligibility requirements for claiming/compensating missing livestock?	<ol style="list-style-type: none"> 1. Must have a depredation event (death or injury) due to gray wolves. 2. Missing livestock claimed for compensation ratio must be sheep, calves, or yearlings. 3. Losses are reported by the producer; lead with trust and further investigate missing livestock claims as appropriate. 4. Missing livestock claimed cannot exceed actual documented livestock loss (following the procedure set forth in Wyoming's compensation ratio program). 5. Investigator may consider role of topography/vegetation. 6. Conflict minimization is not a requirement for damage compensation at a ratio of A. 7. Increase ratio to B if conflict minimization is employed. <ol style="list-style-type: none"> a. Consider verification of nonlethal techniques during initial depredation confirmation.

Program Components	Alternative 3 (continued): Simple Compensation Ratio for Missing Livestock (Stand alone)
Compensation amount for other ('indirect') losses (i.e., pregnancy and weaning?)	<p>Compensation ratio for missing livestock attempts to account for some production losses: some missing livestock may not be due to wolves and producers may claim according to eligibility and proposed cap.</p> <p>An alternative consideration is that a state average baseline for missing livestock loss rate (pre-wolf reintroduction) should be subtracted from actual missing number of livestock, to determine an adjusted number to be claimed. Under this mechanism, the ratio likely does not cover some additional production losses.</p>
Eligibility for 'indirect' loss compensation?	N/A
Ex ante program components?	See ex ante program components
Eligibility for ex ante?	Covered in ratio differences
Additional considerations? (phasing, program evaluation, etc.)	<p>Collect pre-implementation baseline data as well as data on losses, claims and payments for first 3-5 years of implementation; evaluate program after that timeframe and adjust missing livestock compensation rate and types of animals covered as appropriate. Implement in conjunction with robust conflict minimization programs which would be evaluated to determine techniques that have merit and whether the program is robust enough. Consider operation of a compensation program in partnership with CO Department of Ag and/or Wildlife Services to leverage existing relationships with producers.</p> <p>Once wolf status is changed to delisted, harmonize the program into an overall big game compensation program to avoid unintended consequences.</p>
Documented Peer Reviewed Case Studies	Literature on numerical ratios: Oakleaf, 2003; Bangs & Shivak, 2001; Somers, 2010, Switaski, 2002; Lehmkuhler, 2007; DSEIS, 2021 (USFWS)

Program Components	Alternative 4: Itemization for Compensation of Production Loss and Missing Livestock (stand alone)
Confirmation of depredation events	<p>*100% FMV for depredation event (death or injury) that the investigating officer reasonably determines is the result of a wolf depredation resolving any unknowns in the producer’s favor.</p> <p>*Document level of confidence (based on criteria TBD, e.g., highly confident, confident, reasonably confident) it was clear evidence to help inform other management options.</p> <p>*Livestock (including guard and herding animals) injured/killed by wolves will be compensated up to fair market value of animal or \$5k limit (per statute 33.3 - 101a) - this limit needs to be updated if necessary.</p> <p>*CPW/WS-APHIS has investigative authority.</p>
Compensation rate for missing livestock?	This alternative compensates for missing livestock via itemization.
Eligibility requirements for claiming/compensating missing livestock?	<ol style="list-style-type: none"> 1. Must have a depredation incident (death or injury) to itemize. <ol style="list-style-type: none"> a. Consider removal of this requirement or alternative eligibilities, such as documented depredation for other producers or presence of wolves. 2. Missing livestock claimed for compensation ratio must be sheep, calves, or yearlings. 3. Losses are reported by the producer; lead with trust and further investigate missing livestock claims as appropriate. 4. Missing livestock claimed cannot exceed actual documented livestock loss (following the procedure set forth in Wyoming's compensation ratio program). 5. No topography requirement for eligibility. 6. Practice implementation is not a requirement for itemized damage compensation. <ol style="list-style-type: none"> a. Consider developing a mechanism to incentivize the use of nonlethal conflict risk reduction techniques. For example, producers qualify for a type or percentage of losses with nonlethal tools, and all available production losses if nonlethal tools are used.

Program Components	Alternative 4 (continued): Itemization for Compensation of Production Loss and Missing Livestock (stand alone)
<p>Compensation amount for other ('indirect') losses (i.e., pregnancy and weaning?)</p>	<ul style="list-style-type: none"> • Losses are proven by application and documentation as follows (this can apply for one or more of the following options). The following are general considerations, with details to be developed: <ol style="list-style-type: none"> 1. Missing animals: Baseline death loss is submitted with percentages over a minimum of 3 years pre-wolf presence using production records. Additional losses beyond this baseline must be demonstrated to qualify for additional death loss. Consider calculating an average at a greater temporal scale that considers both production highs and lows, due to drought or other factors to eliminate variability. 2. Decreased weaning weights: Baseline weights over a minimum of 3 years must be submitted along with current year weights. Data can be submitted via weight tickets, production records, or sales records. 3. Decreased conception rates: Baseline conception rates over a minimum of 3 years must be submitted along with current year rates. Data can be submitted via production and/or vet records. • Additional losses can be considered on a case-by-case basis by the division. • Consider factoring size of operation and/or interannual changes in operation.
<p>Eligibility for 'indirect' loss compensation?</p>	<ol style="list-style-type: none"> 1. Depredation event (death or injury) automatically qualifies a producer to apply for production loss compensation. <ol style="list-style-type: none"> a. Consider removal of this requirement or alternative eligibilities, such as documented depredation for other producers or presence of wolves.
<p>Ex ante program components?</p>	<p>N/A</p>
<p>Eligibility for ex ante?</p>	<p>N/A</p>
<p>Additional considerations? (phasing, program evaluation, etc.)</p>	<p>Compile data from producers who file claims to report out the level of production losses experienced. Evaluate program after 3-5 years to identify whether there is a cleaner/easier way to cover the losses. Consider tweaking the process based on producer/CPW feedback on ease of application and administration and with considerations on the wolf population. OR consider going to a straight ratio that would be comparable to the actual losses that are demonstrated through this program (ease of use long-term). Once wolf status is changed to delisted, harmonize the program into an overall big game compensation program to avoid unintended consequences.</p>
<p>Documented Peer Reviewed Case Studies</p>	<p>Steele, 2013; Sommers, 2010; Lehmkuhler, 2007; DSEIS, 2021 (USFWS); Ramler, 2014; Widman, 2019; Cooke, 2013</p>

Program Components	Alternative 5: Producer chooses between simple compensation ratio (Alternative 3) OR itemization (Alternative 4)
Confirmation of depredation events	<p>*100% FMV for depredation event (death or injury) that the investigating officer reasonably determines is the result of a wolf depredation resolving any unknowns in the producer's favor.</p> <p>*Document level of confidence (based on criteria TBD, e.g., highly confident, confident, reasonably confident) it was clear evidence to help inform other management options.</p> <p>*Livestock (including guard and herding animals) injured/killed by wolves will be compensated up to fair market value of animal or \$5k limit (per statute 33.3 - 101a) - this limit needs to be updated if necessary.</p> <p>*CPW/WS-APHIS has investigative authority.</p>
Compensation rate for missing livestock?	Producer has option to choose between either simple compensation ratio (alternative 3) or itemization (alternative 4); producer may not do both.
Eligibility requirements for claiming/compensating missing livestock?	Eligibility requirements same as alternative 3 or 4, depending on which option the producer chooses.
Compensation amount for other ('indirect') losses (i.e., pregnancy and weaning?)	See alternative 3 or 4, depending which option the producer chooses.
Eligibility for 'indirect' loss compensation?	See alternative 3 or 4, depending which option the producer chooses.
Ex ante program components?	See alternative 3 or 4, depending which option the producer chooses.
Eligibility for ex ante?	See alternative 3 or 4, depending which option the producer chooses.
Additional considerations? (phasing, program evaluation, etc.)	Considerations in 3&4 should be evaluated along with also looking at which program is most widely used in an attempt to simplify the process after the evaluation time.
Documented Peer Reviewed Case Studies	See alternative 3 or 4

Program Components	Alternative 6: Outcome-based compensation in addition to ex post (pay for performance)
Confirmation of depredation events	See alternative 1 for ex post compensation.
Compensation rate for missing livestock?	N/A
Eligibility requirements for claiming/compensating missing livestock?	N/A
Compensation amount for other ('indirect') losses (i.e., pregnancy and weaning?)	N/A
Eligibility for 'indirect' loss compensation?	N/A
Ex ante program components?	<p>Payments based on wolf pack home ranges and overlap with ranches, and wolf survival to end of year.</p> <p>Payments based on an algorithm, similar to that used by the Mexican Wolf Livestock Council, where points are used to assign percentage of available funding.</p> <p>The following would be an example of that framework:</p> <ul style="list-style-type: none"> • Step 1: Core Area/2 points per core area + Territory/1 point per territory + Wolf Pups/1 point per pup = Subtotal A. • Step 2: Subtotal A is multiplied by 2 if applicant is implementing preventative practices = Subtotal B. • Step 3: The Number of Livestock (AU) (cow/calf is 1; yearling is 0.5) that are exposed to wolves is divided by 100 = Subtotal C. • Step 4: Subtotal B is multiplied by Subtotal C = Grand Total. <p>*Algorithm may be adjusted to reduce bias toward larger producers, e.g., by beginning with a minimum payment regardless of herd size.</p>
Eligibility for ex ante?	Livestock producer (in occupied wolf habitat). May need to enroll to determine ranch geography, number of livestock exposed, period of time, etc.

<p>Program Components</p>	<p>Alternative 6 (continued): Outcome-based compensation in addition to ex post (pay for performance)</p>
<p>Additional considerations? (phasing, program evaluation, etc.)</p>	<p>Conservation performance payments are for wolf survival, independent of depredations or missing livestock. Incentive is for producer to prevent livestock from being killed and to find any missing livestock.</p> <p>Conservation performance payments are for wolf survival, independent of direct or indirect effects. Incentive is for producer to prevent conflict.</p> <ul style="list-style-type: none"> * Like all alternatives, cost will increase with wolf population. * But individual wolf value can decrease with population increase. * Should include a sunset clause: expire, renew, or revise based on time (e.g., 5-10 yr) and/or wolf state endangered status change. *Would require increased agency capacity and monitoring. <p>Implement in conjunction with robust conflict minimization programs which would be evaluated to determine techniques that have merit and whether the program is robust enough.</p>
<p>Documented Peer Reviewed Case Studies</p>	<p>Conservation performance payments preferred by numerous authors and most economists (Nelson 2009; Breck et al. 2011; Dickman et al. 2011; Harris 2020; Macon 2020). Dickman et al (2011) recommended a combo with majority of funds to outcome-based and minority to ex post.</p> <p>Harris (2020) speculated that most benefits of performance-based could be captured by practice-based.</p> <p>Examples:</p> <ul style="list-style-type: none"> Mexican Wolf Livestock Coexistence Council (Strategic Plan 2014). Viviendo con los Gatos (rare cats in Sonora) (Nistler 2007). Sweden lynx & wolverine, with semi-domesticated reindeer (Persson et al. 2015).

Program Components	Alternative 7a: Outcome-based compensation parallel to ex post alternative 1 or 2 (pay for performance/practices)
Confirmation of depredation events	<ul style="list-style-type: none"> • <i>Depredations are investigated but have no bearing on compensation.</i> • Producers bid competitively to opt out of parallel ex-post program (Alternatives 1 or 2). <ul style="list-style-type: none"> o Bids include proactive practices as well as the amount the producer would accept to opt out of ex-post; reviewed by a board and ranked based on wolf presence, risk, practices, and bid. o Conceptually similar to USDA's Conservation Stewardship Program. o Allow pooled bids from multiple producers in a geographic area. o Can be complementary to other financial and technical assistance programs for conflict minimization
Compensation rate for missing livestock?	N/A
Eligibility requirements for claiming/compensating missing livestock?	N/A
Compensation amount for other ('indirect') losses (i.e., pregnancy and weaning)?	N/A
Eligibility for 'indirect' loss compensation?	N/A
Ex ante program components?	<p>Producer bids to opt out of all ex post compensation.</p> <ul style="list-style-type: none"> *May include proactive, preventative strategies (e.g., husbandry practices, guard animals, carcass removal) and/or tools (e.g., fences, light and noise devices). * Practices may be invented by livestock owners (rewards creativity). * Bids are reviewed by a board and ranked based on wolf presence, livestock risk, and bid amount.
Eligibility for ex ante?	Livestock producer (in occupied wolf habitat), by competitive bid.

<p>Program Components</p>	<p>Alternative 7a (continued): Outcome-based compensation parallel to ex post alternative 1 or 2 (pay for performance/practices)</p>
<p>Additional considerations? (phasing, program evaluation, etc.)</p>	<p>Conservation performance payments are for wolf survival, independent of depredations or missing livestock. Incentive is for producer to prevent livestock from being killed and to find any missing livestock.</p> <p>Conservation performance payments are for proactive practices and wolf survival, independent of direct or indirect effects. Incentive is for producer to prevent conflict.</p> <ul style="list-style-type: none"> * Like all alternatives, cost will increase with wolf population. * Ranking should evolve as wolf population spreads and needs change. * Should include a sunset clause: expire, renew, or revise based on time (e.g., 5-10 yr) and/or wolf state endangered status change. * Available funding would need to be adequate enough to incentivize opting out of ex post. Implement in conjunction with robust conflict minimization programs which would be evaluated to determine techniques that have merit and whether the program is robust enough.
<p>Documented Peer Reviewed Case Studies</p>	<p>Harris/MFWP (2020): Payment for practices may be simpler than payment for conservation performance per se. For bid process, none; but recommended by economist (Dana Hoag presentation) Conceptually similar to CSP.</p>

Program Components	Alternative 7b: Outcome-based compensation parallel to ex post alternative 3, 4, or 5 (pay for performance/practices)
Confirmation of depredation events	<p><i>Depredations investigated but have no bearing on compensation.</i></p> <p>Producers bid competitively to opt out of parallel ex-post program (Alts. 3, 4, 5).</p> <ul style="list-style-type: none"> * Bids include proactive practices as well as the amount the producer would accept to opt out of ex-post; reviewed by a board and ranked based on wolf presence, risk, practices, and bid. * Conceptually similar to USDA's Conservation Stewardship Program. * Allow pooled bids from multiple producers in a geographic area. * Can be complementary to other financial and technical assistance programs for conflict minimization.
Compensation rate for missing livestock?	N/A
Eligibility requirements for claiming/compensating missing livestock?	N/A
Compensation amount for other ('indirect') losses (i.e., pregnancy and weaning)?	N/A
Eligibility for 'indirect' loss compensation?	N/A
Ex ante program components?	<p>Producer bids to opt out of all ex post compensation.</p> <ul style="list-style-type: none"> * May include proactive, preventative strategies (e.g., husbandry practices, guard animals, carcass removal) and/or tools (e.g., fences, light and noise devices). * Practices may be invented by livestock owners (rewards creativity). * Bids are reviewed by a board and ranked based on wolf presence, livestock risk, and bid amount.
Eligibility for ex ante?	Livestock producer (in occupied wolf habitat), by competitive bid

<p>Program Components</p>	<p>Alternative 7b (continued): Outcome-based compensation parallel to ex post alternative 3, 4, or 5 (pay for performance/practices)</p>
<p>Additional considerations? (phasing, program evaluation, etc.)</p>	<p>Conservation performance payments are for wolf survival, independent of depredations or missing livestock. Incentive is for producer to prevent livestock from being killed and to find any missing livestock.</p> <p>Conservation performance payments are for proactive practices and wolf survival, independent of direct or indirect effects. Incentive is for producer to prevent conflict.</p> <ul style="list-style-type: none"> * Like all alternatives, cost will increase with wolf population. * Ranking should evolve as wolf population spreads and needs change. * Should include a sunset clause: expire, renew, or revise based on time (e.g., 5-10 yr) and/or wolf state endangered status change. * Available funding would need to be adequate enough to incentivize opting out of ex post. <p>Implement in conjunction with robust conflict minimization programs which would be evaluated to determine techniques that have merit and whether the program is robust enough.</p>
<p>Documented Peer Reviewed Case Studies</p>	<p>Harris/MFWP (2020): Payment for practices may be simpler than payment for conservation performance per se. For bid process, none; but recommended by economist (Dana Hoag presentation) Conceptually similar to CSP.</p>

