POLICY LESSONS FOR COLORADO WOLF REINTRODUCTION

Brielle Manzolillo and Courtney Schultz

This research serves as part of the Center for Collaborative Conservation policy brief series Policy and Practice for Wolf Reintroduction in Colorado. You can find the whole series here.

Research Focus

To inform Colorado’s wolf reintroduction process, we conducted a one-year study to understand policy and management strategies from past wolf reintroductions, including the Northern Rocky Mountains and the Mexican wolf recovery area. Our goals were to identify how lessons learned from past reintroduction and management efforts could inform strategies for future reintroduction, and to capture ideas and suggestions specifically for Colorado.

Approach

We conducted 42 interviews with state and federal land/wildlife managers, and individuals from other key stakeholder groups from past reintroduction areas and Colorado.

Key Findings

The majority of interviewees advocated for taking an “all tools” approach to management, meaning a mix of non-lethal and lethal measures. Many felt that having flexibility for some lethal removal was a critical part of management for increasing social tolerance and population control. Some interviewees mentioned the use of management zones where wolves are afforded different protections across boundary lines. A few felt that this increased social tolerance towards wolves in places like Wyoming, but others felt that boundary lines in the Southwest limited the ecological success of the Mexican wolf population.

Most interviewees felt that collaborative processes with diverse stakeholders and other relevant federal, state, and Tribal managing agencies that allow for joint-decision making increase social tolerance towards having wolves and would be useful in Colorado. Many emphasized the importance of transparency in communication through data-sharing and building personal relationships in order to foster effective collaboration. Decisions affecting specific groups, such as details on livestock compensation programs, should directly involve those stakeholders, interviewees said.

Most felt that depredation compensation programs were a necessity for wolf reintroduction but expressed frustrations with these programs. Difficulties included problems with confirming a depredation, payment not accounting for other losses such as cattle weight loss due to stress, and the amount of time it takes to receive payment. Many also felt that these programs are significantly underfunded.

Many emphasized that Colorado should make sure that the necessary funding mechanisms are in place before reintroduction occurs. Some also were
concerned that reliance on CPW funds may reduce tolerance of wolves. Interviewees suggested that Colorado shift the financial burden away from those who most likely did not vote for reintroduction (e.g., hunter and angler communities) and towards those who did by using general tax revenue.

Although ultimate jurisdictional authority will depend on the federal endangered status of the wolf under the Endangered Species Act (ESA) at the time of reintroduction, the majority of interviewees advocated for Colorado Parks and Wildlife (CPW) to reintroduce wolves only if they remain delisted under the ESA. If wolves are re-listed, CPW will potentially need to seek a permit through the U.S. Fish and Wildlife Service (USFWS) to reintroduce, but ultimate authority will still fall to the federal agency. Interviewees felt that state agencies should have full control over reintroduction because they have more regulatory flexibility and can tailor management plans to state needs.

**Implications for Policy and Practice**

A regulatory framework that utilizes a mix of policy tools (e.g., incentives or financial assistance), along with regulatory flexibility, can help to effectively manage wolves over different scales. This mix of tools should include both lethal removal and non-lethal measures. It is important to use diverse tools, paying attention to how they will be implemented and affect different groups of people.

Collaborative processes that allow for joint-decision making between stakeholders and managers may help to increase social tolerance towards wolves.

Clear management goals and targets will need to be set prior to reintroduction via management plans that are co-generated amongst all relevant partners (i.e., livestock producers, hunters, NGOs, federal and state agencies, Tribal Nations, and other members of the public and stakeholder groups).

Diversifying funding sources to better leverage the resources of those who voted for wolf reintroduction may be helpful to address perceptions of equity. Funding also should be in place prior to reintroduction in order to better support the implementation of policy and management strategies.

Regardless of which agency has jurisdictional oversight, a community-based approach to management will be helpful for successful reintroduction. An approach including local state agencies and community groups could increase social tolerance towards wolves on the landscape by increasing trust between the public and managers, as opposed to reintroduction being run by organizations outside of the state (i.e., federal agencies).

**More Information**

For more information on this project, contact:

Brielle Manzolillo  
Brielle.Manzolillo@colostate.edu  
401-474-5283

Dr. Courtney Schultz  
Courtney.Schultz@colostate.edu  
970-491-6556

Visit sites.warnercnr.colostate.edu/courtneyschultz/ to find our full policy report.

---

This study was made possible by funding from the Department of Forest and Rangeland Stewardship, the Center for Collaborative Conservation, and Center for Human Carnivore Coexistence at Colorado State University.
This research serves as part of the Center for Collaborative Conservation policy brief series Policy and Practice for Wolf Reintroduction in Colorado. You can find the whole series here.

Collaboration for Reducing Livestock-Carnivore Conflicts

Matthew Collins, Rebecca Niemiec, Jon Salerno, Courtney Schulz

Research Focus and Approach
To inform efforts for reducing conflict between wolves and livestock in Colorado, we conducted a study to determine how place-based collaborative groups motivate community-scale implementation of conflict prevention tools (CPT) (e.g., range riding, fencing, and carcass removal) across different social and ecological contexts.

