

**Colorado Wolf Restoration and Management Plan
Stakeholder Advisory Group (SAG)
and Technical Working Group (TWG)
to Colorado Parks and Wildlife (CPW)
Meeting Summary¹**

**December 14-15, 2021
CPW Hunter Education Building
6060 Broadway, Denver, CO 80216**

Participants

SAG Voting members in attendance: Matt Barnes, Donald Broom (virtual, by Zoom), Jenny Burbey, Bob Chastain, Renee Deal, Adam Gall, Dan Gates (virtual, by Zoom), John Howard, Francie Jacober (virtual, by Zoom), Lenny Klinglesmith, Darlene Kobobel, Tom Kourlis, Brian Kurzel, Hallie Mahowald, Jonathan Proctor, Gary Skiba, Steve Whiteman (virtual, by Zoom)

SAG Ex Officio members in attendance: Colorado Department of Natural Resources (DNR) Executive Director Dan Gibbs, Colorado Department of Agriculture Division Director Les Owen, and Colorado Parks and Wildlife Director Dan Prenzlów

TWG members in attendance: Scott Becker (U.S. Fish and Wildlife Service (USFWS) –Regional Wolf Coordinator, virtual, by Zoom); Joel Humphries (for Alan Bitner, Bureau of Land Management Deputy State Director); Stewart Breck (National Wildlife Research Center U.S. Department of Agriculture – Research Wildlife Biologist); Roblyn Brown (Oregon Department of Fish and Wildlife – Wolf Program Coordinator, virtual, by Zoom); Wayne East (CO Department of Agriculture – Agricultural/Wildlife Liaison); Justin Gude (Montana Fish Wildlife and Parks – Research and Technical Services Bureau Chief); Jonathan Houck (Gunnison County Commissioner); Mike Jimenez (USFWS – Retired, virtual, by Zoom); Merrit Linke (Grand County Commissioner); Steve Lohr (US Forest Service – Renewable Resources Director, Rocky Mountain Region); Carter Niemeyer (USFWS – Retired, virtual, by Zoom); Martin Lowney (Animal and Plant Health Inspection Service State Director); Eric Odell (CPW Species Conservation Program Manager); John Sanderson (Colorado State University (CSU) Center for Collaborative Conservation – Director); Doug Smith (National Parks Service, Yellowstone Wolf Project Lead); Robin Young (CSU Extension Service – Archuleta County Extension Director, Natural Resources and Agricultural Agent). Mike Phillips (Rocky Mountain Wolf Project) was unable to attend.

CPW Staff present: Brett Ackerman (SE Region Manager); Brad Banulis (NW Senior Wildlife Biologist); Cory Chick (SW Region Manager); Travis Black (NW Region Manager); Reid Dewalt (Assistant Director for Aquatics, Terrestrial and Natural Resources); Brian Dreher (Terrestrial Section Manager); April Estep (Wildlife Biologist); Rebecca Ferrell (Branding and Communications Section Manager); Luke Hoffman (Game Damage Program Manager); Katie Lanter (Policy and Planning Supervisor); Mark Leslie (NE Region Manager); Dave Klute (Species Conservation Unit Supervisor); Eric Odell (Species Conservation Program Manager); Matt Thorpe (SW Deputy Regional Manager); Jeff Ver Steeg (Assistant Director for Research, Policy & Planning);

Keystone Policy Center Staff present: Julie Shapiro, Ernest House Jr., Cally King Newman, Jonathan Geurts, Jonathan Tyrrell

Objectives

- Build consensus into a refined, bulleted outline of a Colorado compensation plan.

¹Meeting summary prepared by the Keystone Policy Center

- Share information and engage in questions among TWG and SAG regarding wolf management in other states.
- Identify initial/draft principles for conflict minimization & management of depredating wolves.

Next Steps

- The SAG will meet virtually or in a hybrid meeting in January 2022.
- The TWG will meet virtually in January 2022.
- The SAG will plan to submit a letter to the Parks and Wildlife Commission with the group's comments on proposed regulations to allow hazing of gray wolves to prevent or reduce injury to livestock.
- The SAG will meet with CPW staff via subcommittee before the January 2022 meeting to discuss draft alternatives for a livestock compensation plan.