SAG Livestock Compensation Plan Alternatives January 28, 2022								
Program Component	Alternative 1: Current Game Damage Process (i.e., preponderance of evidence standard)	Alternative 2: 2004 Wolf Working Group's Recommendations (100% FMV for confirmed, 50% FMV for probable)	Alternative 3: Simple Compensation Ratio for Missing Livestock (Stand alone)	Alternative 4: Itemization for Compensation of Production Loss and Missing Livestock (Stand alone)	Alternative 5: Producer chooses between simple compensation ratio (Alternative 3) OR Itemization (Alternative 4)	Alternative 6: Outcome-based compensation in addition to ex post (pay for performance)	Alternative 7a: Outcome-based compensation parallel to ex post alternative 1 or 2 (pay for performance/practices)	Alternative 7b: Outcome-based compensation parallel to ex post alternative 3, 4, or 5 (pay for performance/practices)
Confirmation of depredation events	Depositions completed at 100% FMV for confirmation under preponderance of evidence standard if no sales receipt/contracts. Livestock reported/claimed by wolves will be compensated up to fair market value of animal at SSA level. CPWV/WS APHS has investigative authority.	Confirmed kills paid at 100% FMV (up to \$50k). Probable kills paid at 50% of market value. Livestock reported/claimed by wolves will be compensated up to fair market value of animal at SSA level. CPWV/WS APHS has investigative authority.	100% FMV for depredation event (death or injury) but the investigating officer reasonably determines the result of a wolf depredation resulting any circumstances in the producer's favor. "Document level of confidence based on criteria TBD, e.g., highly confident, confident, reasonably confident" (it was clear evidence to help inform other management options). Livestock (including guard and herding animals) reported/claimed by wolves will be compensated up to fair market value of animal at SSA level (per statute 33.3.1014) - this limit needs to be updated if necessary. CPWV/WS APHS has investigative authority.	100% FMV for depredation event (death or injury) but the investigating officer reasonably determines the result of a wolf depredation resulting any circumstances in the producer's favor. "Document level of confidence based on criteria TBD, e.g., highly confident, confident, reasonably confident" (it was clear evidence to help inform other management options). Livestock (including guard and herding animals) reported/claimed by wolves will be compensated up to fair market value of animal at SSA level (per statute 33.3.1014) - this limit needs to be updated if necessary. CPWV/WS APHS has investigative authority.	100% FMV for depredation event (death or injury) but the investigating officer reasonably determines the result of a wolf depredation resulting any circumstances in the producer's favor. "Document level of confidence based on criteria TBD, e.g., highly confident, confident, reasonably confident" (it was clear evidence to help inform other management options). Livestock (including guard and herding animals) reported/claimed by wolves will be compensated up to fair market value of animal at SSA level (per statute 33.3.1014) - this limit needs to be updated if necessary. CPWV/WS APHS has investigative authority.	See alternative 3 for ex post compensation	Depositions investigated but have no bearing on compensation. Producers bid competitively to opt out of parallel ex-post program (Aba, 2, & 5). Bids include proactive practices as well as the amount the producer would accept to opt out of ex post; reviewed by a board and ranked based on wolf presence, risk practices, and bid. Conceptually similar to USDA Conservation Stewardship Program. Allow pooled bids from multiple producers in a geographic area. Can be complementary to other financial and technical assistance programs for conflict mitigation.	Depositions investigated but have no bearing on compensation. Producers bid competitively to opt out of parallel ex-post program (Aba, 2, & 5). Bids include proactive practices as well as the amount the producer would accept to opt out of ex post; reviewed by a board and ranked based on wolf presence, risk practices, and bid. Conceptually similar to USDA Conservation Stewardship Program. Allow pooled bids from multiple producers in a geographic area. Can be complementary to other financial and technical assistance programs for conflict mitigation.
Compensation rate for missing livestock?	No compensation for missing livestock, lowest is running age ewes (1.5 times lamb price)	No compensation for missing livestock, lowest is running age ewes (1.5 times lamb price)	A or B Compensation ratio for missing sheep & calves 1.5A or 1.5B Compensation ratio for missing yearlings Proposed 2 tier compensation ratio: 1) increased compensation rate of A for missing sheep and calves (1.5A for yearlings) 2) increased compensation rate of B for missing sheep and calves (1.5B for yearlings) if the producer employs conflict mitigation measures.	This alternative is a way to itemize for missing animals and production losses.	Producer has option to choose between either simple/straight compensation ratio (Alternative 3) or itemization (Alternative 4); producer may not do both.	N/A	N/A	N/A
Eligibility requirements for claiming/compensating missing livestock?	No compensation for missing livestock.	No compensation for missing livestock.	1. Must have a depredation event (death or injury) by a wolf. 2. Livestock must be sheep, calves or yearlings. 3. Losses are reported by the producer, filed with trust and further investigate missing livestock claims as appropriate. 4. Missing livestock claimed cannot exceed actual documented livestock loss. 5. Investigator may consider rule of thumb/estimation. 6. Conflict mitigation is not a requirement for damage compensation at a ratio of 5. 7. Any the ratio for 3 of conflict mitigation is employed (for further consideration, specific on what qualifies for the what the validation is).	1. Must have a depredation incident (death or injury) to itemize. 2. Livestock must be sheep, calves or yearlings. 3. Losses are reported by the producer, filed with trust and further investigate missing livestock claims as appropriate. 4. Missing livestock claimed cannot exceed actual documented livestock loss (following the producer set both in Wyoming's program). 5. No topography requirement. 6. Practice implementation is not a requirement for itemized damage compensation HOWEVER include an incentive for more compensation available if conflict mitigation is applied.	Eligibility requirements same as alternative 3 or 4, depending on which option the producer chooses.	N/A	N/A	N/A
Compensation amount for other (wildlife) losses (i.e., pregnancy and weaning)?	N/A	N/A	1) Compensation ratio for missing livestock attempt to account for some production losses. Additional consideration: should there be subtraction of a state average baseline (pre-wolf reintroduction) loss rate from actual missing number to be claimed? However, this would mean that the ratio likely does not attempt to cover some additional production losses. 2. Decreased weaning weights. Baseline weights over a minimum of 3 years must be submitted along with current year weights. Further consideration: role of drought years? Data can be submitted as weight tickets, production records, or sales records. 3. Decreased conception rates. Baseline conception rates over a minimum of 3 years must be submitted along with current year rates. Data can be submitted as production and/or set records. 4. Additional losses can be considered on a case-by-case basis by the division. Consider "how to factor in operation/line changes year to year"	Proven by application and documentation for additional losses as follows (can apply for one or more of the following options)... The following are general considerations, with details to be developed: 1. Missing animals. Baseline death loss is submitted with percentage over a minimum of 3 years using production records. Loss above that must be substantiated with affidavits for additional death loss. 3 year is a pre-wolf reintroduction year baseline. 2. Decreased weaning weights. Baseline weights over a minimum of 3 years must be submitted along with current year weights. Further consideration: role of drought years? Data can be submitted as weight tickets, production records, or sales records. 3. Decreased conception rates. Baseline conception rates over a minimum of 3 years must be submitted along with current year rates. Data can be submitted as production and/or set records. 4. Additional losses can be considered on a case-by-case basis by the division. Consider "how to factor in operation/line changes year to year"	See alternative 3 or 4, depending which option the producer chooses.	N/A	N/A	N/A
Eligibility for "wildlife" loss compensation?	N/A	N/A	N/A	Eligibility for production loss compensation: 1. Depredation event (death or injury) automatically qualifies a producer to apply for production loss compensation. "Consider whether it is always a requirement for itemization of production losses?"	See alternative 3 or 4, depending which option the producer chooses.	N/A	N/A	N/A
Is ante program component?	N/A	N/A	Invent in ratio differences.	As an ante program is not part of this alternative, but can be a separate program available to the producers	See alternative 3 or 4, depending which option the producer chooses.	Payments based on wolf past home range and overlap with ranches, and wolf survival to end of year. Payments based on an algorithm, similar to that used by the Mexican Wolf Livestock Council, where points are used to assign percentage of available funding. The following would be an example of the framework: - Step 1: Core Area / 2 points per core area - 1 territory / 1 point per territory = Wolf Point/2 point per pair = Subtotal A - Step 2: Subtotal A is multiplied by 2 if applicable to implementing preventive practices = Subtotal B - Step 3: The number of Livestock (ADJ cow/calf & 2, leading to 3:1) are exposed to wolves is divided by 100 = Subtotal C - Step 4: Subtotal B is multiplied by Subtotal C = Grand Total. *Aggration may be adjusted to reduce bias toward larger producers, e.g., by beginning with a minimum payment regardless of herd size.	Producer bids to opt out of all ex post compensation. *May include proactive, preventative strategies (e.g., husbandry practices, guard animals, carcass removal) and/or tools (e.g., fences, light and noise devices). *Practices may be incentivized by livestock owners (wards/treaties). *Bids are reviewed by a board and ranked based on wolf presence, livestock risk, and bid amount.	
Eligibility for ex ante?	N/A	N/A	Invent in ratio differences.	As an ante program is not part of this alternative, but can be a separate program available to the producers	See alternative 3 or 4, depending which option the producer chooses.	Livestock producer (in occupied wolf habitat). May need to result to determine ranch geography, number of livestock reported, period of time, etc.	Livestock producer (in occupied wolf habitat), by competitive bid	Livestock producer (in occupied wolf habitat), by competitive bid
Additional considerations? (phasing, program evaluation, etc.)		Require definitions for "confirmed and probable"	Collect pre-implementation baseline data as well as data on losses, claims and payments for first 2-5 years of implementation; evaluate program after the first year and adjust missing livestock compensation rate and types of animals covered as appropriate. Implement in conjunction with robust conflict mitigation program which would be evaluated to determine techniques that have merit and whether the program is robust enough. Consider operation of a compensation program in partnership with CD Department of Endow Wildlife Service to leverage relationships with producers. Once wolf status is changed to delisted, harmonize the program into an overall big game compensation program to avoid unintended consequences.	Complete data from producers who file claims to support bid the level of production losses experienced. Consideration in 3B4 should be evaluated along with also looking at which program is most widely used in an attempt to simplify the process after the selection time. Consideration in 3B4 should be evaluated along with also looking at which program is most widely used in an attempt to simplify the process after the selection time. Consideration in 3B4 should be evaluated along with also looking at which program is most widely used in an attempt to simplify the process after the selection time. Consideration in 3B4 should be evaluated along with also looking at which program is most widely used in an attempt to simplify the process after the selection time.	Conservation performance payments are for wolf survival, independent of depredations or missing livestock. Incentive for producer to prevent livestock from being killed and to find any missing livestock. Conservation performance payments are for wolf survival, independent of depredations or missing livestock. Incentive for producer to prevent livestock from being killed and to find any missing livestock. Conservation performance payments are for wolf survival, independent of depredations or missing livestock. Incentive for producer to prevent livestock from being killed and to find any missing livestock. Conservation performance payments are for wolf survival, independent of depredations or missing livestock. Incentive for producer to prevent livestock from being killed and to find any missing livestock.	Conservation performance payments are for wolf survival, independent of depredations or missing livestock. Incentive for producer to prevent livestock from being killed and to find any missing livestock. Conservation performance payments are for wolf survival, independent of depredations or missing livestock. Incentive for producer to prevent livestock from being killed and to find any missing livestock. Conservation performance payments are for wolf survival, independent of depredations or missing livestock. Incentive for producer to prevent livestock from being killed and to find any missing livestock. Conservation performance payments are for wolf survival, independent of depredations or missing livestock. Incentive for producer to prevent livestock from being killed and to find any missing livestock.	Conservation performance payments are for wolf survival, independent of depredations or missing livestock. Incentive for producer to prevent livestock from being killed and to find any missing livestock. Conservation performance payments are for wolf survival, independent of depredations or missing livestock. Incentive for producer to prevent livestock from being killed and to find any missing livestock. Conservation performance payments are for wolf survival, independent of depredations or missing livestock. Incentive for producer to prevent livestock from being killed and to find any missing livestock. Conservation performance payments are for wolf survival, independent of depredations or missing livestock. Incentive for producer to prevent livestock from being killed and to find any missing livestock.	
Documented Peer Reviewed Case Studies		Literature on numerical ratios: Oatland, 2003; Bang & Shink, 2002; Somers, 2010; Swanson, 2002; Lehman, 2007; O'Shea, 2011; O'Shea, 2011 (PWS); Ramer, 2014; Wideman, 2019; Cwik, 2011.		Shink, 2010; Somers, 2010; Lehman, 2007; O'Shea, 2011 (PWS); Ramer, 2014; Wideman, 2019; Cwik, 2011.	See alternative 3 or 4	Conservation performance payments gathered by numerous authors and most estimates (Harris 2002; Beck et al. 2011; Dickner et al. 2011; Harris 2002; Mason 2008; Dickner et al. (2011) recommended a combo with varying of funds to outcome based and monetary to ex post. Harris (2002) speculated that most benefits of performance-based could be captured by practice-based. Reference: Mexican Wolf Livestock Coexistence Council (Strategic Plan 2014) - Huilacoas can los Gatos (wolves cats in Sonora) (Nisler 2007) - Huilacoas lynx & bobcats, with semi-domesticated member (Peterson et al. 2011)	Harris/MPWP (2002) Payment for practices may be simpler than payment for conservation performance per se. For bid process, none, but recommended by economist (Dana Hoag presentation). Conceptually similar to CDP	Harris/MPWP (2002) Payment for practices may be simpler than payment for conservation performance per se. For bid process, none, but recommended by economist (Dana Hoag presentation). Conceptually similar to CDP
Program Administration, Funding Source, Etc.	Program Administered by CPW Game Damage Program Funding: Appropriations enumerated in 33-3-305.8 C.R.S. COA has exclusive jurisdiction over deprecating animals per 33-40-101 C.R.S.					Ex ante administered as with other programs; Program Administered by CPW Game Damage Program - Funding: Appropriations enumerated in 33-3-305.8 C.R.S. COA has exclusive jurisdiction over deprecating animals per 33-40-101 C.R.S. Ex ante administration TBD	Ex ante administration TBD	Ex ante administration TBD
Conflict Mitigation/Risk Reduction Assumptions/All Alternatives	Risk Reduction Program Elements: • Provide financial, technical and operational assistance to promote and implement conflict mitigation and risk reduction practices. • Apply and update, as relevant, regulations to support non-lethal conflict mitigation practices. • Support both pre-wildlife and post-depredation non-lethal practice implementation. • Enforce conflict specificity. • Recognize that not all efforts will prevent loss, while encouraging and supporting implementation and innovation. • Engage producers education and outreach, knowledge experiences and lessons of other producers. • Provide sufficient agency capacity and funding for implementation. • As necessary based on resources, provide support for those that have experienced losses. • Use public-private partnerships to support funding, outreach, and implementation.							
Outcomes/Principles Across All Alternatives	Desired outcomes: • Livestock owners are fairly compensated for losses and are not financially harmed. • Conflicts are minimized. • Wildlife are restored. • Trust and respect are built across communities. Principles: • Build trust, transparency, relationships and good will with agricultural communities. • Be consistent, equitable, fair and robust. • Value both fair compensation and personal responsibility. • Be simple and straightforward. • Provide opportunity for choice and control. • Recognize different kinds of grazing contexts. • Promote conflict minimization. • Support with sustainable funding and capacity. • Use State-Federal partnerships and public-private partnerships where appropriate for implementation and funding. • Engage education and outreach. • Build trust, transparency, relationships and good will with agricultural communities. • Be consistent, equitable, fair and robust. • Value both fair compensation and personal responsibility. • Be simple and straightforward. • Provide opportunity for choice and control. • Recognize different kinds of grazing contexts. • Promote conflict minimization. • Support with sustainable funding and capacity. • Use State-Federal partnerships and public-private partnerships where appropriate for implementation and funding. • Engage education and outreach.							
Education and Outreach	Incorporate education and outreach for producers to ensure awareness and understanding of the program and administrative processes. Incorporate education and information for the public.							

Note: This table is for digital viewing only due to font size.

Appendix B: About the Stakeholder Advisory Group

The Colorado Wolf Restoration and Management Plan Stakeholder Advisory Group (SAG) offers a broad range of perspectives and experience to inform the social implications of wolf restoration and management strategies for the Colorado Wolf Restoration and Management Plan. SAG members were selected by Colorado Parks and Wildlife (CPW) for diversity in demographics, backgrounds, geographic regions, perspectives, and knowledge in order to constitute a vibrant, diverse and inclusive stakeholder voice in the planning process. The SAG is comprised of 17 voting members and 3 non-voting members. CPW is responsible for writing the Wolf Restoration and Management Plan. The Parks and Wildlife Commission (PWC) serves as the decision-making body responsible for approving the Wolf Restoration and Management Plan. The SAG serves in an advisory capacity to Colorado Parks and Wildlife, offering non-binding input into the development of plan content. The SAG is not a decision-making body and has no authority on wolf management policy, research or operations.

The SAG strives to make decisions based on the consensus of all voting members, where possible. Where the SAG is able to achieve consensus, its input will receive priority consideration by CPW. Per the SAG charter, consensus is defined as general agreement that is shared by all the people in a group; it reflects a recommendation, option or idea that all participants can support or abide by, or, at a minimum, to which they do not object. In other words, consensus is a recommendation, option or idea that all can live with. Where consensus does not exist, a vote will be taken and the votes of individual members will be recorded along with a summary of the rationale for supportive and dissenting views.

Stakeholder Advisory Group Members:

Voting Members:

- Matt Barnes
- Donald Broom
- Jenny Burbey
- Bob Chastain
- Renee Deal
- Adam Gall
- Dan Gates
- John Howard
- Francie Jacober
- Lenny Klinglesmith
- Darlene Kobobel
- Tom Kourlis
- Brian Kurzel
- Hallie Mahowald
- Jonathan Proctor
- Gary Skiba
- Steve Whiteman

Ex Officio Members:

- Dan Gibbs, Executive Director, Colorado Department of Natural Resources
- Les Owen, Division Director, Colorado Department of Agriculture (*designee of Kate Greenberg, Commissioner, Colorado Department of Agriculture*)
- Dan Prenzlów, Director, Colorado Parks and Wildlife

Stakeholder Advisory Group report developed with third party facilitation from Keystone Policy Center.

Report on Impact-Based Management Recommendations

Colorado Wolf Restoration and Management Plan Stakeholder Advisory Group (SAG) to Colorado Parks and Wildlife (CPW)

Report on Impact-based Management Recommendations June 2022

Overview

This report summarizes Wolf Restoration and Management Plan Stakeholder Advisory Group (SAG) feedback on impact-based management recommendations discussed and developed between January 2022 and May 2022.

Discussions resulted in **SAG consensus on impact-based management assumptions** that support flexibility through an adaptive management framework. The assumptions include:

- The presence of wolves in Colorado will have both positive and negative impacts.
- Wolves will be left wherever they are if they are not causing problems.
- If wolves show up in places where conflict is likely (e.g., in proximity to livestock), practical measures should be taken to avoid problems through the use of non-lethal methods.
- If wolves are causing problems, manage to resolve the problem. When negative impacts occur, they should be addressed on a case-by-case basis utilizing a combination of appropriate management tools, including education, non-lethal conflict minimization, lethal take of wolves, and damage payments. Proactive and reactive nonlethal conflict minimization should be encouraged and explored as a first line of defense, with consideration of individual and community-level approaches. Lethal management should not generally be a first line of defense, however there may be certain conditions under which lethal take may be used first to support effective conflict management.

The assumptions also discuss engagement, outreach, and capacity to address impact-based management. The entire list of consensus assumptions is presented in this report.

The SAG also developed and reached consensus on a variety of elements within an **impact-based management framework for different Phases of wolf reintroduction in Colorado**. Phase 1 correlates with state endangered status; Phase 2 correlates with state threatened status; and Phase 3 correlates with state delisted, nongame status. Management recommendations are provided for when state authority is in place (i.e., the species is federally delisted); all management actions will be consistent with state and federal regulations.

A summary of the framework recommendations is provided here. See the report's details for specific permitting, reporting, and investigation requirements; additional considerations; and SAG rationale for support or opposition for various techniques. Where consensus was not reached, a roll call vote was documented.

Cross-cutting consensus:

- Allow education across all Phases and scenarios.
- Allow nonlethal, non-injurious and potentially injurious conflict minimization techniques, across all Phases and management scenarios.

Livestock interactions:

- **Consensus:**
 - Allowance of lethal control by state and federal agents and by producers or their agents for wolves caught in the act of biting, wounding, grasping, or killing livestock or working dogs. State statute CRS 33-2-106.4 requires permits for lethal control of a state listed species (in Phases 1 and 2), as well as reporting and investigation.
 - Discretion to CPW to make determination as to whether a situation is characterized as chronic depredation, and if so, what management actions should be taken, including whether lethal take should be allowed.
 - Allowance of lethal control of chronically depredating wolves following depredation event(s), after evaluation of circumstances, by state and federal agents across all Phases and by producers with limited duration permits in Phase 3 (correlating with state delisted, non-game).
 - No allowance of translocation of wolves when present but not causing conflict or when livestock depredation occurs.
- 14 out of 15 SAG voting members supported or did not object to the following; 1 objected:
 - Allowance of lethal take of chronically depredating wolves by a producer or agent with a limited duration permit in Phases 1 and 2 (state endangered and threatened).
 - Allowance of lethal control by state/federal agents for wolves caught in the act of chasing in all Phases, and by producers or their agents, with permit and prior depredation in area required in Phases 1 and 2.

Other wildlife species interactions:

- **Consensus:** Allowance for consideration of translocation of wolves in Phases 1, 2, and 3, with considerations, when ungulate populations are significantly below objectives in a geographic unit or area (i.e., data analysis unit, or DAU) and/or for impacts to other species of concern (e.g., grouse, lynx, etc.).
- **Other items:** SAG members did not have consensus regarding lethal control of specific wolves or wolf packs confirmed by CPW to be having an unacceptable impact on wild ungulate populations in a geographic unit or area (i.e., a DAU) or to be significantly reducing or likely to extirpate other species of concern (see discussion and Appendix B for voting results).