We conducted 27 semi-structured interviews with livestock producers, collaborative group coordinators, wildlife management agency personnel and conflict reduction experts from ten place-based collaborative groups with livestock-carnivore conflict reduction programs throughout the American West.

Key Findings
Implementation and effectiveness of CPTs is contextual and based on local ecological characteristics. Participants described livestock-carnivore conflict and animal husbandry practices in relation to landscape characteristics including terrain openness, steepness, accessibility and geographical scale. Place-based collaborative groups implemented tools appropriate to their local ecological context and terrain.

Place-based collaborative groups build trust and social capital necessary to implement CPTs at community scales.

Early efforts by collaborative groups to address less controversial conservation goals such as habitat improvements or invasive weeds management build trust and social capital among landowners, nonprofits, and agencies important for coordinating and securing funding for more controversial topics such as wolf-livestock conflict reduction.

Technical assistance from wolf experts is important for forming conflict reduction programs. Early involvement of technical experts and agency representatives in advisory roles helps prioritize and implement tools best fit to the landscape. Once programs are established, CPTs are best delivered by trusted individuals with history working in the community.

An individual’s decision to adopt CPT’s is influenced by the perspectives of others in the community and whether the tool or practice is socially supported. Livestock producers may be socially ostracized for implementing CPTs for appearing “pro wolf” or may be hesitant to share successes of tools with neighbors, thus slowing the tools’ uptake. Yet, when collaborative groups’ thought leaders model acceptance and success of CPTs and coordinate with their peers, they set new norms that support coordination for conflict reduction.
Implications for Policy and Practice

Implementation of CPTs to reduce wolf-livestock conflicts should be approached at community scales rather than on an individual basis. Applying range riding, fencing, or carcass collection to individual properties may cause negative spill-over effects including increased depredation to neighbors. To achieve collective benefits of conflict reduction, tools and practices should be delivered and coordinated across private and public lands at community scales. Place-based collaborative groups provide structures to implement and adaptively manage CPTs at such scales within Colorado.

CPW District Wildlife Managers should prioritize engaging existing Colorado collaboratives to build trust and social capital necessary to address challenges with wolves. Further, CPW District Wildlife Managers should identify thought leaders and encourage peer-to-peer and neighbor-to-neighbor interaction to coordinate for conservation actions and prepare communities to coordinate for conflict reduction.

Landowners will require technical assistance from CPW, Wildlife Services (WS), and/or CSU Extension to implement CPTs. This technical assistance to reduce conflict is best delivered through place-based collaboratives that will need financial support. Funding resource coordinator positions that can coordinate community implementation of CPTs should be prioritized.

It is anticipated that funding to support turbo-fladry, range riding, and carcass collection will become available through Natural Resource Conservation Service (NRCS) Farm Bill funding in 2023. Yet, these contracts will only be available to individual producers. State agencies should work with Colorado NRCS field officers to support adoption of these practices into existing Farm Bill programs and share the value of contracting to provide CPTs at the community rather than individual level.

One way to build relationships with landowners would be to help fund the capacity for place-based collaboratives to coordinate with CPW and DNR. Funding for CPTs is often easier to secure than funding the capacity to implement them effectively. Colorado DNR could offer funding to subsidize hiring of resource coordinators to ensure that place-based collaboratives have the capacity to coordinate for conflict reduction.

More Information

For more information on this project, contact:

Matthew Collins
mcollins@colostate.edu
443-841-6087

Thank you to our interview participants and project partners, Western Landowners Alliance and USDA-APHIS. This study was made possible by funding from the Department of Human Dimensions of Natural Resources and the Center for Collaborative Conservation at Colorado State University.
Research Focus

I conducted a study to identify a potential pathway forward to assist in managing social conflict over wolf recovery in Colorado and help mitigate further conflict escalation and backlash. Wolf recovery is a notoriously polarizing issue that is steeped in vitriol and stakeholder conflict, which poses added challenges to wildlife managers. My goal here was to identify guiding principles, that could be implemented in a stakeholder engagement process, specific to reducing conflict and fostering intergroup reconciliation.

Approach

In Summer 2020 I developed these principles from a synthesis of various primary and secondary resources. This included interviews with conflict and peace-building theorists, decision science analysts, and practitioners from the conflict resolution, public deliberation, and collaborative conservation fields. I then conducted an academic literature review across several relevant disciplines, such as general conflict theory, environmental conflict resolution, public deliberation, and negotiation and mediation theory. Furthermore, I completed a policy review relevant to environmental collaboration and conflict resolution and reviewed practitioner-oriented conflict resolution training materials.

Key Findings

My synthesis revealed six thematic areas, the guiding principles, that are important to incorporate into broader stakeholder engagement processes to effectively manage and resolve social conflict.

Guiding Principles for Conflict Resolution

1. Use of a Professional 3rd-Party Facilitator

To guarantee fair implementation of the guiding principles and ensure effective conflict engagement, it is necessary to contract a facilitator, practiced in conflict resolution, to govern the process.

2. Extensive Stakeholder Analysis & Selection Transparency

Extensive stakeholder analysis by process hosts to identify all parties who should have a seat at the table is of the upmost importance. Selection of participants should be transparent, clearly articulated, and include an open application process.