December 14, 2021

Welcome

CPW Director Dan Prenzlou welcomed the SAG and TWG members to the meeting. He gave an overview of the meeting's objectives and guidelines and noted his appreciation for the investment in time and energy that members have given both at and between meetings. He encouraged open communication between the groups over the course of the meeting. He introduced Jerry Neal, a videographer for CPW, who has been invited to help create a video as a historical record of this process. He also noted COVID-19 restrictions resulting in pre-registration for public attendance and comment.

Executive Director Dan Gibbs welcomed everyone, acknowledging the time and effort of SAG and TWG members in attending and of Keystone Policy Center.

Julie Shapiro gave an overview of the meeting agenda and Ernest House Jr. facilitated introductions from SAG and TWG members and CPW and KPC support staff.

Navigating conflict and collaboration

Ernest House Jr. and Julie Shapiro gave a short presentation on guidelines for collaboration, noting the complexity of the work ahead and offering members tools to use for navigating conflict. Members briefly held informal conversations at their tables regarding challenges they have faced with regard to wolf management and planning issues, in this effort and throughout their careers.

Livestock compensation plan

Luke Hoffman (CPW Game Damage Program Manager) gave an overview of the SAG's progress at the November meeting on principles, desired outcomes, and elements for a compensation program for wolf damage to livestock. He noted that at the November meeting, the group reached informal general agreement regarding compensation of confirmed depredations at one-hundred percent fair market value and probable depredations for at least fifty percent fair market value. He noted the group needed to further discuss compensation for missing livestock and/or indirect losses, the use of compensation strategies such as a multiplier/compensation ratio and/or a pay-for-presence program; and conflict minimization/risk reduction techniques as related to the compensation program. He noted the group will consider, at a future meeting, alternatives of a livestock compensation package, administration and funding for compensation programs, and the TWG's technical considerations regarding compensation.

Brian DeBolt (Wyoming Department of Game and Fish Large Carnivore Conflict Coordinator) gave a presentation on Wyoming's livestock compensation program, including Wyoming's regulatory framework for the program; constraints on reporting; compensation funding source; value of payments up to the value of an individual animal; qualifications for payments, which include being in the trophy game hunting zone in Northwest Wyoming; and compensation for depredated and missing livestock, guard animals, and for injuries to livestock or guard animals. He explained Wyoming's compensation multiplier for missing calves and sheep, which is applied for a depredation claim at up to a 7:1 ratio per claim, but not exceeding the number of reported missing livestock per claim. He noted that the missing livestock multiplier was also chosen in acknowledgment of the complications related to accounting for probable and indirect losses, which are not directly compensated.

Roblyn Brown briefly discussed the compensation program in Oregon, which compensates for missing livestock on an as-possible basis, depending on funding. Roblyn also noted Oregon's compensation program is decentralized and is administered per county.

A brief question and answer period followed with members and presenters. Regarding Wyoming's compensation plan, members and presenters discussed the trade-off between compensation and higher protections for wolves only in the trophy game management area versus no compensation and more liberal lethal control programs in the rest of Wyoming. It was noted that confirmation of the total number of actual missing livestock in Wyoming was based on an honor system. It was also suggested that those compensated in the trophy game management zone were more satisfied with compensation despite increased protections for wolves, where dissatisfaction with the lack of compensation in the rest of Wyoming has led to the Wyoming Department of Agriculture beginning a fund to compensate producers in the predator zone of Wyoming as well. Members asked if seedstock pricing was honored, to which presenters noted it was in both Wyoming and Oregon if receipts are provided. It was noted that documentation of nonlethal risk reduction techniques is required to carry out lethal management of depredating wolves in Oregon, but the regulation is less specific regarding compensation. It was suggested that carcass and attractant clean-up in Oregon are important factors in preventing depredation.

Members next held discussions on missing livestock, indirect losses, multiplier/compensation ratio, pay-for-presence programs, and conflict minimization/risk reduction techniques as related to compensation in facilitated break-out sessions.

In the plenary, Keystone facilitators shared common themes and ideas which emerged in each respective breakout.

Missing livestock and Multipliers/compensation ratios

Groups discussed multipliers as a mechanism to provide compensation for missing livestock. Missing livestock generally referred to missing sheep or cattle which were not confirmed as depredation, but were lost due to depredation, among other factors.