Other situations

- **Consensus:**
 - Allow lethal control of wolves involved in attacks on humans.
 - Allow removal of a wolf pack denning within municipal boundaries or high-density population areas.
 - Do not allow regulated public hunting of wolves in Phases 1, 2, and 3.
 - Allow additional provisions for agency operations, typically involving agreements and arrangements where state and federal wildlife agencies work in cooperation towards wildlife management activities.
- **Other items:** Regarding lethal control of wolves attacking pets and/or hunting dogs, an informal poll reflected mixed preferences among SAG members across different Phases and options.

Contents

Overview	1
Impact-Based Management Assumptions	4
Table 1: Impact-Based Management Techniques Allowed During Various Phases of Wolf Management in Colorado	6
SAG Consensus/Voting Outcomes and Discussion for Impact-Based Management Recommendations	9
Cross-cutting education and nonlethal conflict minimization themes	9
Livestock interactions	10
Other wildlife species interactions	14
Other situations	16
Appendix A: SAG Vote Results for Non-Consensus Impact-based Management Recommendations	17
Appendix B: About the Stakeholder Advisory Group	21

Impact-Based Management Assumptions

The SAG developed **consensus** impact-based gray wolf management assumptions, which were adapted from those provided by the 2004 Wolf Working Group.

Consensus is defined as general agreement that is shared by all the people in a group. It reflects a recommendation, option, or idea that all participants can support or abide by, or, at a minimum, to which they do not object. In other words, consensus is a recommendation, option, or idea that all can live with.

The management plan is predicated on managing wolves in Colorado using “impact-based” management within an adaptive management framework that will allow the state the maximum flexibility to manage wolves. The assumptions inherent in this impact-based approach are as follows:

Goals and Range of Impacts

- a) Goals of impact-based management include restoration of wolves, minimization of conflicts, minimization of lethal take, and building of trust across communities. Impact-based management should consider biological, ecological, social, agricultural, and economic dimensions of wolf management and should recognize and consider diverse perspectives on these topics.
- b) The presence of wolves in Colorado will have both positive and negative impacts.
- c) Impacts will vary in intensity and location based on a variety of factors including wolf distribution, density, and behavior; distribution, species, and density of livestock and wild ungulates; and land ownership patterns. Some impacts, such as the possibility of increased tourism, may be viewed as negative or positive by different stakeholders and communities.
- d) Negative impacts can include but are not limited to: depredation and harassment of livestock; loss of pets, herd dogs, and guard animals; dispersal of wild ungulates and possible resulting property damage; changes in hunting or viewing opportunities; changes in hunting license sales that could decrease revenue for wildlife management; and declines below management objectives in ungulate populations and/or in ungulate recruitment rates. Some negative impacts may be low on a statewide scale but can be acute on a local or individual scale, with social and economic impacts for those that are affected.
- e) Positive impacts, where they occur, should be recognized and utilized, and may include, but are not limited to: an additional tool for managing ungulates in management units where they are overpopulated; dispersal of wild ungulates resulting in habitat improvement due to less pressure on the landscape, especially in riparian areas; a decreased possibility of disease transmission and/or prevalence (including but not limited to Chronic Wasting Disease) from ungulate overpopulation and concentration; and social, economic and/or non-monetary values, such as intrinsic value, existence value, and other possible values for present and future generations.

Managing Impacts

- f) Wolves will be left wherever they are if they are not causing problems.
- g) Monitoring of wolf populations, livestock, wild ungulates, other wildlife species, hunter opportunity and success, and human attitudes is an essential aspect of impact-based management. Monitoring of other biological, economic and social dimensions may also be conducted by other actors beyond CPW.
- h) If wolves show up in places where conflict is likely (e.g., in proximity to livestock), practical

measures should be taken to avoid problems through the use of nonlethal methods. CPW and Wildlife Services – in partnership with Tribes in the case of problems on the sovereign lands of Tribal nations – will work with livestock producers to investigate, assess the situation, and take appropriate action. Public and private organizations may also provide support for conflict minimization.

- i) If wolves are causing problems, manage to resolve the problem. When negative impacts occur, they should be addressed on a case-by-case basis utilizing a combination of appropriate management tools, including education, nonlethal conflict minimization, lethal take of wolves, and damage payments. Proactive and reactive nonlethal conflict minimization should be encouraged and explored as a first line of defense, with consideration of individual and community-level approaches. Lethal management should not generally be a first line of defense, however there may be certain conditions under which lethal take may be used first to support effective conflict management.
- j) Flexibility in the array of management tools is essential to accommodate changing circumstances over time and to allow discretion for managers to consider biological and social context on the ground.
- k) Where the state has jurisdiction, management must be in compliance with federal and state regulations. Use of management of tools may be phased based on state listing status, balancing consistency across phases with specific legal considerations.
- l) Successful wildlife management includes both public and private lands; provide consistency of management across land jurisdiction where possible.
- m) As with any wildlife management program, the wolf management program will evolve through time; creative and adaptive management should be applied.

Engagement, Outreach & Capacity to Support Impact-Based Management

- n) CPW may, at its discretion, reconvene the Stakeholder Advisory Group and/or Technical Working Group or other advisory group. This group would assist in finding resolution to unexpected or non-routine developments that are likely to occur.
- o) A high degree of cooperation and coordination among management agencies within the state, among states, among state and federal partners, and between the state and Tribes is necessary to ensure that management actions and damage payments are efficient and timely. Cooperation and coordination between management agencies and the private sector can be beneficial to support conflict minimization.
- p) Education and outreach to foster shared learning and understanding of issues, management actions, and consequences is a key component of successful wolf management in Colorado. Effectiveness of education and outreach is impacted by coordination and agreement on messaging. It is important to provide producers and their agents clarity on allowable actions, legal parameters, and required permits and/or verifications.
- q) Sufficient funds and capacity should be made available to implement all aspects of this plan.

Table 1: Impact-Based Management Techniques Allowed During Various Phases of Wolf Management in Colorado

This plan is predicated on managing wolves in Colorado using "impact-based" management within an adaptive management framework that will allow the State the maximum flexibility to manage wolves. The assumptions inherent in this impact-based approach are that the presence of wolves in Colorado will have both positive and negative impacts. The positive impacts of having wolves on the landscape will be recognized and utilized without having to implement direct wolf management practices. The negative impacts of wolves may involve direct intervention. Negative impacts can include but are not limited to: depredation and harassment of livestock; loss of pets, herd dogs and guard animals; and declines below management objectives in ungulate populations and/or in ungulate recruitment rates. This table describes what the intervention may be implemented to address the negative impacts of having wolves on the landscape. **The management descriptions below will be in compliance with federal and state regulations.**

(Note: not all impacts can be predicted, allow flexibility where specific impacts and actions not prescribed)

Final language discussed and voted upon by the Wolf Plan Stakeholder Advisory Group on May 25, 2022.

Color coding added after the vote to reflect the following:

Full consensus of the SAG.
14 out of 15 SAG voting members supported or did not object; 1 objected.
Other vote result or no formal vote.

Impact	Management tools	Phase 1 (correlating w/Endangered status)	Phase 2 (correlating w/Threatened status)	Phase 3 (correlating with delisted, non-game)	Additional /other considerations across phases	
Livestock interactions						
Present but not biting, wounding grasping or killing or chasing; no prior attacks	Education	Allowed	Allowed	Allowed	This is an important and effective tool both proactively and reactively to depredation events	
	Non-injurious, Nonlethal Conflict Minimization Practices (e.g., fladry, range riders, livestock guardian dogs)	Allowed	Allowed	Allowed	Non-injurious harassment of wolves includes scaring off an animal(s) by making loud noises (e.g., confronting the animal(s) without doing bodily harm). If known injury or death of a wolf occurs, CPW must be notified within 48 hours. Training will be provided by CPW staff at the time of deployment of materials.	
	Potentially injurious hazing techniques (Rubber buckshot, rubber slugs, etc.)	Allowed	Allowed	Allowed	Non-lethal injurious harassment means scaring off a wolf (or wolves) without killing but with potential for minor injury to the wolf and includes rubber bullets, bean bag projectiles. Not currently allowed under CPW regulations, previous 10(j) rules have allowed.	
	Translocation	Not applicable	Not applicable	Not applicable		
	Lethal take	Not Allowed	Not Allowed	Not Allowed		
Observed in act of biting, wounding, grasping or killing -OR- Observed in the act of chasing	Non-injurious, Nonlethal Conflict Minimization Practices (e.g., fladry, range riders, livestock guardian dogs)	Allowed	Allowed	Allowed	Non-injurious harassment of wolves includes scaring off an animal(s) by making loud noises (e.g. confronting the animal(s) without doing bodily harm). If known injury or death of a wolf occurs, CPW must be notified within 48 hours. Training will be provided by CPW staff at the time of deployment of materials.	
	Potentially injurious hazing techniques (Rubber buckshot, cracker shells, etc.)	Allowed	Allowed	Allowed	Non-lethal injurious harassment means scaring off a wolf (or wolves) without killing but with potential for minor injury to the wolf and includes rubber bullets, bean bag projectiles. Not currently allowed under CPW regulations, previous 10(j) rules have allowed.	
	Lethal Control for wolves caught in the act of BITING, WOUNDING, GRASPING or KILLING livestock or working dogs <i>Nonlethal tools should be explored and encouraged before lethal; lethal management should not generally be a first line of defense.</i>	Allowed by State/Fed agents	Limited duration permit for lethal take may be issued to producer or agent on private or public land; proof of attack required following lethal take - <i>requires reporting, and investigation demonstrating evidence to justify act.</i>	Allowed by State/Fed agents	Allowed by a producer or agent without a permit on private and public lands, permissible for producers to take action on wolves when biting, wounding, grasping, or killing - <i>requires reporting, and investigation demonstrating evidence to justify act.</i>	While the likelihood of observing a wolf in the act of biting, wounding grasping killing or chasing is rare and the likelihood of implementing lethal control in this context is also rare, this management approach provides producers with tools to respond, should the situation occur. Nonlethal tools should be explored and encouraged before lethal; lethal management should not generally be a first line of defense. There may be certain conditions under which lethal take may be used sooner or first to support effective conflict management and a successful recovery (e.g., specific scenarios, situations where non-lethals are less likely to be effective, etc.); managers should consider context on the ground (biological and social considerations for population growth, pack dynamics and distribution of wolves, recent and proximal depredations, etc.). Such scenarios where lethal control is implemented must be reported within 24 hours and injured or dead livestock or dogs or physical evidence that would lead a reasonable person to believe that an attack would occur at any moment on livestock or dogs must be evident to verify the wolf attack.
	Lethal take for wolves in the act of CHASING (necessary to prevent depredating animals from inflicting death or injury to livestock or damaging agricultural products or resources) <i>Nonlethal tools should be explored and encouraged before lethal; lethal management should not generally be a first line of defense.</i>	Allowed by State/Fed agents	Limited duration permit for lethal take may be issued to producer or agent on private or public land based on a prior depredation event (your livestock or in area) - <i>requires reporting, and investigation demonstrating evidence to justify act.</i>	Allowed by State/Fed agents	Allowed by a producer (or agent) without a permit on private and public lands, permissible for producers to take action on wolves when chasing - <i>requires reporting, and investigation demonstrating evidence to justify act.</i>	Permit required under state law CRS 33-2-106.4. Upon good cause shown and where necessary to alleviate damage to property or to protect human health, endangered or threatened species may be removed, captured, or destroyed but only pursuant to permit issued by the division and, where possible, by or under the supervision of an agent of the division. Provisions for removal, capture, or destruction of nongame wildlife for the purposes set forth in this subsection (4) shall be set forth in regulations issued by the commission pursuant to section 33-2-104(1). Issuance of a permit accompanied by information and encouragement of nonlethal tools. Definition of CHASING is from CRS 35-40-100.2(5) as part of "Pose a threat" <i>Note that sufficient evidence must be available following lethal control for wolves chasing livestock such that a law enforcement officer has the ability to determine wolves were in the act of chasing livestock. Without sufficient evidence, lethal control is not justified for wolves chasing livestock.</i>

Impact	Management tools	Phase 1 (correlating w/Endangered status)	Phase 2 (correlating w/Threatened status)	Phase 3 (correlating with delisted, non-game)	Additional /other considerations across phases
Management following confirmed depredation(s) (death of livestock)	Education	Allowed		Allowed	This is an important and effective tool both proactively and reactively to depredation events
	Non-injurious Nonlethal Conflict Minimization Practices (e.g., fladry, range riders, livestock guarding dogs)	Allowed		Allowed	Non-injurious harassment of wolves includes scaring off an animal(s) by making loud noises (e.g., confronting the animal(s) without doing bodily harm). If known injury or death of a wolf occurs, CPW must be notified within 48 hours. Training will be provided by CPW staff at the time of deployment of materials.
	Potentially injurious hazing techniques (Rubber buckshot, cracker shells, etc.)	Allowed		Allowed	Non-lethal injurious harassment means scaring off a wolf (or wolves) without killing but with potential for minor injury to the wolf and includes rubber bullets, bean bag projectiles. Not currently allowed under CPW regulations, previous 10(j) rules have allowed.
	Translocation, post depredation	Not Allowed		Not Allowed	Translocation will not be used if animals are known or suspected to have depredated on livestock or pets.
	Lethal Control of Chronically Depredating Wolves following depredation event(s) <i>Nonlethal tools should be explored and encouraged before lethal; lethal management should not generally be a first line of defense.</i>	Allowed by State/Fed agents (consistent with federal law) after evaluation of circumstances.	Limited duration permits for lethal take may be issued to producer or agent on public or private land after evaluation of circumstances. Evaluation will consider status and number of wolves in the state, among other considerations (Column F). Only issued if state/federal agencies do not have the resources to implement on-the-ground lethal control actions - <u>requires reporting, and investigation demonstrating evidence to justify act.</u>	Allowed by State/Fed agents (consistent with federal law) after evaluation of circumstances. Limited duration permits for lethal take may be issued to producer or agent on public or private land after evaluation of circumstances. Evaluation will consider status and number of wolves in the state, among other considerations (Column F). Only issued if state/federal agencies do not have the resources to implement on-the-ground lethal control actions - <u>requires reporting, and investigation demonstrating evidence to justify act.</u>	SAG recommends [by consensus] that it should be left to the discretion of CPW to make determination as to whether a situation is characterized as Chronic Depredation, and if so, what management actions should be taken, including whether lethal take should be allowed. This evaluation of circumstances will include considerations such as the status and number of the wolves in the state, documented repeated depredation and harassment in a limited geography caused by wolves, previously implemented practices to minimize/reduce depredation, likelihood of additional and continued wolf related mortality will continue if control is or is not implemented, intentional use of attractants that may be luring or baiting wolves to the location. Discretion is addressed at a programmatic or leadership level; it is not a field-level determination. Permit required under state law CRS 33-2-106.4. Upon good cause shown and where necessary to alleviate damage to property or to protect human health, endangered or threatened species may be removed, captured, or destroyed but only pursuant to permit issued by the division and, where possible, by or under the supervision of an agent of the division. Provisions for removal, capture, or destruction of nongame wildlife for the purposes set forth in this subsection (4) shall be set forth in regulations issued by the commission pursuant to section 33-2-104(1)
Other Wildlife Species Interactions					
Wolves present, no apparent population level negative impacts to other wildlife species observed	No direct wolf management necessary	Education and outreach		Education and outreach	
Ungulate populations significantly below objectives in a geographic unit or area (i.e., DAU)	Translocation	Allowed, with considerations		Allowed by state/federal agents with considerations In addressing appropriate management response to wild ungulate impacts, CPW will require: 1) data or other information indicating that wolves are a major cause of ungulate herds not meeting objectives; and will consider: 2) ability to address the situation through non-lethal means; 3) the level and duration of wolf removal necessary to achieve management objectives; 4) ability to measure ungulate response to management actions; and, 5) identification of other potential major causes of an ungulate population not meeting objectives and attempts made to address them.	Unacceptable impact is defined as an impact to an ungulate population or herd where CPW has determined that wolves are one of the major causes of the population or herd not meeting established state management goals. Wolf removals must not contribute to reducing the wolf population in the state below 150 wolves. There may be additional unit areas (i.e., specially managed GMUs or research areas) that are also considered.
Impacts to other species (grouse, lynx, etc.)	Translocation	Allowed, with considerations			Though not expected, potential that wolf population at higher levels (Phase 3) may have some impact on sustainability of species of concern. Per TWG input, not expected that wolves will have any impact on grouse or lynx populations.
	Lethal control of specific wolves or wolf packs confirmed by CPW to be significantly reducing or likely to extirpate other species of concern	Not allowed		Potentially allowed by state/federal agents, with same consideration as described in row describing ungulate management.	

Impact	Management tools	Phase 1 (correlating w/Endangered status)	Phase 2 (correlating w/Threatened status)	Phase 3 (correlating with delisted, non-game)	Additional /other considerations across phases
Other Situations					
Wolves present, no human health or safety risks posed	No direct wolf management necessary	Education and outreach		Education and outreach	
Human safety	Lethal control of wolves involved in the attack on humans	Allowed by any person in self defense		Allowed by any person in self defense	Unlikely/rare – allowance same according to state/federal law. Any person may take a wolf in self defense, only State/Federal agents may take wolves deemed to be a threat to human safety that are not involved actively attacking a person.
		Allowed by state/federal agent for animals not involved in actively attacking, but have attacked a person.		Allowed by state/federal agent for animals not involved in actively attacking, but have attacked a person.	
Pet attacked	Lethal control of wolves attacking (Biting, wounding, grasping, killing) pets	Alternative 1: Allowed by any person when attacking - <u>requires reporting, and investigation demonstrating evidence to justify act.</u>		Alternative 1: Allowed by any person when attacking - <u>requires reporting, and investigation demonstrating evidence to justify act.</u>	<i>To be consistent with current game damage, this would not be allowed</i>
	Non-lethal deterrence should be explored and encouraged before lethal	Alternative 2: Not allowed by any person when attacking		Alternative 2: Not allowed by any person when attacking	
Hunting dog attacked	Lethal control of wolves attacking (Biting, wounding, grasping, killing) hunting dogs	Alternative 1: Allowed by any person when attacking - <u>requires reporting, and investigation demonstrating evidence to justify act.</u>		Alternative 1: Allowed by any person when attacking - <u>requires reporting, and investigation demonstrating evidence to justify act.</u>	<i>To be consistent with current game damage, this would not be allowed</i>
	Non-lethal deterrence should be explored and encouraged before lethal	Alternative 2: Not allowed by any person when attacking		Alternative 2: Not allowed by any person when attacking	
Wolves denning within municipal boundaries/in high density population area	Removal of pack by state or federal agents	Allowed		Allowed	Translocation will be considered and implemented if possible.
Limited Quota hunts	Regulated hunting of wolves	Not allowed		Not allowed	When the state wolf population meets appropriate criteria, limited quota hunts will be discussed as a management tool (Phase 4)
Additional provisions for agency operations	Per existing agreements with state and federal agencies, take (non-lethal and lethal) by state and federal agents is allowed for scientific purposes, to avoid conflict with human activities, to relocate a wolf to enhance survival and recovery prospects, to aid or euthanize sick, injured wolves, to salvage dead specimens, to aid in law enforcement investigations involving wolves, and to manage wolves with abnormal physical or behavioral characteristics.				

SAG Consensus/Voting Outcomes and Discussion for Impact-Based Management Recommendations

SAG members developed and achieved consensus on a variety of impact-based gray wolf management recommendations, as reflected in the table above and summarized in narrative form in this section. In the absence of full consensus, roll call votes were taken; the votes are recorded in the tables in Appendix A. For several items, as noted below, 14 out of 15 SAG voting members supported or did not object; 1 objected.

Phases refer to the following:

- Phase 1 correlates with state endangered status
- Phase 2 correlates with state threatened status
- Phase 3 correlates with state delisted, nongame status

The Technical Working Group (TWG) has developed *Technical Recommendations for Colorado State Listing/Delisting Thresholds and Phasing*, in which it provided feedback for specific population recovery thresholds corresponding to these Phases. The SAG was charged with developing recommendations regarding management within these Phases. Phases refer to state status, and management recommendations are provided for when state authority is in place (i.e., the species is federally delisted). All management actions will be consistent with state and federal regulations.

This section provides a brief summary of consensus or voting outcomes for items in the impact-based management table, along with brief discussion of rationale for support, opposition (where relevant), and/or additional considerations. *Specific rationales and/or additional considerations reflect a range of feedback from SAG discussion, and do not necessarily reflect consensus of all members.*

Cross-cutting education and nonlethal conflict minimization themes

Consensus items:

- Allow education across all Phases and scenarios.
- Allow nonlethal non-injurious and potentially injurious conflict minimization techniques, across all Phases and depredation conditions.

Discussion:

- SAG discussion frequently emphasized the impact-based management assumption (i) that proactive and reactive nonlethal conflict minimization should be encouraged and explored as a first line of defense, with consideration of individual and community-level approaches. Lethal management should not generally be a first line of defense, however there may be certain conditions under which lethal take may be used first to support effective conflict management.
- Discussion also emphasized the importance of outreach and education, particularly for producers and agents in order to explain what management actions are allowed, and with what permitting, reporting, and investigation requirements.
- Discussion also emphasized the importance of funding and capacity for wolf management.

Livestock interactions

Lethal control of wolves biting, wounding, grasping, or killing livestock and working dogs

The SAG had consensus for allowance of lethal control for wolves caught in the act of biting, wounding, grasping, or killing livestock or working dogs, as follows:

- Phase 1, 2, and 3: Allowed by state and federal agents
- Phase 1 and 2: Limited duration permit for lethal take may be issued to a producer or agent on private or public land; proof of attack required following lethal take - requires reporting, and investigation demonstrating evidence to justify act.
- Phase 3: Allowed by a producer or agent without a permit on private and public lands, permissible for producers to take action on wolves when biting, wounding, grasping, or killing - requires reporting, and investigation demonstrating evidence to justify act.

Rationale for support

- Allowance of lethal control of wolves caught in the act of biting, wounding, grasping, or killing livestock is simple to understand and communicate because of the stipulation that wolves must have 'teeth on' livestock or working dogs.
- While the feasibility of lethally firing on an attacking wolf is low, this allowance provides a range of tools for producers to respond to and defend livestock. This flexibility also creates good will and potentially increases trust.
- State statute CRS 33-2-106.4 requires permits for lethal control of a state listed species (i.e., Phases 1 and 2); allowing producers to lethally take a depredating wolf with no permit in Phase 3 reflects the change in value of individual wolves as wolf populations grow larger in Colorado.
- Emphasis on nonlethal conflict minimization as a first line of defense is reflected in the provision that issuance of a permit is accompanied by information and encouragement of nonlethal tools; education can also be incorporated into the investigation process to minimize future conflict.
- Consistency of rules on private and public lands provides clarity to producers and avoids difficulty of distinguishing land ownership type.

Additional considerations

- Lethal rounds may be more likely to be on hand than rubber buckshot when responding to caught-in-the-act depredation when no wolves were previously confirmed to be present. Other nonlethal tools may be limited and less effective when the wolf already has 'teeth on' livestock or working dogs.
- If wolves are known to be in the general area, the process for a producer to obtain a permit should be streamlined and efficient. Prior depredation is not recommended as a permit requirement for a wolf that is caught with 'teeth on.'
- There is some concern for burdensome verification requirements to confirm evidence of wolf depredation. Emphasize flexibility to allow use of video or photographic evidence when investigations cannot be conducted in a timely manner. There needs to be clarity of what evidence is acceptable.

Lethal control of wolves chasing livestock

14 out of 15 SAG voting members supported or did not object, and 1 objected, regarding allowance of lethal take of wolves in the act of chasing (necessary to prevent depredating animals from inflicting

death or injury to livestock or damaging agricultural products or resources). Refer to Appendix A, Table A-i for the vote results on the following:

- Phase 1, 2, and 3: Allowed by state and federal agents
- Phase 1 and 2: Limited duration permit for lethal take may be issued to producer or agent on private or public land based on a prior depredation event (your livestock or in area) - requires reporting, and investigation demonstrating evidence to justify act.
- Phase 3: Allowed by a producer or agent without a permit on private and public lands, permissible for producers to take action on wolves when chasing - requires reporting, and investigation demonstrating evidence to justify act.

Rationale for support

- While the feasibility of lethal control of a chasing wolf is unlikely, allowing producers to attempt to take chasing wolves may prevent depredation and also creates good will and potentially increases trust.
- State statute CRS 33-2-106.4 requires permits for lethal control of a state listed species (i.e., Phases 1 and 2); allowing producers to lethally take a depredating wolf with no permit in Phase 3 reflects the change in value of individual wolves as wolf populations grow larger in Colorado.
- The permit requirement of a prior depredation to a producer's livestock or in the producer's area in Phases 1 and 2 underscores that lethal take of chasing wolves in early Phases is intended to be directed to wolves that have already been involved in conflict.
- There is potential value in lethally controlling individual wolves who display emboldened behaviors in order to mitigate production losses to livestock and/or to prevent the whole pack from adopting these conflict behaviors.
- The experience of producers and agents in the field enables them to determine chasing behaviors and differentiate them from other behaviors.
- The Technical Working Group (TWG)'s proposed temporal requirements to move from state endangered to threatened and delisted status mean that wolf populations could be large while still listed as state endangered, supporting allowance of lethal take at earlier Phases.

Rationale for opposition

- Even with robust education, chasing and testing behaviors are difficult to discern in the field and in the moment of potential conflict.
- Allowance of lethal take for chasing would create a low bar for someone to use as an excuse for lethal take when other nonlethal techniques could be used. Chasing behavior provides an opportunity to train wolves away from livestock using nonlethal techniques.
- Allowance of lethal take for chasing wolves in early Phases may not support a self-sustaining population and may face public opposition.

Additional considerations

- Provide education to producers and their agents regarding nonlethal techniques that can be used to deter chasing behavior, and information to understand wolf body language and behaviors.
- There must be robust investigation to verify chasing if a wolf is taken. Use of existing statutory definitions and 'necessary to prevent' language would streamline and simplify standards for allowance and investigation of chasing.
- There was interest in a clearer definition for chasing to better capture a sense of "imminent threat;" this could be included in all Phases.
- The definition of a depredation 'event' may need to be clarified in the framework as including death, damage, or injury.

Lethal control of chronically depredating wolves

The SAG had consensus support regarding control of chronically depredating wolves following depredation event(s):

- It should be left to the discretion of CPW to make a determination as to whether a situation is characterized as chronic depredation, and if so, what management actions should be taken, including whether lethal take should be allowed.
- Allowance of lethal control of chronically depredating wolves following depredation event(s):
 - Phase 1, 2, and 3: Allowed by state/federal agents (consistent with federal law) after evaluation of circumstances.
 - Phase 3: Limited duration permits for lethal take may be issued to producer or agent on public or private land after evaluation of circumstances. Evaluation will consider status and number of wolves in the state, among other considerations (see Table 1 for details). Permits will only be issued if state/federal agencies do not have the resources to implement lethal control actions - requires reporting, and investigation demonstrating evidence to justify the act.

14 out of 15 SAG voting members supported or did not object, and 1 objected, regarding the following:

Refer to Appendix A, Table A-ii for the vote results on this topic.

- Allowance of lethal control of chronically depredating wolves following depredation event(s):
 - Phase 1 and 2: Limited duration permits for lethal take may be issued to producer or agent on public or private land after evaluation of circumstances. Evaluation will consider status and number of wolves in the state, among other considerations (see Table for details). Only issued if state/federal agencies do not have the resources to implement lethal control actions - requires reporting, and investigation demonstrating evidence to justify the act.

Rationale for support of agency discretion to determine chronic depredation

- Flexibility on a case-by-case basis will allow better development and maintenance of relationships and trust with livestock producers.
- Discretion allows context-specific evaluation of a variety of considerations such as the status and number of the wolves in the state, documented repeated depredation and harassment in a limited geography caused by wolves, previously implemented practices to minimize/reduce depredation, likelihood that additional and continued wolf related mortality will continue if control is or is not implemented, and intentional use of attractants that may be luring or baiting wolves to the location.
- Allowing discretion for the agency to determine chronic depredation would be more effective to deal with outlying or extreme cases of depredation. Chronic depredation may be the exception, rather than the norm.
- Fixed numeric thresholds (i.e., x depredation in y amount of time) may be too restrictive or too liberal; do not sufficiently allow for evaluation of the context and conflicts; have not been met with success in other states; and can damage relationships and trust between agencies and livestock producers.

Rationale for support of lethal take of chronically depredating wolves

- *Support for state and federal agency allowance:*
 - It is important to lead with trust in and flexibility for state and federal agents to lethally control chronically depredating wolves.

- The public may be more willing to trust state and federal agents to remove chronically depredating wolves in earlier stages of reintroduction.
- State and federal agents' abilities to investigate and track wolves may increase ability to target the wolves that are chronic depredators.
- *Support for producer or agent allowance:*
 - Agency capacity limitations may affect ability to address chronic depredation as the wolf population grows larger.
 - The Technical Working Group (TWG)'s proposed temporal requirements to move from state endangered to threatened and delisted status mean that wolf populations could be large while still listed as state endangered, supporting allowance of lethal take by producers at earlier Phases.
 - Although it is preferential, particularly in early Phases, for state and federal agents to remove chronic depredators, it is important to allow producers to lethally take wolves when state and federal agencies lack capacity to efficiently address problems.
 - It is important to trust agencies to give out permits to landowners judiciously, including in earlier Phases of reintroduction.
 - Landowners may be better situated to respond quickly to chronic depredation, particularly given the remoteness of their operations as well as the producers' and agents' knowledge of the terrain within which they operate.

Rationale for opposition of producer/agent lethal take of chronically depredating wolves in Phases 1 and 2

- Allowing livestock producers to take wolves that are state endangered or threatened would be met with significant public backlash.
- There is concern that producers will not be as effective at targeting chronic depredating individuals.
- State and federal agencies should be funded to provide capacity to manage chronic depredators at lower wolf populations.

Additional considerations

- Additional hiring of state and federal agency staff can mitigate capacity issues; adequate funding to address capacity issues to respond to depredation is needed.
- Clear communication between levels of agency leadership is important in addressing chronic depredation. Discretion for determining whether a situation meets the characteristics of being a chronic depredation circumstance, and if so, what management to apply, is addressed at a programmatic or leadership level; it is not a field-level determination.
- If permits are issued to producers or agents, close communication and coordination between producers/agents and state or federal agents could improve a landowner's certainty of effectively targeting wolves that are chronic depredators.
- Producer permits should be allowed only within defined proximity of investigated and confirmed livestock depredations.
- Evaluation criteria for defining chronic depredation and determining management actions should be used as examples within a holistic framework, rather than a prescriptive checklist.
- A policy statement on lethal control for chronic depredations could be crafted based on literature review, e.g., "Lethal control of wolves is appropriate when conflicts are likely to continue, nonlethal methods have been attempted and/or are unlikely to be successful, domestic animals were clearly killed by wolves, and there is no evidence of intentional feeding or unnatural attraction of wolves. If implemented, lethal control should be targeted to wolves involved in conflict, swift, effective, as humane as possible, and closely monitored."

- Do not consider translocation of wolves when present but not causing conflict. Translocation should also not be considered to displace depredating wolves to other areas where they may continue to cause conflict.
- The definition of a depredation ‘event’ may need to be clarified in the framework as including death, damage, or injury.

Other wildlife species interactions

The SAG had consensus for consideration of allowance of translocation of specific wolves or wolf packs confirmed by CPW to be having an unacceptable impact on wild ungulate populations in a geographic unit or area (i.e., a DAU) and/or for impacts to other species of concern (e.g., threatened and endangered species such as grouse, lynx, or other species of conservation need etc.).

The SAG discussed but did not have consensus for the following: Refer to Appendix A, Tables A-iii and A-iv for the vote results on these topics.

- Lethal control of specific wolves or wolf packs confirmed by CPW to be having an unacceptable impact on wild ungulate populations in a geographic unit or area (i.e., a DAU):
 - Not allowed in Phases 1 and 2. (10 out of 15 SAG voting members supported or did not object; 5 objected)
 - Allowed with considerations in Phase 3 (see table for details of considerations). (12 out of 15 SAG voting members supported or did not object; 3 objected)
- Lethal control of specific wolves or wolf packs confirmed by CPW to be significantly reducing or likely to extirpate other species of concern:
 - Not allowed in Phases 1 and 2. (8 out of 15 SAG voting members supported or did not object; 7 objected)
 - Allowed with considerations in Phase 3 (see table for details of considerations). (13 out of 15 SAG voting members supported or did not object; 2 objected)

Rationale for support for translocation of wolves:

- Translocation of wolves should be considered if wolves cause ungulate populations to decline to below objective in a given management area, or if other species of concern are impacted.
- Translocation would redistribute impacts of wolves to areas where ungulate herds or other species of concern are less likely to experience significant impact.
- Translocation of wolves for the above reasons may be more effective at earlier Phases of restoration and less effective when a larger population of wolves is widely dispersed throughout Colorado.

Rationale for support of lethal take of wolves impacting ungulates or other species of concern:

In any Phase:

- Flexibility of management tools to respond to impacts on ungulates should be similar to those available for livestock interactions.
 - Livestock producers have more options for addressing and/or being compensated for impacts than hunters or outfitters.
 - Short of translocating wolves, the primary option to relieve impacts on ungulates without lethal take of wolves is to decrease hunting opportunities.
- Impact-based management of wolves for impacts to ungulates should include ability to respond to local impacts that may be acute in one region even if there are not impacts across the state.

- Local impacts of concern could include decline in ungulate populations leading to decline in cow hunting licenses, upon which many Colorado families depend for an annual meat source.
- Ability to respond to local impacts with lethal control can also mitigate impacts to CPW's overall funding, which relies heavily on hunting licenses including from out-of-state hunters. There is concern for a decline in interest from out-of-state hunters due to perceived negative impacts from wolves on the landscape.
- Though unlikely to occur, flexibility to respond to impacts to other species of concern should be allowed in any Phase; Colorado has invested resources in a variety of species of concern.

In Phase 3 only:

- While likelihood of need for and use of lethal take to control wolf impacts to ungulates or other species may be low, higher wolf populations in Phase 3 support flexibility for lethal take, with considerations as described in Table 1. This flexibility would be accompanied by multi-year data or other information, collected through Phases 1 and 2, indicating that wolves are a major cause of ungulate herds not meeting objectives or of significant impacts to other species of concern.

Rationale for opposition of lethal take of wolves impacting ungulates or other species of concern:

In any Phase:

- Wolves are natural predators of ungulates and thus should not be managed for their natural behavior.
- Wolves' natural predation of ungulates should not be considered a negative impact; wolves may prey more frequently on elderly or sick elk, creating a healthier herd overall.
- There should be a high standard of evidence that wolves are the cause of decline of ungulate populations. Other environmental factors (e.g., climate and disease) contribute to impacts on ungulates and other wildlife species.

In Phases 1 and 2 only:

- Insufficient time to collect multi-year data on impacts of wolves to ungulates or species of concern, and lower wolf populations, would not support lethal take of wolves for impacts to ungulates or other species of concern early in restoration.

Additional considerations

- Use a standardized unit of area to guide evaluation of wolf impact. Specifically, use a data analysis unit (DAU), which has precedence guiding ungulate management objectives.
 - SAG members discussed whether DAUs apply to every management scenario in Colorado for which lethal take of wolves due to impacts on ungulates would be considered. Some suggested special management units may need to be considered as well to align with existing management and because wolf effects on ungulates may occur at scales smaller than a DAU.
 - Others suggested DAUs are the only appropriate metric. DAUs are the smallest scale at which CPW conducts sampling, surveying, and modeling for ungulates.
 - Detecting and measuring effects at smaller scales may be challenging because of animal movements within the DAU, and a special, targeted monitoring scheme, if designed, would not be consistent with how CPW manages other ungulate populations.
 - CPW should determine which unit area metrics are appropriate.
- There were calls to better understand:

- Impacts on elk herds like habitat loss from fires, population growth, and climate change, along with the number of elk a wolf is expected to take each year, and subsequent impacts on the number of elk licenses made available and declines in agency revenue.
- How quickly the agency would be able to respond to impacts that are measured through studies.
- SAG members discussed relevance of the North American model of wildlife conservation for these scenarios; some suggested the model could be interpreted to support management of wolves for impacts to ungulates; others expressed concern that this model is not suitable for wolf management because of the wolf's current status as an endangered species and because current law prohibits use of license fees for wolf management. Further, various stakeholders have differing views on the model's historic and present success.
- Consider additional activities to manage ungulates to proactively mitigate and/or avoid any potential significant declines to ungulate populations that could impact hunters, outfitters, livestock producers that use hunting/outfitters as an additional income source, and rural economies; and to mitigate the kind of social conflict ongoing in the Northern Rocky Mountain states. *More detailed discussion of opportunities for management of ungulates will occur separately.*

Other situations

The SAG had consensus on management for the following additional situations:

- Allow lethal control of wolves involved in attacks on humans.
- Allow removal of a wolf pack denning within municipal boundaries or high-density population areas.
- Do not allow regulated hunting of wolves in Phases 1, 2, and 3.
- Allow additional provisions for agency operations, including lethal and nonlethal take by state or federal agencies for scientific purposes, to avoid conflict with human activities, to relocate a wolf to enhance survival and recovery prospects, to aid or euthanize sick, injured wolves, to salvage dead specimens, to aid in law enforcement investigations involving wolves, and to manage wolves with abnormal physical or behavioral characteristics.

Regarding lethal control of wolves attacking pets and/or hunting dogs, no formal roll call vote was taken.

- An informal poll of SAG members' preferences was taken in lieu of robust conversation due to time constraints and SAG feedback regarding prioritization of this discussion topic. The informal poll reflected mixed preferences among SAG members across different Phases and options. Allowance of lethal take of wolves when attacking pets generally received more informal opposition and more responses of 'no preference' than allowance of lethal take for wolves when attacking hunting dogs.
- Brief discussion of considerations to allow lethal take of wolves attacking pets included:
 - Concern for a lower standard to allow take of wolves attacking pets compared to livestock (i.e., no permit required for take of wolves attacking pets); the existing standard for bear and lion does not allow lethal take when attacking pets, however there is potential for interspecies aggression among wolves and dogs; pets should be managed, rather than wolves, to avoid conflicts; and consideration of pets' role as 'family' members. Members suggested not allowing lethal take of wolves only chasing rather than biting/wounding/killing) pets.
 - Additionally, some members suggested a different allowance for lethal take when wolves attack hunting dogs, given hunting dogs' role in wildlife management and/or their role in and cost to hunters and hunting and outfitting businesses.