The groups discussed criteria, amounts, and messaging around use of a compensation ratio to compensate for missing livestock but did not directly discuss *whether* missing livestock should be compensated for, by a multiplier or other means. The groups discussed definitions of confirmed and probable losses as relevant to qualifications for use of a compensation ratio. Varying perspectives on the definition of a "probable loss" emerged in discussion, with some requesting further clarification on CPW's "preponderance of evidence" standard for confirmed losses and whether that standard is inclusive of probable losses. Other potential criteria for use of a ratio to compensate for missing livestock included requirement of a depredation event; whether death or damage; for only missing sheep, calves,

and possibly yearlings to be eligible, with yearlings perhaps at a lower ratio; and that only missing livestock on rangeland (as determined by topography, vegetation, geography, and/or size) be eligible. Another potential principle of compensation for missing livestock was to lead with trust in producers' reporting of their actual missing numbers.

Regarding amount (e.g., factor) of a compensation ratio, members suggested the ratio be determined by baseline data (such as trends of loss), account for topography/geography/vegetation, and that there be review of the ratio after a certain period of time. Members also suggested and generally agreed a compensation ratio should not exceed the number of reported missing livestock. Members suggested other variations on a multiplier, including based upon the availability of control methods and incentives and/or requirements for nonlethal conflict minimization.

Members also discussed the importance of messaging the compensation program to producers and the broader public. There was concern that the term "multiplier" conveys an unfair connotation whereas the intent is to compensate for actual missing livestock. There was discussion of the importance of public education and clarity of messaging around the purpose, amount, and desired social outcomes of additional compensation for wolves; some members suggested a good compensation program could help wolves be accepted by producers.

Indirect losses

Members discussed compensation for indirect losses, which are losses to weight, conception rates, and other factors other than death of livestock. Some members suggested indirect costs should be compensated for with a compensation ratio/multiplier. Considerations to inform recommendations for compensation for indirect losses included public perception of a compensation program as too liberal or as a tool to gain social support for wolves, feasibility of using baseline data for prior losses to quantify indirect losses, land ownership in its relationship to burden of loss, consideration of accessibility and ease/complexity of the reporting and claims process, and the importance of simplicity in communication and compensation programs.

Pay for presence/habitat

Members discussed pay for presence or pay for habitat programs as potential mechanisms for compensation of indirect losses and/or as a holistic mechanism to help support having wolves on the landscape. Concerns included the ability to effectively monitor wolves in order to compensate based on presence. Alternatively, there was discussion of compensation based on habitat value, although some members expressed concerns around the feasibility of payment for providing wolf habitat under existing agency capacity and funding. Funding was discussed as a limiting factor, with members suggesting that expectations around compensation and funding should be clear to prevent frustration and/or confusion with compensation programs.

Conflict minimization/risk reduction techniques as they relate to livestock compensation

Members discussed methods to incentivize adoption and use of conflict minimization/risk reduction techniques and considered whether conflict minimization should be required, in some form, as a requirement for compensation. Some members suggested additional compensation could be used to incentivize conflict minimization practices, while others suggested conflict minimization could be required to qualify compensation beyond direct losses or in cases of chronic depredation. Members discussed that the efficacy of conflict minimization tools are specific to the geography, size, type of livestock, and other conditions of a producer's operation. Members spoke of the importance of creating incentives with efficacy in mind but suggested that expectations and actual circumstances of funding and

agency capacity to provide technical and financial support to producers' use of conflict minimization were important to the reception of the program. Discussion of conflict minimization programs continued on the second day of the meeting (see below).

Information sharing: Wolf management in other states

Eric Odell discussed the management recommendations produced by the 2004 Wolf Working Group, noting that plan outlined a "live and let live" approach to wolves that did not cause conflict, and that it recommended that conflict be resolved on a case-by-case basis with the techniques necessary to allow for flexibility in management. He noted the plan did not address the following questions, which the SAG may want to consider in future conversations: How does management change as the wolf population grows after the initial period of reintroduction? What management tools are available at various population sizes? What are the relevant triggers to these management tools? Should some tools used be consistent regardless of population size? What management tools should maintain consistency regardless of population? He noted the group may also want to consider contingencies under the possibility of wolves being federally relisted under the Endangered Species Act.