Appendix A: SAG Vote Results for Non-Consensus Impact-based Management Recommendations

Table A-i: Vote Results regarding wolves caught in the act of chasing

		Lethal take for wolves in the act of CHASING (necessary to prevent depredating animals from inflicting death or injury to livestock or damaging agricultural products or resources)		
Depredation Condition:				
Phase		1, 2,3	1 & 2	3
First Name	Last Name	Allowed by state/fed agents	Limited duration permit for lethal take may be issued to producer or agent on private or public land based on a prior depredation event (your livestock or in area) - requires reporting, and investigation demonstrating evidence to justify act.	Allowed by a producer (or agent) without a permit on private and public lands, permissible for producers to take action on wolves when chasing - requires reporting, and investigation demonstrating evidence to justify act.
Matt	Barnes	2	3	2
Donald	Broom	2	1	1
Jenny	Burbey	1	1	1
Bob	Chastain	2	3	2
Renee	Deal	1	1	1
Adam	Gall	Absent	Absent	Absent
Dan	Gates	1	2	1
John	Howard	Absent	Absent	Absent
Francie	Jacober	3	3	2
Lenny	Klinglesmith	1	1	1
Darlene	Kobobel	4	4	4
Tom	Kourlis	1	1	1
Brian	Kurzel	2	3	2
Hallie	Mahowald	1	1	1
Jonathan	Proctor	3	3	3
Gary	Skiba	3	3	2
Steve	Whiteman	2	3	2
Total support/no objection (1, 2, or 3)		14	14	14
Total objections (4 or 5)		1	1	1
Additional language relevant to each item is in the "Impact-Based Management Framework." Voting reflects this additional language, which includes considerations such as exploring and encouraging non-lethal techniques before lethal and additional considerations proposed by the SAG.				
*Consensus scale:				
1	Enthusiastically support			
2	Support			
3	Can abide by or live with; do not object			
4	Object			
5	Strongly object			

Table A-ii: Vote Results regarding limited duration permits for producer or agent for lethal take of chronically depredated wolves

Depredation Condition:		Lethal Control of Chronically Depredating Wolves following depredation event(s)
Phase		1 & 2
First Name	Last Name	Limited duration permits for lethal take may be issued to producer or agent on public or private land after evaluation of circumstances. Evaluation will consider status and number of wolves in the state, among other considerations (Column F). Only issued if state/federal agencies do not have the resources to implement on-the-ground lethal control actions - requires reporting, and investigation demonstrating evidence to justify act.
Matt	Barnes	3
Donald	Broom	1
Jenny	Burbey	1
Bob	Chastain	2
Renee	Deal	2
Adam	Gall	Absent
Dan	Gates	2
John	Howard	Absent
Francie	Jacober	2
Lenny	Klinglesmith	1
Darlene	Kobobel	3
Tom	Kourlis	1
Brian	Kurzel	3
Hallie	Mahowald	2
Jonathan	Proctor	4
Gary	Skiba	3
Steve	Whiteman	3
Total support/no objection (1, 2, or 3)		14
Total objections (4 or 5)		1
Additional language relevant to each item is in the "Impact-Based Management Framework." Voting reflects this additional language, which includes considerations such as exploring and encouraging non-lethal techniques before lethal and additional considerations proposed by the SAG.		
*Consensus scale:		
1	Enthusiastically support	
2	Support	
3	Can abide by or live with; do not object	
4	Object	
5	Strongly object	

Table A-iii: Vote Results regarding lethal control of wolves having an unacceptable impact on wild ungulate populations

		Lethal control of specific wolves or wolf packs confirmed by CPW to be having an unacceptable impact on wild ungulate populations in a geographic unit or area (i.e., a DAU)	
Depredation Condition:			
Phase		1 & 2	3
First Name	Last Name	Not allowed	Allowed by state/federal agents with considerations In addressing appropriate management response to wild ungulate impacts, CPW will require: 1) data or other information indicating that wolves are a major cause of ungulate herds not meeting objectives; and will consider: 2) ability to address the situation through non-lethal means; 3) the level and duration of wolf removal necessary to achieve management objectives; 4) ability to measure ungulate response to management actions; and, 5) identification of other potential major causes of an ungulate population not meeting objectives and attempts made to address them.
Matt	Barnes	1	4
Donald	Broom	3	1
Jenny	Burbey	5	2
Bob	Chastain	4	2
Renee	Deal	4	2
Adam	Gall	Absent	Absent
Dan	Gates	5	2
John	Howard	Absent	Absent
Francie	Jacober	1	1
Lenny	Klinglesmith	3	1
Darlene	Kobobel	1	5
Tom	Kourlis	5	1
Brian	Kurzel	3	1
Hallie	Mahowald	3	2
Jonathan	Proctor	2	3
Gary	Skiba	2	4
Steve	Whiteman	2	3
Total support/no objection (1, 2, or 3)		10	12
Total objections (4 or 5)		5	3
Additional language relevant to each item is in the "Impact-Based Management Framework." Voting reflects this additional language, which includes considerations such as exploring and encouraging non-lethal techniques before lethal and additional considerations proposed by the SAG.			
*Consensus scale:			
1	Enthusiastically support		
2	Support		
3	Can abide by or live with; do not object		
4	Object		
5	Strongly object		

Table A-iv: Vote Results regarding lethal control of wolves significantly reducing or likely to extirpate other species of concern

Depredation Condition:		Lethal control of specific wolves or wolf packs confirmed by CPW to be significantly reducing or likely to extirpate other species of concern	
Phase		1 & 2	3
First Name	Last Name	Not allowed	Potentially allowed by state/federal agents, with the same consideration as described in row describing ungulate management.
Matt	Barnes	3	2
Donald	Broom	4	1
Jenny	Burbey	5	1
Bob	Chastain	4	2
Renee	Deal	5	1
Adam	Gall	Absent	Absent
Dan	Gates	5	2
John	Howard	Absent	Absent
Francie	Jacober	2	2
Lenny	Klinglesmith	5	1
Darlene	Kobobel	1	4
Tom	Kourlis	3	1
Brian	Kurzel	3	2
Hallie	Mahowald	4	1
Jonathan	Proctor	3	2
Gary	Skiba	2	4
Steve	Whiteman	2	2
Total support/no objection (1, 2, or 3)		8	13
Total objections (4 or 5)		7	2
Additional language relevant to each item is in the "Impact-Based Management Framework." Voting reflects this additional language, which includes considerations such as exploring and encouraging non-lethal techniques before lethal and additional considerations proposed by the SAG.			
*Consensus scale:			
1	Enthusiastically support		
2	Support		
3	Can abide by or live with; do not object		
4	Object		
5	Strongly object		

Appendix B: About the Stakeholder Advisory Group

The Colorado Wolf Restoration and Management Plan Stakeholder Advisory Group (SAG) offers a broad range of perspectives and experience to inform the social implications of wolf restoration and management strategies for the Colorado Wolf Restoration and Management Plan. SAG members were selected by Colorado Parks and Wildlife (CPW) for diversity in demographics, backgrounds, geographic regions, perspectives, and knowledge in order to constitute a vibrant, diverse, and inclusive stakeholder voice in the planning process. The SAG is comprised of 17 voting members and 3 non-voting members. CPW is responsible for writing the Wolf Restoration and Management Plan. The Parks and Wildlife Commission (PWC) serves as the decision-making body responsible for approving the Wolf Restoration and Management Plan. The SAG serves in an advisory capacity to Colorado Parks and Wildlife, offering non-binding input into the development of plan content. The SAG is not a decision-making body and has no authority on wolf management policy, research, or operations.

The SAG strives to make decisions based on the consensus of all voting members, where possible. Where the SAG is able to achieve consensus, its input will receive priority consideration by CPW. Per the SAG charter, consensus is defined as general agreement that is shared by all the people in a group; it reflects a recommendation, option or idea that all participants can support or abide by, or, at a minimum, to which they do not object. In other words, consensus is a recommendation, option or idea that all can live with. Where consensus does not exist, a vote will be taken and the votes of individual members will be recorded along with a summary of the rationale for supportive and dissenting views.

Stakeholder Advisory Group Members:

Voting Members:

- Matt Barnes
- Donald Broom
- Jenny Burbey
- Bob Chastain
- Renee Deal
- Adam Gall
- Dan Gates
- John Howard
- Francie Jacober
- Lenny Klinglesmith
- Darlene Kobobel
- Tom Kourlis
- Brian Kurzel
- Hallie Mahowald
- Jonathan Proctor
- Gary Skiba
- Steve Whiteman

Ex Officio Members:

- Dan Gibbs, Executive Director, Colorado Department of Natural Resources
- Les Owen, Division Director, Colorado Department of Agriculture (*designee of Kate Greenberg, Commissioner, Colorado Department of Agriculture*)
- Heather Dugan, Acting Director, Colorado Parks and Wildlife

Stakeholder Advisory Group report developed with third party facilitation from Keystone Policy Center.

Report on Ungulate Management Recommendations

Colorado Wolf Restoration and Management Plan Stakeholder Advisory Group (SAG) to Colorado Parks and Wildlife (CPW)

Report on Ungulate Management Recommendations August 2022

This report summarizes consensus recommendations of the Colorado Wolf Restoration and Management Plan Stakeholder Advisory Group (SAG) regarding strategies to manage ungulate populations and hunter opportunities in the context of wolf reintroduction and management.

In conjunction with the recommendations made in this report, the SAG's report on impact-based management also provides insight on direct management of wolves in response to ungulate populations significantly below objectives that can be caused by wolf predation.

Discussion

Although impacts to outfitters and hunters are not addressed in Proposition 114, the SAG feels it is important to address them as part of the plan. A SAG member reported the concern that some members of the hunting community are not supportive of how their concerns have been addressed within the SAG process. Many SAG members are concerned that the tension and frustrations that have led to anti-wolf policies experienced in Idaho and Montana are beginning in Colorado. SAG members encourage the Commission to work early and proactively to address these tensions and frustrations.

The SAG understands that it is difficult to predict specific numerical impacts and location of impacts of wolves on ungulates. Wolves may bring about negative impacts at localized levels to certain ungulate populations while some herds may be largely unaffected with little to no impacts. Additionally, wolves may help certain populations become healthier through predation and altering habitat use.

While these outcomes will play out as wolves repopulate western Colorado, the real and perceived social and economic impacts are already present among the hunter/outfitter community. There is concern that wolves will reduce hunter opportunity due to declining herd numbers, deer and elk will be pushed out of designated permit areas that outfitters operate in and result in their businesses not being able to provide the services they are permitted to provide, and numerous other concerns. For more detailed descriptions on both the positive and negative impacts wolves may have on a localized level, the SAG recommends reviewing the impact-based management report.

Whether it's positive or negative impacts being discussed, the SAG recognizes there is some speculation involved about impacts in Colorado based on science and previous observations where wolves have been present. It would be beneficial for CPW and Colorado to develop proactive measures prior to wolf restoration that will address potential impacts to livestock producers or hunters and outfitters. Therefore, it is critical for CPW to develop a proactive approach to potential and perceived negative impacts that may stoke greater barriers to sustainable wolf populations and deliver clear and consistent messaging on the handling of wolf/ungulate interactions. In this way, CPW can create trust and buy-in

from the public and contribute to the long-term sustainability of both wolves and ungulate populations and ultimately individuals and communities living with them in Colorado.

Based on evidence and direct communication with biologists from the Northern Rockies, if and where impacts occur, they will be at a local level (in Colorado, likely at a DAU or GMU scale). Local level impacts on ungulates, both real and perceived, may have an outsized role in catalyzing opposition to wolves and may serve as one of the greatest long-term challenges to wolf sustainability. Monitoring will be key to understanding impacts and responding accordingly through impact-based management (see the SAG's impact-based management report for more on this topic).

The SAG understands that wolves alone are not the focus of ungulate management but another layer that must be incorporated into the current models. Ungulates face multiple stressors including but not limited to ever-increasing non-consumptive recreational impacts, multiple predators, habitat encroachment/loss, drought/aridification and more. With all these factors in mind, it is important to remember CPW's main tool for ungulate population management is through hunting. Managed hunting of ungulate game populations provides the backbone source of revenue for CPW, provides numerous outlets for economic activity, and provides an extremely valuable source of protein/food.

In closing, the SAG offers the following recommendations, understanding that there is not a collective assumption wolves will negatively impact ungulate herds. Rather, these recommendations are offered for consideration of how to manage already existing concerns and proactively address them should they occur in the future. The details of such recommendations would require further discussion.

Recommendations

- **Prioritize, ramp up and maintain monitoring of ungulate populations and actively manage for impacts at a local level.** Where consistent monitoring identifies localized impacts (cause-specific), integrate data into the planning and management strategies at the local level. Cause-specific factors could include habitat fragmentation, increased recreation, or drought, along with predation.
- **Continue growing ungulate herds.** The SAG recognizes that CPW is making efforts to bring certain ungulate populations that are currently below objective back within objective. In this vein, the SAG would suggest continuing these efforts, as well as proactively expanding efforts to grow ungulate herds on a GMU or DAU basis, particularly where wolves are predicted to occupy, and managing/maintaining these herds at the upper end of objectives. This approach could provide a win-win in the sense that an abundance of ungulates will provide a buffer against potential wolf-caused population decline, provide ample prey base for rapid and successful wolf population growth, and, if population declines fail to appear over time, the opportunity will exist to increase hunt-based ungulate management. Additionally, prioritize wolf release sites where ungulate populations are NOT under objective. This recommendation should be taken into consideration in addition to other ungulate management factors.
- **Develop and implement an Education and Outreach communications campaign.** A consensus recommendation from the SAG is to create an active communications campaign for target audiences. CPW should provide education and outreach that gives consistent baseline information for agency actions with respect to ungulate management (license allocation, quota

reduction, herd counts, etc.) and science around Colorado's wolves, in order to mitigate controversies with best available science and provide transparent, relevant, and easy-to-understand information to impacted communities. This recommendation hinges on a proactive approach to outreach by putting information into the hands of the public vs. the public needing to seek it out. In reference to this recommendation, CPW has stated the cost of \$1.7 million to pursue the next levels of outreach and social science driven education. More specific details on this communications campaign are provided in the attached addendum. Refer as well to the SAG's recommendations on outreach and education for more on these topics.

- **Consider a compensation program for affected outfitter businesses and/or clients. See attached documents on other state voucher/set aside programs.** There are a variety of options the SAG discussed with this recommendation. The basic premise revolves around outfitters whose permitted area shows a data-backed connection between declining ungulate herds and wolf predation. CPW may provide vouchers to these affected operators that could provide an alternate means of generating revenue for the outfitter, thereby keeping their business alive until a wolf/ungulate balance is achieved. Alternatively, CPW could create or support other compensation avenues for outfitter businesses that cannot provide services related to wolf presence. A separate compilation of data directly from the Northern Rockies' state wildlife agencies is being submitted separately but in conjunction with these recommendations. As a related concept, consider working with the US Forest Service, Bureau of Land Management, and private landowners, as applicable, to explore reserved common permits for outfitters.
- **Create new opportunities and promote current opportunities for the public to provide non-hunting income to support wolves and wildlife management.** This recommendation stems from the idea that those who voted for Proposition 114 and want wolves on the landscape should have the opportunity to provide financial support to CPW for the management of wolves, impacts on ungulate populations, and habitat to support both. Refer as well to the SAG's recommendations on funding for more on these topics.
- **Solidify robust and consistent funding.** The SAG recognizes that robust and consistent funding is necessary to accomplish the recommendations above. Solidifying reliable and adequate sources of additional funding to implement ideas such as a top-notch communications campaign and increased monitoring are paramount to the success and associated costs of Colorado wolves, while also maintaining the ungulate populations that CPW and hunter dollars have invested so much in already. In the 2022 budget, the General Fund provided \$2.1 million for wolf planning. A preliminary estimate for actual needs would be an amount of up to \$3 million annually for funding of directly related expenses; this number could potentially be more when considering adjacent expenses that are indirectly or partially related to wolf restoration and management, for example research and communications. Refer to the SAG's recommendations on funding for more on these topics.

Conclusion

The SAG recognizes the issue of ungulate management is challenging and highly variable. Ultimately, CPW staff and the CPW Commission are tasked to take actions that are best for a successful wolf recovery in conjunction with maintaining healthy ungulate populations and maintaining hunter opportunity.

Ungulate Management Report: SAG Member Level of Support

First Name	Last Name	Ungulate Management Report: Individual votes
Matt	Barnes	3
Donald	Broom	2
Jenny	Burbey	1
Bob	Chastain	2
Renee	Deal	2
Adam	Gall	2
Dan	Gates	Absent
John	Howard	3
Francie	Jacober	1
Lenny	Klinglesmith	2
Darlene	Kobobel	3
Tom	Kourlis	2
Brian	Kurzel	2
Hallie	Mahowald	2
Jonathan	Proctor	2
Gary	Skiba	2
Steve	Whiteman	2
Total support/no objection (1, 2, or 3)		16
Total objections (4 or 5)		0
*Consensus scale:		
1	Enthusiastically support	
2	Support	
3	Can abide by or live with; do not object	
4	Object	
5	Strongly object	

About the Stakeholder Advisory Group

The Colorado Wolf Restoration and Management Plan Stakeholder Advisory Group (SAG) offers a broad range of perspectives and experience to inform the social implications of wolf restoration and management strategies for the Colorado Wolf Restoration and Management Plan. SAG members were selected by Colorado Parks and Wildlife (CPW) for diversity in demographics, backgrounds, geographic regions, perspectives, and knowledge in order to constitute a vibrant, diverse, and inclusive stakeholder voice in the planning process. The SAG is comprised of 17 voting members and 3 non-voting members. CPW is responsible for writing the Wolf Restoration and Management Plan. The Parks and Wildlife Commission (PWC) serves as the decision-making body responsible for approving the Wolf Restoration and Management Plan. The SAG serves in an advisory capacity to Colorado Parks and Wildlife, offering non-binding input into the development of plan content. The SAG is not a decision-making body and has no authority on wolf management policy, research, or operations.

The SAG strives to make decisions based on the consensus of all voting members, where possible. Where the SAG is able to achieve consensus, its input will receive priority consideration by CPW. Per the SAG charter, consensus is defined as general agreement that is shared by all the people in a group; it reflects a recommendation, option or idea that all participants can support or abide by, or, at a minimum, to which they do not object. In other words, consensus is a recommendation, option or idea that all can live with. Where consensus does not exist, a vote will be taken and the votes of individual members will be recorded along with a summary of the rationale for supportive and dissenting views.

Stakeholder Advisory Group Members:

Voting Members:

- Matt Barnes
- Donald Broom
- Jenny Burbey
- Bob Chastain
- Renee Deal
- Adam Gall
- Dan Gates
- John Howard
- Francie Jacober
- Lenny Klingsmith
- Darlene Kobobel
- Tom Kourlis
- Brian Kurzel
- Hallie Mahowald
- Jonathan Proctor
- Gary Skiba
- Steve Whiteman

Ex Officio Members:

- Dan Gibbs, Executive Director, Colorado Department of Natural Resources
- Les Owen, Division Director, Colorado Department of Agriculture (*designee of Kate Greenberg, Commissioner, Colorado Department of Agriculture*)
- Heather Dugan, Acting Director, Colorado Parks and Wildlife

Stakeholder Advisory Group report developed with third party facilitation from Keystone Policy Center.

Appendix:

Avoiding Real and Perceived Loss of Hunting Opportunity and Montana/Idaho Outcomes

Additional input provided by Adam Gall and John Howard

Whether wolves will greatly impact hunting opportunity and/or success is difficult to determine due to the number of variables at play. In looking at data from the Northern Rockies, we believe the impacts will be at a localized level. Sometimes as specific as a particular creek drainage or basin where wolves might or will impact the presence of elk.

This presents an opportunity to take early proactive action in the field and in communications to avoid the Montana/Idaho Outcomes. To change the narrative.

Biologists in MT and ID report the failure to take more proactive action scaling back elk licenses in areas of predation (from many species) was a missed opportunity. It allowed a largely data free narrative to develop over time born out of the frustration with the absence of various state and federal actions and engagement. Working with the data and experiences from the Northern Rockies, these are a few suggestions for the Commission to proactively avoid the Montana/Idaho outcome:

- 1) **Continue growing the elk herds.** While efforts to do so have been under way for the past several years, we believe the hunting community fails to understand this effort. In addition, this conversation tends to be tags versus predators and now wolves. While reduction in cow elk harvest is an important lever in elk population growth, there are many factors: other predator control (lions in particular, bears in the spring), drought mitigation, conservation of calving and winter range, habitat improvement, **recreation planning and restraint**. CPW knows how to manage elk, but two public announcements we believe would cause immediate relief and support in the hunting community. We have trial tested these ideas with various leadership levels of major conservation groups in Colorado and received an overwhelmingly positive response.
 - a. *Raise the elk herd population goal publicly (consider deer and moose);*
 - b. *When the agency considers localized conditions within a DAU/GMU where wolves are present or likely present in the future, the agency will consider a larger population goal for that DAU/GMU.*
 - c. This comes at the expense of short-term loss of opportunity for hunters, potential for increased damage on livestock operators, and a decrease in revenue for CPW. However, the increased herd numbers should offer medium- and long-term greater hunting opportunity countering any actual or perceived narrative blaming wolves for elk population decline. If such a growth is unneeded in the future, CPW knows how to manage the population down.

- d. Such a strategy can unite the diverse stakeholders around greater food sources for wolves, preserving and perhaps expanding hunting opportunity, and most importantly avoiding the Montana/Idaho outcome.

2) Targeted Active Communications Campaign – The Critical Step

- a. CPW should retain a Colorado based advertising agency with experience in conservation. A model is GOCO's Generation Wild campaign, although on a much smaller and targeted scale;
- b. An advertising agency should be retained to work with agency staff to design a proactive communication plan with the following goals:
 - i. Provide a baseline of information for the agency's actions;
 - ii. Provide a baseline of information for science around Colorado's wolves;
 - iii. Address controversies with the best available science;
 - iv. Provide impacted communities with information in forms and format they accept and understand.
- c. Tactics
 - i. Target impacted communities;
 - ii. Receive back in real time effectiveness of such communication (this is not only possible in social media now, but also traditional media);
 - iii. Adjust immediately to real time feedback to improve communications;
 - iv. Explain transparently what actions the agency is taking;
 - v. Explain transparently the science from CPW's research;
 - vi. Lead the conversation, don't react to it;
 - vii. Always seek to target messages appropriately to different groups across the state – addressing not just what they want to hear but also what they do not want to hear, but on their terms.
- d. How is this different from CPW's current communications?
 - i. It's active – it takes particular messages out across multiple channels in a coordinated fashion;
 - ii. CPW is great at passive communication of data – “It's all up on the website”.
 - iii. Our proposal takes that mountain of data and shapes it into succinct messages – “wolves do not impact hunting” or “wolves do impact hunting locally, but our planning has accounted for it” or “elk populations are up and we are in a new golden age of hunting”.
 - iv. Not propaganda, but a compelling invitation for greater engagement with the facts on the ground.
 - v. GOCO could have put data on how the outdoors impacts kids and moms on a website. What made Generation Wild a success was the active engagement via media, games, contests, events, and other tactics that drove the message that Moms and Kids in the outdoors is key to health and a happy life.

Statement on Regulated Public Hunting of Wolves

Colorado Wolf Restoration and Management Plan Stakeholder Advisory Group (SAG) to Colorado Parks and Wildlife (CPW)

Statement on Regulated Public Hunting of Wolves July 2022

Overview & summary of key points

This report summarizes feedback from the Colorado Wolf Restoration and Management Plan Stakeholder Advisory Group (SAG) regarding regulated public hunting of wolves.

1. **The SAG does not have consensus on whether to allow regulated public hunting of wolves.** The SAG has not sought a formal vote nor consensus on this topic.
2. **The SAG recommends, by consensus, that a decision on regulated public hunting of wolves should not be made in the restoration and management plan to be finalized in 2023.** The SAG recommends that it is premature for a decision to be made on regulated public hunting in the upcoming 2023 plan. The SAG recognizes that any decision on this topic would only be relevant if wolves have achieved a self-sustaining population in Colorado as required by 33-2-105.8. The SAG further recognizes that these conditions will not be relevant, if at all, for many years. Some SAG members are concerned that a decision on regulated public hunting in the planning process may overshadow other key elements of the plan and that it should not be decided at this time. Other SAG members suggest that while they agree it should not be decided upon now, it is important for the Commission to discuss the topic prior to state delisting. Other SAG members believe public hunting of wolves should not be allowed.
3. **The SAG recommends, by consensus, that any future discussion and/or decision on regulated public hunting of wolves should be impact- and science-based, with consideration of biological and social science as well as economic and legal considerations.** The SAG anticipates that an abundance of biological, social, and economic data and information will be gathered when wolves are reintroduced to and are present in Colorado over time. The SAG recommends that this information be used to inform future decision making regarding regulated public hunting, along with consideration of interpretation of legal authorities relative to the definition of gray wolves in CRS 33-2-105.8. Some SAG members feel it is premature to detail the considerations that should inform a future decision.
4. **The SAG recognizes, by consensus, that the concept of regulated public hunting is distinct from targeted lethal control.** The SAG provided feedback on targeted lethal control of wolves in its June 2022 report on impact-based management. Within the consensus impact-based management assumptions in that report, the SAG recommended, ‘when negative impacts occur, they should be addressed on a case-by-case basis utilizing a combination of appropriate management tools, including education, non-lethal conflict minimization, lethal take of wolves, and damage payments.’ The SAG also offered consensus recommendations in that report regarding allowance of targeted lethal control in specific situations.

Final SAG Statement on Regulated Public Hunting, July 2022

About the Stakeholder Advisory Group

The Colorado Wolf Restoration and Management Plan Stakeholder Advisory Group (SAG) offers a broad range of perspectives and experience to inform the social implications of wolf restoration and management strategies for the Colorado Wolf Restoration and Management Plan. SAG members were selected by Colorado Parks and Wildlife (CPW) for diversity in demographics, backgrounds, geographic regions, perspectives, and knowledge in order to constitute a vibrant, diverse and inclusive stakeholder voice in the planning process. The SAG is comprised of 17 voting members and 3 non-voting members. CPW is responsible for writing the Wolf Restoration and Management Plan. The Parks and Wildlife Commission (PWC) serves as the decision-making body responsible for approving the Wolf Restoration and Management Plan. The SAG serves in an advisory capacity to Colorado Parks and Wildlife, offering non-binding input into the development of plan content. The SAG is not a decision-making body and has no authority on wolf management policy, research or operations.

The SAG strives to make decisions based on the consensus of all voting members, where possible. Where the SAG is able to achieve consensus, its input will receive priority consideration by CPW. Per the SAG charter, consensus is defined as general agreement that is shared by all the people in a group; it reflects a recommendation, option or idea that all participants can support or abide by, or, at a minimum, to which they do not object. In other words, consensus is a recommendation, option or idea that all can live with. Where consensus does not exist, a vote will be taken and the votes of individual members will be recorded along with a summary of the rationale for supportive and dissenting views.

Stakeholder Advisory Group Members:

Voting Members

- Matt Barnes
- Donald Broom
- Jenny Burbey
- Bob Chastain
- Renee Deal
- Adam Gall
- Dan Gates
- John Howard
- Francie Jacober
- Lenny Klingsmith
- Darlene Kobobel
- Tom Kourlis
- Brian Kurzel
- Hallie Mahowald
- Jonathan Proctor
- Gary Skiba
- Steve Whiteman

Ex Officio Members:

- Dan Gibbs, Executive Director, Colorado Department of Natural Resources
- Les Owen, Division Director, Colorado Department of Agriculture (*designee of Kate Greenberg, Commissioner, Colorado Department of Agriculture*)
- Heather Dugan, Acting Director, Colorado Parks and Wildlife

Stakeholder Advisory Group report developed with third party facilitation from Keystone Policy Center.

Final SAG Statement on Regulated Public Hunting, July 2022

Report on Outreach and Education

Colorado Wolf Restoration and Management Plan Stakeholder Advisory Group (SAG) to Colorado Parks and Wildlife (CPW)

Report on Outreach and Education August 2022

Overview and guiding recommendations

This report summarizes feedback from the Colorado Wolf Restoration and Management Plan Stakeholder Advisory Group (SAG) regarding outreach and education, including 1) consensus recommendations described on this page and 2) a compilation of suggestions for specific audiences and messages offered by each sector of the SAG.

The SAG offers, by consensus, the following priority recommendations regarding the value and need for outreach and education:

1. Targeted outreach and education are an essential component of a successful restoration and management program that can increase trust, transparency, and awareness.
2. Substantially increase funding for education and outreach; effective outreach and education requires robust agency capacity, dedicated funding, and resources.

The following consensus recommendations should also guide outreach and education related to wolf management:

- Outreach and education should occur proactively, continuously, and reactively.
- General as well as audience-specific messages and mechanisms are needed; diverse audiences use and/or prefer different communications approaches and formats, including bilingual messaging.
- Include messaging about what is in the plan; agency actions and how the plan is being implemented; goals and expectations; and positive and negative impacts of wolves at various scales.
- Identify trusted messengers; consider where trust in the agency is strong or weak as a potential lever or barrier to effective communication.
- Common messaging should be amplified through partnerships; there is power in diverse stakeholders communicating similar messages to their sectors.
- Messaging can help build awareness and empathy for different perspectives; highlight how different stakeholders are working together across different points of view; and illustrate impacts with personal stories.
- Social science research can help inform outreach and education strategies and messages; the effectiveness of communications tools and messaging should be monitored to inform and adapt them for greater success.
- Outreach and communication should highlight opportunities for a variety of interests/stakeholders to support funding of the wolf plan.
- Balance information on wolves with other wildlife messaging; wolves are a member of the suite of native species in Colorado.
- Counter misinformation and misperceptions with best available science.

Key messages by audience

The SAG has discussed a variety of potential audiences for outreach and education. The following sections synthesize feedback on key messaging topics, by target sector. They are offered as a compilation of feedback from SAG discussion and *do not necessarily reflect SAG consensus on all points*.

Messages suggested for the agriculture, sportsperson, and wolf advocacy sectors reflect the compilation of feedback from breakouts of each of those sectors, respectively; they are not necessarily a reflection of SAG consensus nor consensus of the broader constituencies of each sector beyond those that participated in each of the SAG sector discussions. Messages suggested for outdoor recreationists, local and municipal decision makers, and the general public are a compilation of messages suggested by all SAG members; once again, they do not necessarily reflect consensus on all points.

Agricultural community *(messages suggested by SAG agriculture members)*

Key messages to provide to the agricultural community:

- Describe what the management plan says and relevant issues for livestock producers. Specifically, describe options available for compensation, conflict minimization, and use of nonlethal or lethal tools; the resources that are available and how to access them; and the reporting and investigation process.
- Producers are valued; ranching and open space benefits and ecosystem services are valued.
- Impacts will be local; impacts to specific producers can be significant while statewide impacts are small.

Key messages the agricultural community would like to get across:

- Ranching supports wildlife by providing connections and habitat across public and private lands; private lands are necessary for wildlife habitat, especially animals' winter range.
- Livestock producers do not hate wolves.
- Livestock producers want to keep livestock alive, healthy, happy, and safe; producers do not want to see livestock suffer.
- Livestock compensation does not cover all costs to producers; stress and mental health issues are real and significant; the agricultural community would like to understand what financial support others are willing to provide to support wolf restoration.

Sportspersons and outfitters *(messages suggested by SAG sportspersons/outfitters members)*

Key messages to provide to sportspersons and outfitters:

- There is a plan to manage wolves and the species' reintroduction.
- Impacts will be local, not statewide.
- There is a strategy to stabilize and maintain ungulate populations and to grow populations where possible, with consideration of all impacts, including to wolves.

Key messages the sportsperson and outfitter sector would like to get across:

- Sportspeople are the key component of financial support and physical support for science-based wildlife management.
- Over time, wolves should be managed like all wildlife.

Wolf advocates *(messages suggested by SAG wolf advocacy members)*

Key messages to provide to wolf advocates:

- There will be impacts to individuals and communities from wolves.
- It is important to understand the concerns of impacted individuals and local communities.
- There will be compensation for livestock losses by law, but producers sometimes are unsatisfied with the programs as they feel they do not compensate for all losses, leading to decreased tolerance for wolves.
- Wildlife management takes effort and money.

Key messages wolf advocates would like to get across:

- There are positive impacts of wolves, including restoring biodiversity and wildlife diversity; tourism and economic benefits from wolf-based tourism; and contributing to healthier riparian systems (e.g., more songbirds).
- Wolves will not decimate ungulate populations or the livestock industry.
- (Particularly for the agricultural community) Most wolves do not kill livestock; some do.
- Wolves do not pose a significant threat to human safety.
- Wolves should *not* be managed like all other wildlife (e.g., advocates do not have a favorable view of management of bears and cougars).
- Even when they are distributed throughout western Colorado, wolves will be far less common than coyotes, black bears, or cougars.

Outdoor recreationists *(The following messages are a compilation of messages suggested by all SAG members. The suggestions do not necessarily reflect consensus on all points.)*

Key messages to provide to outdoor recreationists:

- Historically, wolves do not attack people; wolves pose no significant personal danger to human safety.
- Wolves may approach you out of curiosity. Know what to do if approached.
- Your activity, presence, and pets have an impact on wildlife and habitat, including wolves.
- There will not be significant loss of recreation opportunity due to wolf reintroduction or their presence on the landscape.
- Be aware of wolves' impacts on lands used for recreation, including positive impacts such as the opportunity to wildlife watch and negative impacts such as potential closures due to denning sites.
- Recreation benefits from wildlife management; encourage recreationists to contribute directly to wildlife and wolf management and make options for contribution clear (i.e., emphasizing "donate now" opportunities on the CPW website).

Additional FAQ and best practice considerations for messaging to outdoor recreationists:

- What to do if you see a wolf.
- Leash your dog: it is safer on leash for wildlife and your dog.
- Wolves are wild animals: give them space and do not approach or feed them.
- It is illegal to chase or harass a federally endangered species.
- Don't handle wolf scat.
- Wolf pups likely aren't abandoned; leave wolf dens alone.

- How to report wolf sightings to local CPW offices.
- (For hunters) Lead bullet fragments left in carcasses [gut piles] can cause lead poisoning of scavengers; switching to copper bullets can help.
- Don't leave stock tied up in vulnerable areas.
- The difference between coyotes and wolves: e.g., tracks, scat (use pictures/graphics).
- Proper food storage practices.
- Include wolves in existing messaging for bears, cougars, etc.
- Provide information near wolf locations (i.e., at visitor centers and trailheads; use QR codes).

Local and municipal decision makers *(The following messages are a compilation of messages suggested by all SAG members; however, the suggestions do not necessarily reflect consensus on all points.)*

Key messages to provide to local and municipal decision makers:

- The benefits and costs to reintroduce and manage wolves in their area.
- General facts about wolf biology; the wolf reintroduction and management plan; plans for livestock compensation, ungulate management, and conflict mitigation.
- We are counting on decision makers for accurate messaging to the broader public.
- Wolf impacts tend to be more localized and may impact individual producers rather than entire regions; local decision makers can help messaging to have an appropriate scale.
- Facts about what resources are available to impacted constituents.

Additional considerations for messaging approaches to decision makers:

- Work with local leadership first; be proactive in their role in communicating with the broader public; emphasize the importance of local leadership in communication.
- Emphasize the importance of decision makers' partnership with CPW; leverage relationships between local CPW staff and leaders.
- Leverage existing groups (e.g., CCI, Club 20, Action 22) to hold workshops on wolf restoration and management.
- Use factsheets to make information accessible and easily digestible.
- Local leaders are an important source of information at the local scale and can communicate issues in their communities.

Key messages decision makers would like to get across:

- We are here to support our constituencies.
- We have/need the resources to support you.

General public *(The following messages are a compilation of messages suggested by all SAG members; however, the suggestions do not necessarily reflect consensus on all points.)*

Key messages to provide to the general public:

- The plan, timing, and process of wolf reintroduction (e.g., 'We are bringing wolves to Colorado by the end of 2023.')
- Why wolves are being reintroduced when they are already here and why the state is spending money on restoration efforts.
- We don't have to choose among ranching, hunting, and restoration.
- This is a historic moment for Colorado.

- General facts about wolf biology (wolves are a native species and being restored to the state).
- Funding for wolf restoration is currently being allocated from the general fund.
- We need funding to protect animals and reduce conflict with livestock.
- CPW is the authority of correct information; the agency is made up of experts on this topic.
- Management is impact-based and adaptive.
- Impacts from wolves may be positive or negative.
- The wolf planning process actively engages a diverse set of stakeholders to inform a plan that acknowledges and strives to address a variety of concerns.
- Ungulate populations are impacted by a variety of factors.

Additional considerations for messaging approaches to the general public:

- Focus on the middle ground; highlight personal stories; showcase intersectionality of interests.
- Highlight systems and processes in place for wolf issues.
- Direct delivery: local television, radio, businesses, professional sports teams, op-eds, news articles.
- Address myths about safety with education.
- Humanize CPW; increase agency transparency with the public.
- Review images and graphics to ensure they are accurate to the real world (e.g., photos of livestock guard dogs, not burros; pictures of livestock on the range and not dairy cows).

About the Stakeholder Advisory Group

The Colorado Wolf Restoration and Management Plan Stakeholder Advisory Group (SAG) offers a broad range of perspectives and experience to inform the social implications of wolf restoration and management strategies for the Colorado Wolf Restoration and Management Plan. SAG members were selected by Colorado Parks and Wildlife (CPW) for diversity in demographics, backgrounds, geographic regions, perspectives, and knowledge in order to constitute a vibrant, diverse, and inclusive stakeholder voice in the planning process. The SAG is comprised of 17 voting members and 3 non-voting members. CPW is responsible for writing the Wolf Restoration and Management Plan. The Parks and Wildlife Commission (PWC) serves as the decision-making body responsible for approving the Wolf Restoration and Management Plan. The SAG serves in an advisory capacity to Colorado Parks and Wildlife, offering non-binding input into the development of plan content. The SAG is not a decision-making body and has no authority on wolf management policy, research, or operations.