Eric introduced TWG members Justin Gude, Roblyn Brown, and Scott Becker to give informational presentations regarding the history of wolf management in Montana, Oregon, and Washington and Wyoming, respectively.

Justin Gude discussed wolf management in Montana. He discussed Montana's process of developing a plan via technical and social working groups, as well as public meetings. He discussed the process of wolf restoration planning and plan approval by the federal government, as well as the variable listing status of gray wolves in the mid-late 2000s. He noted that Montana determined a threshold of 150 wolves and 15 breeding pairs would be the trigger for more liberal actions and approaches for many aspects of wolf management, including increased lethal depredation response, allowing public harvest, and coarser population monitoring. The Montana wolf population far exceeded this threshold when wolves were delisted in 2009 and 2011, triggering liberal management approaches. Monitoring of individual wolves and packs via radio-collaring every pack has become difficult with a population that has exceeded that threshold. He discussed current monitoring and population modeling practices, including the integrated patch occupancy model, which is informed by collaring and monitoring data to estimate distribution, territory size, pack size, and ultimately population size. He discussed changes made for allowance of public harvest, noting more liberal methods of take are being monitored and analyzed to understand effects to the population, which he suggested have not caused large declines to the overall population to date even though that has been the intent. He discussed trends in livestock depredation and lethal and nonlethal tools used to manage depredating wolves.

Roblyn Brown discussed wolf management in Oregon, including guiding principles that inform management as well as state and federal policies that have informed wolf management. She discussed Oregon's phased approach to wolf management, noting that three phases address a range of management practices and that the phases are implemented in different geographical areas or "zones" in Oregon to increase management flexibility. She discussed criteria within this phased approach that trigger lethal control for depredating wolves, nonlethal management tools, and the process of regularly updating the Oregon wolf management plan.

Scott Becker discussed wolf management in Washington and Wyoming. For Wyoming, he discussed the process of management planning, the logistics of Wyoming's wolf trophy game management area in

Northwest Wyoming, the seasonal wolf trophy game management area in a small portion of West central Wyoming, and the wolf's classification as a predator in the rest of the state. He noted the differences in allowance of lethal management of wolves across the three zones: the trophy game area allows for permitted hunting, the seasonal trophy game area for a season of permitted hunting, and the remainder of the state for wolves to be lethally taken without permits. He also discussed thresholds of minimum population and effects on ungulate populations as additional management considerations for Wyoming. For Washington, he discussed a similar zoned approach to Oregon, where wolves have various levels of management, as triggered by factors such as population size, size of ungulate populations, and listing status.

Members held a question and answer session with the presenters. Members discussed how thresholds were determined, which the presenters noted followed a federal standard determined by an international panel of experts. Members also discussed effects to big game in the Northern Rocky Mountains states; presenters noted that big game at a statewide level had not experienced significant declines, that some effects on distribution were observed, and that trends were highly variable. Members also discussed the need to anticipate potential federal relisting in the planning process. Members also discussed impacts on wolf pack behavior following lethal control of one or more members; presenters suggested these packs did not experience significant destabilization. Members also discussed social expectations around monitoring and management, as well as definitions of success in the planning process.

December 15, 2021

Proposed hazing regulation

Luke Hoffman and Katie Lanter briefly discussed the issue paper before the Parks and Wildlife Commission (PWC) to allow nonlethal hazing of gray wolves in Colorado to prevent or reduce injury to livestock and the PWC process. Katie noted the PWC first heard the paper during their November 2021 meeting and will vote on it, after a period of feedback and revisions made by CPW staff, in January 2022. Katie noted the first written public comment deadline for the January 2022 meeting is noon on December 29, 2021. (*Note: second (final) deadline for comment is noon on Friday, January 7, 2022*).

Members discussed a strawman letter to the PWC drafted by an informal, *ad hoc* group of SAG members. Regarding nonlethal techniques, members discussed the legality of inadvertent take of a wolf by a guard dog; inclusion of range riders, sheep herders, and drones or other aircraft as allowed nonlethal hazing tools; the burden of investigation when a wolf is accidentally taken, and allowance of innovation in nonlethal hazing. Members revisited the drafted letter after a working lunch by the *ad hoc* group of members and resolved to finalize the wording of the letter to submit to the PWC before the 12/29 deadline.

Follow-up discussion: Livestock compensation plan

Members returned to the discussion of considerations for a wolf livestock compensation program, with particular focus on considerations for a conflict minimization program. Members emphasized the need for a program to support conflict minimization practices that is separate from (and not as a requirement for) compensation for losses. Members discussed the need to support both preventative and post-depredation non-lethal practice implementation, emphasize context specificity, recognize that not all efforts will prevent loss while encouraging and supporting implementation and innovation, and emphasize producer education and outreach, leveraging experiences and lessons of other producers. Concerns for incentivizing conflict minimization techniques included creating an attitude of "checking a box" and that linking conflict minimization techniques to compensation for loss would be complex and

costly. Members emphasized that technical, staffing, and financial assistance should be provided to increase adoption of conflict minimization techniques. Members suggested conflict minimization tools are an opportune area to form public-private partnerships and/or work with NGOs, as well as to identify diverse funding sources.

Members had further discussion on habitat and pay for presence programs, with some members expressing concerns about feasibility, efficacy, and complexity. Some members suggested that such programs may be applicable more broadly and appropriate for other wildlife management objectives rather than wolf compensation. Others expressed interest in further consideration of these programs in order to support and incentivize the desired outcome of having wolves on the landscape. For those interested in these and other kinds of programs (e.g., insurance programs), there was interest in maintaining an openness to exploring them should specific ideas be further proposed.

Following these discussions, members informally agreed that the next steps should include drafting alternative(s) for further review, incorporating the following elements. The group agreed that a subcommittee would work with CPW to refine alternatives prior to the next SAG meeting.:

- Compensate for confirmed losses at 100 percent fair market value; compensate for probable losses due to wolves at least 50 percent (and perhaps up to 100%) fair market value.
 - There was interest in further understanding how these categories compare to the CPW preponderance of evidence standard and how they would be determined in the field and/or classified for data collection.
- Use a ratio to compensate for missing livestock, with the specific ratio or compensation amount to be determined. This amount may also help to account for indirect losses.
- A conflict minimization program should be developed to provide financial and technical assistance for implementing practices.
- Public education for producers and the larger public, around the process and desired outcomes of the compensation program, should be emphasized.
- Opportunities for creativity, especially as related to promoting conflict minimization, should be encouraged.

Many members also spoke to the importance of maintaining the simplicity of a compensation program, for ease of access and favor with producers, as well as maintaining the general public's approval of any program that differs from CPW's existing game damage program.

Conflict minimization and management of depredating wolves

In small groups, members were asked to identify and discuss questions that they might have regarding management approaches for wolves that have depredated livestock. During a brief plenary discussion, members discussed potential outcomes of not allowing lethal take, with some suggesting this might increase illegal take; there was also discussion of political considerations and management of public expectations regarding lethal control. Some members suggested the importance of balancing flexibility and regulation around lethal and nonlethal management techniques for depredating wolves. Some members suggested nonlethal tools are important to prioritize but that all tools are important to consider in a manager's toolbox. Some members inquired about the feasibility of translocating depredating wolves, which others suggested is ineffective and not ideal due to cascading social concerns, especially in the area where a depredating wolf would be relocated. Members suggested the importance of maintaining relationships, trust, and agency credibility in considering different types of management strategies. Additional questions were captured to help inform future discussions.

Information sharing and discussion: Public Engagement Report and FAQs

Julie Shapiro briefly noted that the Summer 2021 Public Engagement Report is available to read and was presented to the PWC during its November 2021 meeting; the presentation recording is available to view on the Commission website. She noted that the public engagement report will be used to help inform social considerations of upcoming topics when discussed by the SAG. She also encouraged future public comments to identify considerations and ideas not already included in the report. She noted Keystone and CPW are working to develop the next rounds of public engagement, before and after a draft plan becomes available. She invited SAG members to ask clarifying questions of Keystone about the content of the report as they emerge in the future.