The SAG strives to make decisions based on the consensus of all voting members, where possible. Where the SAG is able to achieve consensus, its input will receive priority consideration by CPW. Per the SAG charter, consensus is defined as general agreement that is shared by all the people in a group; it reflects a recommendation, option, or idea that all participants can support or abide by, or, at a minimum, to which they do not object. In other words, consensus is a recommendation, option, or idea that all can live with. Where consensus does not exist, a vote will be taken and the votes of individual members will be recorded along with a summary of the rationale for supportive and dissenting views.

Stakeholder Advisory Group Members:

Voting Members

- Matt Barnes
- Donald Broom
- Jenny Burbey
- Bob Chastain
- Renee Deal
- Adam Gall
- Dan Gates
- John Howard
- Francie Jacober
- Lenny Klingsmith
- Darlene Kobobel
- Tom Kourlis
- Brian Kurzel
- Hallie Mahowald
- Jonathan Proctor
- Gary Skiba
- Steve Whiteman

Ex Officio Members:

- Dan Gibbs, Executive Director, Colorado Department of Natural Resources
- Les Owen, Division Director, Colorado Department of Agriculture (*designee of Kate Greenberg, Commissioner, Colorado Department of Agriculture*)
- Heather Dugan, Acting Director, Colorado Parks and Wildlife

Stakeholder Advisory Group report developed with third party facilitation from Keystone Policy Center.

Report on Funding Recommendations

Colorado Wolf Restoration and Management Plan Stakeholder Advisory Group (SAG) to Colorado Parks and Wildlife (CPW)

Report on Funding Recommendations June 2022

The following funding recommendations reflect the consensus of the Wolf Restoration and Management Plan Stakeholder Advisory Group (SAG).

The SAG recognizes that wolf restoration and management will be accompanied by both positive economic benefits and localized personal negative economic impacts, especially to our more rural neighbors. To the extent possible we all should try to equitably distribute those positive economic benefits and mitigate the negative impacts.

Short-term and long-term funding will be necessary for a variety of needs related to wolf restoration and management, including but not limited to: staff capacity, reintroduction logistics, management and conflict minimization materials and activities, depredation compensation, monitoring and research, and education and outreach. We urge all to remember that conservation and equity take time and consistent energy and funding.

Proposition 114 asks the General Assembly to ‘make such appropriations as are necessary to fund the programs authorized and obligations... and... may adopt such other legislation as will facilitate the implementation of the restoration of gray wolves to Colorado.’

The SAG is concerned that the ongoing costs of the wolf restoration and management program have not been fully anticipated by the [fiscal note](#) supporting CRS 33-2-105.8 in SB21-105, and that funding to address these costs has not been fully identified. Growth in future annual funding needs should be anticipated due to growth in the wolf management program.

The SAG recommends that opportunities for private donations be actively marketed through a communications campaign; that a full list of potential public and private funding sources that can be used for wolf restoration and management, along with their restrictions, be documented and maintained; and that funding sources that cannot be used for wolf restoration and management also be clearly communicated.

To support and sustain a successful wolf restoration and management plan that maximizes positive benefits and minimizes and mitigates negative impacts, the SAG urges full funding for the program.

Specifically, the SAG recommends:

1. **Annual Appropriations.** Until such time as a sustainable funding model is established, the SAG suggests that full funding be provided by the Colorado State Legislature; this number would be estimated annually by CPW based on wolf-related needs. A preliminary estimate would be an amount of up to \$3 million annually for funding of directly related expenses. This number could

potentially be more when considering adjacent expenses that are indirectly or partially related to wolf restoration and management, for example research and communications.

2. **Wolf Cash Fund or Wolf-Specific Account.** To provide long-term, sustainable funding, the SAG suggests exploration of the use of an existing cash fund, the creation of a new wolf restoration and management cash fund, or the creation of a wolf-specific account. Annual appropriations do not guarantee multi-year, long-term funding; establishment or leveraging of an existing cash fund or other wolf-specific account early in and/or prior to wolf reintroduction can help to secure public and private funding while interest is high, so that it can be available when needed in both the short- and long-term. The SAG suggests that this fund or account be provided initial seed funding by the Colorado State Legislature, and then be supported by a variety of public and private funding sources. Marketing of opportunities for private donations should be conducted through a communications campaign. CPW may consider opportunities for the fund or account to support both holistic, unrestricted funding needs as well as separate, program-specific needs for compensation and nonlethal conflict minimization. Any cash fund or account should not compromise CPW's enterprise status.

3. **External Endowment Fund.** To enhance opportunities to identify and fundraise from external sources, the SAG encourages support for the development of an external endowment that is managed and administered separately, but with input and partnership from Colorado Parks and Wildlife. The endowment fund would specifically support nonlethal aspects of wolf management, as well as other programs to explore and develop the projected positive economic benefits that can come with the restoration of a keystone wildlife species. The specific terms and governance of the endowment will need to be determined, including whether and how the fund provides supplemental funding to CPW and/or external entities for nonlethal wolf management and conflict minimization activities. Full funding for the agency's annual budget and programs should be provided directly to the agency through public funding and should not be reliant on the external endowment. Opportunities for private donations would be actively marketed through a communications campaign. SAG members are interested to support next steps for continued exploration and creation of an endowment.

About the Stakeholder Advisory Group

The Colorado Wolf Restoration and Management Plan Stakeholder Advisory Group (SAG) offers a broad range of perspectives and experience to inform the social implications of wolf restoration and management strategies for the Colorado Wolf Restoration and Management Plan. SAG members were selected by Colorado Parks and Wildlife (CPW) for diversity in demographics, backgrounds, geographic regions, perspectives, and knowledge in order to constitute a vibrant, diverse and inclusive stakeholder voice in the planning process. The SAG is comprised of 17 voting members and 3 non-voting members. CPW is responsible for writing the Wolf Restoration and Management Plan. The Parks and Wildlife Commission (PWC) serves as the decision-making body responsible for approving the Wolf Restoration and Management Plan. The SAG serves in an advisory capacity to Colorado Parks and Wildlife, offering non-binding input into the development of plan content. The SAG is not a decision-making body and has no authority on wolf management policy, research or operations.

The SAG strives to make decisions based on the consensus of all voting members, where possible. Where the SAG is able to achieve consensus, its input will receive priority consideration by CPW. Per the SAG charter, consensus is defined as general agreement that is shared by all the people in a group; it reflects a recommendation, option or idea that all participants can support or abide by, or, at a minimum, to which they do not object. In other words, consensus is a recommendation, option or idea that all can live with. Where consensus does not exist, a vote will be taken and the votes of individual members will be recorded along with a summary of the rationale for supportive and dissenting views.

Stakeholder Advisory Group Members:

Voting Members:

- Matt Barnes
- Donald Broom
- Jenny Burbey
- Bob Chastain
- Renee Deal
- Adam Gall
- Dan Gates
- John Howard
- Francie Jacober
- Lenny KlingleSmith
- Darlene Kobobel
- Tom Kourlis
- Brian Kurzel
- Hallie Mahowald
- Jonathan Proctor
- Gary Skiba
- Steve Whiteman

Ex Officio Members:

- Dan Gibbs, Executive Director, Colorado Department of Natural Resources
- Les Owen, Division Director, Colorado Department of Agriculture (*designee of Kate Greenberg, Commissioner, Colorado Department of Agriculture*)
- Heather Dugan, Acting Director, Colorado Parks and Wildlife

Stakeholder Advisory Group report developed with third party facilitation from Keystone Policy Center.

Appendix A: Stakeholder Advisory Group Members

Stakeholder Advisory Group Members:

Voting Members

- Matt Barnes
- Donald Broom
- Jenny Burbey
- Bob Chastain
- Renee Deal
- Adam Gall
- Dan Gates
- John Howard
- Francie Jacober
- Lenny KlingleSmith
- Darlene Kobobel
- Tom Kourlis
- Brian Kurzel
- Hallie Mahowald
- Jonathan Proctor
- Gary Skiba
- Steve Whiteman

Ex Officio Members:

- Dan Gibbs, Executive Director, Colorado Department of Natural Resources
- Les Owen, Division Director, Colorado Department of Agriculture (*designee of Kate Greenberg, Commissioner, Colorado Department of Agriculture*)
- Heather Dugan, Acting Director, Colorado Parks and Wildlife

The Stakeholder Advisory Group was supported with third party facilitation from Keystone Policy Center and with additional staff support from Colorado Parks and Wildlife.

Appendix B: Stakeholder Advisory Group Biographies

Matt Barnes

Matt Barnes is a range scientist and wildlife conservationist. He works with landowners and managers to improve rangeland stewardship, and to coexist with large carnivores such as grizzly bears and wolves. His work has also focused on resolving the long-standing debate in range science over rotational grazing. He is the owner of Shining Horizons Land Management and a research associate with the Northern Rockies Conservation Cooperative. He previously worked with the nonprofit People and Carnivores in Montana and Wyoming. Matt ran a holistically managed custom cattle grazing operation in western Colorado; served as President of the Colorado Section Society for Range Management; and served as a rangeland management specialist in the USDA Natural Resources Conservation Service, a prescribed fire manager with the USDI Bureau of Indian Affairs Branch of Forestry, serving five Tribes in northwestern Arizona; and as a grizzly bear technician for Idaho Fish and Game. He holds an M.S. in range science from Utah State University and a B.S. in wildlife ecology from the University of Arizona.

Donald Broom

Donald Broom is serving his first term as a Moffat County Commissioner. Donald is the commissioner liaison to several county boards including the community libraries, fair board, and the Moffat County Tourism Association. Donald manages Sombrero Ranches where he oversees the nation's largest herd of broke horses, supplying riding stables, movie scenes, and outfitters with rideable livestock. Donald has a strong background in agriculture, economic development, tourism, and has a broad understanding of the social and economic ties that comprise Moffat County, Colorado.

Jennifer Burbey

Jennifer Burbey is the Colorado Outfitters Association President with over 30 years of experience providing outfitting services in the backcountry of Southwestern corner of the state. When not in the backcountry she and her family raise hay, Quarter Horses, and Draft crosses in Breen, CO.

Bob Chastain

Bob Chastain became Cheyenne Mountain Zoo's President and CEO in 2005. However, he has been on staff at CMZ since 1995, first serving as Curator of Horticulture, then Director of Horticulture and Construction, and Vice President and COO. He earned a B.S. degree in public horticulture from Purdue University and a M.S. degree in environmental education and ecology from University of Wisconsin – Stevens Point. He has been the project leader for many of the improvements at Cheyenne Mountain Zoo including the African Rift Valley exhibit, which was awarded the 2003 Colorado Springs Partnership in Community Design Award and the 2004 AZA Exhibit Award; Rocky Mountain Wild and Encounter Africa, Australia and most currently the recently completed Africa: Water's Edge exhibit. Bob and his wife Antonia are residents of Penrose, Colorado and have two college-aged children. Among other pursuits, Bob has been a volunteer firefighter and a certified U.S. Forest Service Wildland firefighter and in his spare time enjoys hiking, mountain biking, and almost any outdoor activity.

Renee Deal

Renee Deal is a fourth-generation rancher from Somerset, Colorado. Her great-grandfather and grandfather ran cattle starting in the 1920s and her grandfather and father switched to sheep production in the 1970s. Deal's family has also been outfitting for big game since the 1940s and operate with an outfitting permit on the Gunnison National Forest. Deal left the ranch to pursue a degree in chemical engineering and worked as a biomedical engineer in Boulder and Arvada for ten years before

returning to the family sheep ranch with her husband and children in 2001, forming Sperry Livestock Corporation with her father. They feel very fortunate to have raised their family in rural western Colorado with its strong agricultural roots and values. In addition to working on the ranch, she taught preschool and secondary math for fifteen years but is now dedicated full-time to the ranching operation. Deal's three grown children now live throughout Colorado in Meeker, Pagosa Springs, and Boulder and she enjoys visiting them as often as she can. She is passionate about agriculture and recognizes the importance of bridging the gap between urban and rural communities through outreach and education. Deal recognizes that working with a diverse group of stakeholders is necessary to achieve the best possible outcome of wolf reintroduction to the western part of Colorado and would particularly like to represent the voices of those whose lives and livelihoods will be most directly affected by the effort.

Adam Gall

Adam Gall lives in Hotchkiss, CO with his family. He and his wife own and operate Timber to Table Guide Service and Dark Timber Outfitters, guiding elk hunts. Adam is a partner in a small craft brewery in Paonia called Chrysalis Barrel Aged Beer. He's been a long-time fishing guide in the Gunnison Gorge Wilderness with Black Canyon Anglers. Prior to this, Adam was a high school science teacher at Hotchkiss High School, a wolf biologist with the Nez Perce Tribe in Idaho and a US Forest Service wildland firefighter on the Clearwater National Forest. When he has a minute, he enjoys fly fishing, chasing elk with a bow, spending time outside with his wife and daughters, and being in the high country as much as possible.

Dan Gates

A lifelong sportsman, Dan dedicates a tremendous amount of time to conservation and wildlife management efforts. Sitting on national, regional, and state boards along with being the Chair of the Colorado Habitat Stamp Committee, sitting on the Colorado Wildlife Council, the Colorado Outdoor Partnership Executive Council, and many other working groups, he brings many different perspectives from diverse stakeholders and many wildlife related subjects and issues. For over three decades he has assisted and consulted in addressing and solving a variety of wildlife concerns and conflicts with a family-owned business that works with many sectors including public utilities, water resources, agricultural production, human health and safety, the defense department, transportation, recreation, aviation, and other commercial, industrial, and residential customers.

John Howard

John Howard is a lifetime sportsperson who fishes and hunts small game, waterfowl, and big game in Colorado. Former Chairman of the Colorado Parks and Wildlife Commission for two terms, he served a total of almost five years on the Commission from 2014 to 2019. Having graduated from CU Law in 1987, he spent five years in private practice before turning to a corporate career that took him around the world working on media, technology, and industrial companies as an executive and director. Since 2011, he has operated Bounds Green Crisis Management and Mediation, specializing in troubled companies, government agencies, and NGOs planning for and suffering through crisis as well as investing in troubled assets via Sleep Again Capital, LLC.

Francie Jacober

Francie Jacober is a Pitkin County Commissioner. She has lived in Colorado since 1965 when she first attended the University of Colorado. She has ranched with her family in Archuleta, Costilla, and Pitkin Counties. Francie taught middle school math, science, Spanish, and literature for over thirty years, including five years at Aspen Country Day and twenty-two years at Carbondale Community School. She worked at Colorado Outward Bound School while in college and was the first female instructor at

Hurricane Island Outward Bound. In addition, she founded and directed Colorado Wilderness Experience, an adventure program for teenagers. She led twenty-five-day courses which included rafting, kayaking, mountaineering, rock climbing, and mountain biking. Francie is the general manager at Fatbelly Burgers in Carbondale. She has four children and nine grandchildren. Her passions are respecting the natural environment, gardening, anything math, river running, and her family.

Lenny Klinglesmith

Lenny Klinglesmith is a second-generation rancher and landowner, born and raised in northwestern Colorado. Lenny currently owns and operates LK Ranch with his wife Jackie and their two daughters Lori Ann and Lila. The operation specializes in sustainably raising a commercial cow-calf herd with a grass-fed, stocker-yearling program. Along with raising cattle, Lenny has worked side-by-side with CPW, Colorado Cattlemen's Agricultural Land Trust, Habitat Partnership Program, and others to conserve land for wildlife and agriculture. Lenny has also worked with CPW in establishing a well-running Ranching for Wildlife, a big-game hunting program that provides private client, public drawing, and youth hunting opportunities. Lenny is hopeful his knowledge and experience on the land will be an asset to the planning process. In his spare time, he enjoys training horses and traveling with his family.

Darlene Kobobel

Darlene Kobobel rescued a wolfdog in 1993 from a kill shelter in Colorado, and credits this as her inspiration for becoming a voice for wolves. She started a sanctuary in Lake George, CO, and was in that location for ten years until being forced to evacuate due to the Hayman fire in 2002. Kobobel moved her sanctuary to Florissant and then made way to her final destination in Divide in 2006. This location is now the Colorado Wolf and Wildlife Center. This year marks twenty-eight years of Kobobel living with wolves, and teaching and being a voice for this iconic animal.

Tom Kourlis

Tom Kourlis is a respected sheep and cattle rancher and statewide leader in Colorado. Tom served as Colorado Commissioner of Agriculture under Governor Roy Romer for five years. He has been at the forefront of numerous statewide collaborative planning efforts between governmental agencies, private landowners, and interest groups, such as the CPW Habitat Partnership Program, the CDA Colorado Ag Council and the BLM Coordinated Resource Management Plan for NW Colorado. Tom has been named Citizen of the West, Woolgrower of the Year, been inducted into the Colorado Agriculture Hall of Fame and received awards from the Colorado Society of Range Management, CSU Integrated Resource Management Program, Colorado Corn Growers, and Colorado Wheat Growers. Tom believes we have a responsibility to manage natural resources in perpetuity for the benefit of the citizens of Colorado.

Brian Kurzel

Brian Kurzel is the Rocky Mountain Regional Executive Director for the National Wildlife Federation (NWF) and has more than twenty-five years of experience developing conservation policy, leading on-the-ground conservation efforts and actively engaging adults and youth in outdoor stewardship and education. Through his roles at NWF, and as Policy and Planning Supervisor at Colorado Parks and Wildlife and leading a statewide, science-driven natural areas program, Brian has worked effectively with ranchers, hunters, environmentalists, industry, land managers, and others to find collaborative solutions that help wildlife and people thrive.

Hallie Mahowald

As programs director for the Western Landowners Alliance, a landowner-led nonprofit advancing policies and practices to sustain working lands, connected landscapes, and native species, Hallie

manages people and strategy to support stewardship across the American West. At Western Landowners Alliance, Hallie oversees all programming including the Working Wild Challenge program, a landowner-led effort that recognizes the challenge of ranching with wildlife and facilitates constructive dialogue between wildlife managers and working land stewards to solve problems through peer learning, public policies, and increasing access to technical and financial assistance. Hallie also serves on the steering committee of the Conflict Reduction Consortium, a group of landowners, NGO partners, agency staff, and individuals focused on reducing the impacts of human-wildlife conflict while supporting working landscapes. Previously, Hallie worked for the Department of Energy where she handled compliance with the National Environmental Policy Act (NEPA) and Endangered Species Act (ESA). She holds a B.A. in environmental science and a M.A. in international environmental policy. Hallie currently serves on the advisory board of CSU's Center for Collaborative Conservation and as board president for the Central Colorado Conservancy. In her free time, she enjoys mountain biking, paddling, and skiing with her husband and two children.

Jonathan Proctor

Jonathan Proctor is the Rockies and Plains Program Director for Defenders of Wildlife. He directs a staff of seven in Colorado, Montana, and Wyoming to improve policies and implement projects to conserve and restore imperiled wildlife across the Rocky Mountains and the Great Plains. Over his thirty-year career in conservation across the Rocky Mountains, Great Plains, and Northwest, Jonathan has worked as a wilderness ranger with the U.S. Forest Service and as a wildlife advocate with two nonprofit organizations. This has included conservation of wolves, bison, grizzly bears, prairie dogs, black-footed ferrets, wolverines, lynx, swift fox, and beaver. This work often focuses on collaboration and conflict prevention measures with willing landowners and wildlife managers including Tribal and state wildlife agencies, ranchers, rural homeowners, and land trusts. Jonathan is a co-founder of the Great Plains Conservation Network – a coalition working to restore the region's natural heritage – and co-founder of the Prairie Dog Coalition. He is co-author of *Ocean of Grass*, an ecoregion assessment of the Northern Great Plains, and four publications on prairie dogs. Jonathan received a B.A. in geography from Wittenberg University and a M.S. in environmental studies from the University of Montana.

Gary Skiba

Gary grew up in western Pennsylvania, just north of Pittsburgh. While eastern forests still hold a special place in his heart, the west is his home. He holds a B.S. in wildlife management from the University of New Hampshire (1978) and an M.S. in wildlife biology from Colorado State University (1981). His master's work focused on the bighorn sheep herd in Dinosaur National Monument in the northwest corner of Colorado. Gary worked as a wildlife biologist for the Colorado Division of Wildlife for twenty-five years, focusing on threatened and endangered species management. He retired from CDOW in 2010 and has since held positions with Great Old Broads for Wilderness, the La Plata County Humane Society, and New Mexico State Parks. He is currently the Wildlife Program Manager for the San Juan Citizens Alliance, a Durango-based environmental advocacy organization. He lives east of Durango with his wife, Kate Pickford, two whippets, and expects to soon have a Labrador puppy that he hopes to turn into a top-notch duck hunter. Gary is honored to serve on CPW's wolf Stakeholder Advisory Group.

Steve Whiteman

Steve Whiteman is in charge of wildlife resource management on the Southern Ute Indian Reservation in southwestern Colorado. Originally from California, Steve received his Bachelor of Science degree in fish and wildlife biology from the University of California at Davis in 1993. He worked briefly for the California Department of Fish and Wildlife out of Sacramento, as well as the U.S. Fish & Wildlife Service in western Alaska. Most of his career – over twenty-five years – has been spent working for the

Southern Ute Tribe, where he started as the Tribe's first Fisheries Biologist in 1996. In 2001, he moved into the Division Head position, where he has overseen the Tribe's programs in game and non-game management, fisheries, and parks. He has also served as the Tribe's acting Director of Natural Resources for the past year and a half. Steve has significant experience with threatened and endangered species policy and management, which includes participation on the Tribal Working Group for the federal Mexican Wolf Recovery Program. He is also well-versed on Native American sovereignty, treaty-reserved off-reservation hunting rights, and Ute Indian history.

Heather Dugan - Acting Director, Colorado Parks and Wildlife (Ex-Officio)

Heather Dugan is the Assistant Director for Law Enforcement and Public Safety for Colorado Parks and Wildlife. Heather oversees the boating registration program and law enforcement-related operations, including training and investigations associated with protecting Colorado's wildlife and providing a safe and enjoyable recreational experience for visitors at Colorado's state parks. Heather worked for six seasons in state parks while working to earn her Bachelor of Science degree in wildlife biology. After graduating from Colorado State University in 1992, Heather was hired as a full-time ranger and has since worked in several parks, as a training coordinator and instructor, and most recently as a region manager.

Dan Gibbs - Executive Director, Department of Natural Resources (Ex-Officio)

As Executive Director, Dan Gibbs leads the development and execution of the Department's initiatives for the balanced management of the state's natural resources. Dan works on an array of issues pertaining to all of Colorado's natural resources, including water, wildlife, state lands, oil and gas, and mining. Dan is a respected collaborator and a strong proponent of building partnerships across agencies, nonprofits, and private-sector organizations to improve the productivity and success of government operations and services. Prior to joining the Department of Natural Resources, Dan served as a Summit County Commissioner from 2010-2018. As County Commissioner, Dan successfully pushed for wildfire preparedness, affordable workforce housing, lower health insurance costs, and protection and improvements to transportation infrastructure. Prior to his tenure as a Commissioner, Dan served in the Colorado House of Representatives and in the Colorado State Senate where he served on the Senate Agriculture and Natural Resources Committee. His legislative accomplishments include securing funding for wildfire mitigation and forest health, creating the Colorado Kids Outdoors grant program, supporting watershed health initiatives, and increasing environmental protections for wildlife from oil and gas development. Dan is a certified wildland firefighter and is affiliated with the ROSS system, through which he is on call to fight wildfires throughout the United States. He chaired the statewide Wildland Fire and Prescribed Fire Matters Advisory Council and represented county governments on the Forest Health Advisory Committee. Dan has served on a variety of civic boards including Search and Rescue Advisory, Legislative Sportsmen's Caucus, Tourism Office, Youth Corps Association, Friends of the Dillon Ranger District and the Keystone Science School. Dan is a graduate of Western State Colorado University and completed the Harvard Kennedy School Senior Executives in State and Local Government Program. He is also a Marshall Memorial Fellow. Dan enjoys all that living in the high country has to offer, including skiing, running, mountain biking, hunting, and fishing. He is a resident of Breckenridge, Colorado, where he lives with his wife, Johanna; daughter, Grace; and son, Tate.

Les Owen, Conservation Services Division Director, Colorado Department of Agriculture (for Kate Greenberg, Commissioner of Agriculture, Colorado Department of Agriculture) (Ex-Officio)

Les Owen has been the Conservation Services Division Director with the Colorado Department of Agriculture since August of 2016. He provides oversight and coordination of the Department's efforts to protect and enhance the state's agriculture activities as they relate to land use and range management, conservation, soil and vegetation management, grazing on public lands, water quality and quantity,

wildlife habitat, and endangered species. The Division also provides administrative and financial assistance to the 74 conservation districts; and oversight and administration of the noxious weed, weed free forage, bio-control (insectary), water quality, chemigation, and renewable energy programs. Les moved here from New Mexico where he worked for the New Mexico Department of Agriculture on a variety of issues related to federal land management, threatened and endangered species, and other rules and regulations that affect natural resource management. He was raised near the small town of Corona, New Mexico where most of his time was spent working on the family ranch.

Appendix C: Stakeholder Advisory Group Meeting Dates and Locations

Date(s)	Location
June 25, 2021	Salida
July 27, 2021	Craig
August 25, 2021	Salida
September 22, 2021	Grand Junction
October 27, 2021	Glenwood Springs
November 15, 2021	Colorado Springs
December 14-15, 2021	Denver
January 26-27, 2022	Virtual
February 23-24, 2022	Glenwood Springs
March 23-24, 2022	Montrose
April 27-28, 2022	Meeker
May 25-26, 2022	Woodland Park
June 22-23, 2022	Denver
July 27-28, 2022	Durango
August 24-25, 2022	Glenwood Springs

Appendix D: Stakeholder Advisory Group Charter



**Colorado Wolf Restoration and Management Plan
Stakeholder Advisory Group
to Colorado Parks and Wildlife**

**Governance Charter
6/30/21**

I. Purpose and Scope of the Stakeholder Advisory Group

The Stakeholder Advisory Group (SAG) offers a broad range of perspectives and experience to inform the social implications of wolf restoration and management strategies for the Colorado Wolf Restoration and Management Plan. The SAG will receive information provided by Colorado Parks and Wildlife (CPW) and the Technical Working Group (TWG), will follow the development of management and restoration alternatives, and will have opportunities to review and provide input to CPW on plan alternatives and language throughout the process. SAG members are encouraged to collaborate with their broader networks of organizational and community members, sharing information about the process and opportunities for stakeholder and public engagement.

II. Governance

This document constitutes the SAG's governance charter. The charter is approved and may be amended by the CPW Director, including with consideration of input from the SAG.

III. Powers and Duties

Colorado Parks and Wildlife is responsible for writing the Wolf Restoration and Management Plan. The Parks and Wildlife Commission (PWC) serves as the decision-making body responsible for approving the Wolf Restoration and Management Plan. The SAG serves in an advisory capacity to Colorado Parks and Wildlife, offering non-binding input into the development of plan content. The SAG is not a decision-making body and has no authority on wolf management policy, research or operations.

IV. Operating principles and responsibilities

Operating principles and responsibilities of members include:

- a. Compliance with all aspects of this governance charter.
- b. SAG members have been selected for diversity in demographics, backgrounds, geographic regions, perspectives, and knowledge in order to constitute a vibrant, diverse and inclusive stakeholder voice in the planning process. Members will demonstrate

composure and respect working with those with different experiences, backgrounds and perspectives.

- c. Members will demonstrate the ability to engage productively and in good faith in the SAG's business and provide timely input.
- d. Members will demonstrate willingness and preparedness to engage SAG meetings.
- e. Members will demonstrate focus on the scope and charge of the group.
- f. Members will refrain from behavior or comments that denigrate other SAG members or others involved in wolf restoration management efforts, or are disruptive to the charge and progress of the group.
- g. Members will treat all draft documents and deliberative communications received or generated by the SAG and its members as confidential and will not disclose their contents except through the reporting procedures discussed below.

V. Membership and Participation

a. Members

Members of the SAG are appointed by the CPW Director.

Within the SAG, there are 17 voting members of the SAG and 3 non-voting, ex-officio members. Non-voting members include the Director of Colorado Parks and Wildlife, the Director of Colorado Department of Natural Resources, and the Commissioner of Colorado Department of Agriculture or their designees.

SAG members will represent themselves as individuals, not on behalf of a specific organization.

b. Resignation of SAG Members

Any member who is no longer able to participate on the SAG shall notify the CPW Director as soon as practicable.

c. Removal of SAG Members

A member may be removed from the SAG at the discretion of the CPW Director based on conduct or lack of participation.

d. Vacancies

If a vacancy occurs on the SAG, the CPW Director may appoint a member to fill the vacant position.

e. Quorum

A quorum for purposes of meetings is a simple majority (9) of the voting membership of the SAG.

f. Meeting attendance

Voting members may not appoint a delegate to represent them at any meeting.

SAG members shall make best efforts to attend SAG meetings in person when meetings are conducted in person, but may participate by telephone or virtual conference when necessary. Reasonable accommodation will be made to provide quality participation experience for remote participants.

VI. Consensus and Voting

a. Consensus

The SAG shall strive to make decisions based on the consensus of all voting members, where possible. Where the SAG is able to achieve consensus, its input will receive priority consideration by CPW.

Consensus is defined as general agreement that is shared by all the people in a group; it reflects a recommendation, option or idea that all participants can support or abide by, or, at a minimum, to which they do not object. In other words, consensus is a recommendation, option or idea that all can live with.

Final assessment of consensus: Level of agreement will be assessed and recorded on final recommendations, options or ideas. A quorum must be present, as defined above. When conducting a final assessment of level of agreement on a proposed recommendation, option or idea, each member will indicate whether they can support or abide by it, and do not object; if no participants object, then consensus exists and will be recorded, along with a summary of rationale and perspectives as relevant. If any participant objects, then there is not consensus, and a vote will be taken.

Informal assessment of consensus: When informally assessing level of agreement during the course of SAG discussions, the table below may be utilized to assess perspectives on a draft recommendation, option or idea. As relevant, the group will discuss whether, and if so how, the recommendation, option or idea could be improved and/or how concerns could potentially be better addressed. Informal assessment of support for a recommendation or alternative may be conducted iteratively throughout the process and will not be recorded.

	Consensus exists if <u>ALL</u> participants are at level 1-3:
1	I enthusiastically support this recommendation, option or idea.
2	I support this recommendation, option or idea.
3	I do not fully agree with the decision, however I can abide by or live with this recommendation, option, or idea; I do not object.
4	I object to this recommendation, option or idea.
5	I strongly object to this recommendation, option or idea; I cannot support, live with or abide by it.

b. Voting

Where consensus does not exist on a final recommendation, option, or idea, a vote shall be taken and the votes of individual members will be recorded along with a summary of the rationale for supportive and dissenting views. A quorum must be present, as defined above. Total vote counts, the votes of individual members, and the summary of rationale and views will be included in the report of the SAG to CPW.

c. Proxies

No member shall be permitted to vote by proxy or delegate.

d. Reports

A final assessment of the SAG's level of support for a recommendation, option, or idea will be conducted publicly and recorded in a report to CPW. The report will reflect the recommendations or options considered, level of agreement for each recommendation or option, and a summary of the rationale for both supportive and dissenting views. Interim reports on specific topics, options or alternatives may be provided by the SAG to CPW throughout the process. A final report authored by the facilitator with review by the SAG will compile interim and final feedback on all topics from the SAG to CPW.

VII. Meetings and Records

a. Regular Meetings

CPW shall establish a schedule for SAG meetings in consultation with the facilitators. The SAG shall meet one day a month on average. Additional meetings will be called as necessary by CPW.

b. Facilitation

The CPW Director will contract facilitators to facilitate the work of the SAG. CPW staff person(s) will be appointed to coordinate with facilitators in the development of schedules, agendas, materials, and processes for the SAG.

c. Conduct of Meetings

The facilitator will manage meetings of the SAG in the most informal manner possible. SAG votes will be conducted formally by roll call of the SAG.

d. Public Meetings

The SAG does not have authority to adopt rules or create policy and is not subject to the Colorado Open Meetings Law. Nonetheless, to support openness and transparency, all meetings of the SAG shall be open to public observation in person. Information about meetings will be provided publicly in advance. SAG members may discuss the work of the group with each other outside of SAG meetings.

e. Public Comment

Public comment opportunities will be offered at SAG meetings. CPW shall determine when opportunities for public comment will be offered, and in what format. Public comment opportunities at in-person meetings will be provided only to in-person attendees. Public comment opportunities at virtual meetings with no in-person meeting component will be provided to virtual attendees.

f. Minutes

Minutes shall be kept of all SAG meetings and shall include at least names of all SAG members present, the location of the meeting (physical location or virtual meeting), a summary of the issues or matters discussed, any public comment received, and the outcome of any formal votes taken; including the vote of individual SAG members when a vote is called. Minutes shall be kept by the facilitator and posted to the SAG website.

g. Open Records

Any records received by the SAG and/or CPW may be subject to the Colorado Open Records Act.

VIII. Communication

The CPW Director or his/her designee within CPW shall be the official spokesperson regarding the SAG process. The CPW Director or designee shall be responsible for managing the communications regarding the SAG, including to the media, legislators, the Governor and other policy makers.

SAG members are free to discuss the SAG's work with any interested party but in so doing must clarify they are speaking for themselves, and not the SAG, and must abide by the confidentiality provision above regarding draft and deliberative materials. SAG members are urged to use discretion when discussing the group. Consistent with operating principles, members will refrain from communications that denigrate other participants or are disruptive to the charge and progress of the group.

IX. Compensation

Members of the SAG may be offered a nominal stipend and reimbursement for necessary travel expenses incurred in the performance of their duties and in accordance with state government guidelines, when requested.



COLORADO

Parks and Wildlife

Department of Natural Resources

Director's Office
6060 Broadway
Denver, CO 80216
P 303.297.1192

To: Members of the general public; Members of the Parks and Wildlife Commission

From: Heather Dugan, Acting Director, Division of Parks and Wildlife

Date: June 15, 2022

RE: Amendment to the Stakeholder Advisory Group Governance Charter

Purpose of this amendment

This amendment to the Stakeholder Advisory Group Governance Charter prohibits the audio and or video recording of Stakeholder Advisory Group (SAG) proceedings and the livestreaming of such proceedings.

Background

On November 3, 2020, Colorado voters approved [Proposition 114](#), Reintroduction and Management of Gray Wolves. The law, now codified at § 33-2-105.8, CRS, requires the Parks and Wildlife Commission (Commission or PWC) to develop a plan to restore and manage gray wolves in Colorado and take the steps necessary to begin reintroduction of gray wolves by December 31, 2023.

On [January 14, 2021](#), the Commission adopted the Division of Parks and Wildlife's (Division's) "proposed [blueprint](#) for public involvement to inform the development of a Colorado Wolf Restoration and Management Plan." The blueprint contemplates the formation of advisory groups and states:

The PWC will convene two groups, in consultation with CPW, to support the management planning process: a Technical Working Group (TWG) and a Stakeholder Advisory Group (SAG; described below). These groups are advisory bodies to the PWC. They are not decision-making bodies and have no authority on wolf management policy, research, or operations. Blueprint, p. 2.

The SAG is comprised of 19 [individuals](#) "with a broad range of interests in wolves and wolf management and conservation." Blueprint, p. 3. The SAG has held numerous



meetings across the state and has made written recommendations to the Commission on the social considerations of wolf restoration, including payment of fair compensation to owners of livestock, wolf hazing, and wolf restoration logistics.

On June 30, 2021, the Division issued the SAG Governance Charter. The [Charter](#) explains the operating principles and responsibilities of SAG members and outlines procedures for reaching consensus recommendations. SAG meetings are to be conducted “in the most informal manner possible” and are “open to public observation in person.” Charter, p. 4.

The Division has recently learned that members of the public are using smart phones or other electronic devices to make audio or video recordings of SAG proceedings, specifically group deliberations and discussions. The purpose of this amendment is to expressly prohibit any person, including CPW staff, Keystone Policy Center staff, and members of the public from making audio and or video recordings of SAG discussions inside the meeting room and to prohibit any person from live streaming such meetings. This amendment does not prohibit still photography, stenography, or any other form of documenting the proceedings. This amendment only applies to proceedings in the meeting room and not to gatherings in the lobby or hallway outside such meeting room.

The SAG’s primary charge - to develop recommendations for the Commission regarding the social considerations of wolf restoration and management - touches on controversial and divisive topics. In order to promote candid discussion among SAG members on such topics, the Division, in consultation with the Chair of the Commission, has determined it is reasonably necessary to take the action described in this amendment.

Numerous SAG members have expressed concern that such recordings, if posted on social media or otherwise widely shared, could lead to undesirable outcomes, including threats, intimidation, and embarrassment, and otherwise chill participation. The Commission and Division appreciate the SAG members’ service, particularly that of the volunteer citizen members of the SAG, and believe such concerns are well founded.

Division staff shall post the attached notice on the meeting room for all future SAG meetings and the Colorado Parks and Wildlife website.



Heather Dugan

Acting Director, Division of Parks and Wildlife

NOTICE: AUDIO AND OR VIDEO RECORDING OR LIVE-STREAMING OF STAKEHOLDER ADVISORY GROUP PROCEEDINGS IS PROHIBITED

1. No person shall use any electronic device to make audio and or video recordings of Stakeholder Advisory Group proceedings inside this meeting room or live stream such proceedings.

2. This prohibition does not apply to still photography, stenography, or any other form of documenting the proceedings. This prohibition only applies to proceedings in the meeting room and not to gatherings in the lobby or hallway outside such meeting room.

3. Staff of the Colorado Division of Parks and Wildlife shall post this notice at all future SAG meetings.

4. Staff of the Division may take appropriate steps to enforce this policy by requesting that any person cease recording or live streaming, taking a recess, and, if necessary, clearing the public from the room for the remainder of the meeting.


Heather Dugan

Acting Director, Division of Parks and Wildlife