Public comment

Dianna Tomback (CO resident) noted she is a conservation biologist at the University of Denver, participated in the Rocky Mountain Wolf Project, and was on the board of Working Circle. She suggested livestock conflict minimization techniques should be required for qualification for some compensation structure, such as pay-for-presence. She suggested use of a point system to incentivize use of conflict minimization and an adaptive management process with regular review of a compensation system. She also suggested greater education efforts for conflict minimization and safety concerns should be employed by CPW, and could benefit from help with local university extension programs and NGOs.

Robin Knox (CO Wildlife Federation) thanked CPW for hosting an informative meeting, and suggested advisory groups take their time to create a compensation program to address Colorado's unique conditions, such as topography, winter movement of ungulates, and population. He suggested it was an important topic for landowners in Colorado and that the CO Wildlife Federation looked forward to reviewing a draft plan.

Bonnie Brown (Delta Co., Executive Director, CO Woolgrowers) cited the language of Proposition 114 and stated that the Parks and Wildlife Commission should not impose resource restrictions on landowners based on nonlethal deterrents or requiring a land use restriction. She suggested she did not want a liberal program, but a fair and adequate compensation program, as taxpayers' will pressure ranchers to provide detailed accounts of their losses. She suggested producers' costs can be itemized to take an agreed-upon compensation rate, in addition to compensation for direct losses, and she stated that there are other direct losses beyond death and damage to livestock. She suggested that compensation should not be withheld if CPW cannot get out to verify a claim in time. She suggested the importance of maintaining working lands in Colorado, as they provide key open space and habitat for critical wildlife.

Karin Mahuna (CO resident) expressed her disgust for the livestock industry. She expressed dissatisfaction with producers on the rangeland and the multiplier used to compensate for missing livestock in Wyoming. She suggested it was important to foster goodwill toward wolves. She suggested wolves should not be singled out for use of multipliers or additional compensation. She asked for prosecution of wolves to be stopped and that hunting of wolves should not be allowed.

Terry Fankhauser (Executive Vice President, Colorado Cattlemen's Association) noted the ranching industry is committed to this discussion. He stated that wolf reintroduction is a political decision, not a biological one, and that compensation for direct and indirect losses should be based on those factors. He stressed the importance of considering indirect losses, which may increase exponentially when confirmed depredation occurs. He suggested a modeled approach to compensate for indirect losses that reflects accurate information.

Debra Taylor (Denver Co.) expressed her concern for poaching and climate change as unaccounted factors for missing livestock and indirect losses. She suggested compensation programs should not be insurance programs and that compensation should be limited to incentivize additional conflict minimization techniques. She suggested a compensation program for wolves should follow the current program for bear and mountain lion.

Gail Bell (Denver Co.) noted she felt honored to represent and advocate for wolves and to advocate to right the wrongs this country has perpetrated against wolves. She expressed her fear as to whether Colorado would be different from other states in wolf management and messaging. She expressed her hope for the development of a plan that would make all Coloradoans proud, to show the rest of the country and world that humans can learn from and correct their mistakes. She suggested that the public perception of the TWG and the SAG is that both groups are weighted in opposition of wolves.

Alex Few (Western Landowners' Alliance) noted she leads a program called the Working Wild Challenge. She suggested the group look for efficiencies in the process of depredation investigation. She suggested indirect losses are 7.5 times higher than losses from confirmed kills and that these should be phrased as actual losses rather than indirect losses. She suggested an effective conflict minimization program requires technical, financial, and operational assistance. She suggested effective conflict minimization will not reduce all losses but will reduce them when working with producers collaboratively and adaptively. She suggested chronic depredators should be removed to support nonlethal practices, and that these practices are best delivered by trusted members of the agricultural community.

Rhonda Dern (CO resident) suggested wolves predate mostly on elk and that coexistence strategies can limit all depredation on livestock. She expressed opposition to additional compensation beyond what is fair. She expressed that the SAG is a group unfairly weighted against wolves and that inability of the public to view breakout groups is a deliberate attempt to silence wolf advocates. She listed comments she heard in breakout groups.

Tom Zieber (Gunnison Co.) expressed his excitement for the meeting's robust discussion on hazing issues and noted he would feel unsatisfied if a wolf was lethally controlled. He suggested that he viewed compensation as a backstop to conflict minimization and responsible practices on the part of the rancher. He also expressed that some wolf advocates did not vote to reintroduce wolves for fear of how wolves would be treated and requested that their concerns be considered as well.