3. Identification & Targeting of Underlying Conflict Drivers

Conflict between groups is driven by values and by various perceptions and assumptions of the issue and of others. Identifying these underlying drivers associated with the conflict, and addressing them in the process, is necessary for reducing conflict.

4. Early Stakeholder Involvement & Co-Development of Outcome Objectives

Process details should be determined by participants’ shared vision, and goals must be co-developed. Stakeholders need to work together to build a shared narrative of concerns, common ground, and core needs.

5. Stakeholder Empowerment

A good process should empower actors to guide the process and desired outcomes, and to work energetically and cooperatively to achieve their goals.

6. Process & Agency Transparency

It is vital stakeholders understand their potential degree of decision-making power and their role in the process, therefore decision-makers need to be transparent about their goals, intentions, and restrictions.
Implications for Policy and Practice

Emphasizing stakeholder conflict management efforts in stakeholder engagement processes for contentious natural resource management issues, such as wolf recovery and management, is critical to the long-term success of such an initiative. Unmanaged conflict often results in prolonged and costly litigation, loss of trust in and hostility towards agencies, persecution of the species and groups involved, delays in executing management objectives, and aggressive stakeholder lobbying.

It is of upmost importance to conduct extensive stakeholder and conflict analyses when initiating collaborative stakeholder processes related to divisive issues. Using stakeholder analysis to ensure all affected parties have a seat at the table, particularly traditionally marginalized groups or those that have felt marginalized from decision-making, is vital to reducing conflict and increasing trust. Moreover, understanding the conflict from the perspective of those groups involved is necessary for affecting change. Conflict between groups is driven by deeply held values related to the issue and by perceptions of the nature of the conflict and assumptions about members of one’s own group and outside groups. These values, perceptions, and assumptions lead to strong emotions that fuel the conflict. Identifying these underlying drivers associated with the conflict from the perspectives of all relevant groups, and addressing them in stakeholder engagement processes, is necessary to achieving conflict resolution.

To effectively manage conflict, it is important that engagement processes lead to some degree of influence in a management plan, and that stakeholders feel empowered by the process to make a real impact in decision-making. Further, a transformative process should encourage openness, empathy, and perspective-taking and put the power to guide the process and outcomes in the participants’ hands. However, this empowerment should not be limited to self-determination and dispute settlement. Conflict engagement should be an opportunity to explore differences, air past grievances or perceived slights, and build recognition and empathy for others’ needs and values. This type of intergroup contact has been shown to reduce prejudice, facilitate reconciliation, encourage agreement on solutions, and prevent future conflicts from arising.

A condition of effective conflict management is transparency by decision-makers regarding participant selection and for both agency and process goals, intentions, and restrictions. Stakeholder groups are more likely to accept and cooperate with plans and policies, even those not fully in line with their views, when they feel their needs and concerns have been listened to and incorporated to some degree. However, if stakeholders feel ignored or exploited, in that they perceive the process and their participation a farce, reactance can occur and trust in agency can diminish. Deciding stakeholders’ roles in decision-making may be an iterative process that develops over time and the degree of stakeholder influence can be up to the discretion of the ultimate decision-makers. However, it is vital stakeholders understand early on their potential degree of decision-making power (or at what stage of the process that will be decided upon) and their role in the process.

More Information

For more information about this project, and to review the “Guiding Principles for Conflict Resolution” report, contact:

Mireille Gonzalez, PhD Candidate
Human Dimensions of Natural Resources, CSU
Mireille.Gonzalez@colostate.edu

This study was made possible by funding from the Center for Collaborative Conservation and Center for Human Carnivore Coexistence at Colorado State University.
Perspectives on Wolf Depredation Reporting and Compensation

Rae Nickerson, Alex Few, Becky Niemiec, Dana Hoag, and Paul Evangelista

This research serves as part of the Center for Collaborative Conservation policy brief series Policy and Practice for Wolf Reintroduction in Colorado. You can find the whole series here.

Research Focus
To inform the development of an equitable compensation program for wolf depredation in Colorado, we conducted 12 focus groups and collected 165 survey responses from livestock producers across the West, including Colorado stakeholders to gauge expectations. Our goals were to identify what factors drive compensation use and the associated reporting process, and to understand what aspects of existing compensation can be improved to better serve landowners.

Key Findings
While the majority of respondents had reported depredations to the required personnel, about half of all producers had chosen not to report a depredation at least once. The most commonly stated reasons for reporting included to be eligible for compensation, to maintain an accurate record of wolf conflict, and to have wolves removed and/or management taken. The most commonly stated reasons for not reporting included discomfort with government oversight and regulation, concern about unfair confirmations made by agency personnel, and that the time investment associated with the reporting process (detection and confirmation) is not worth the available compensation.

Respondents who believed their neighbors and/or community members were also reporting depredations were more likely to intend to report future depredation. However, those who had experienced wolf depredation in the past were less likely to intend to report compared to those who had not yet experienced depredation.

Of the producers who had received compensation for depredation in the past, satisfaction with programs was extremely mixed. The most commonly stated reasons for choosing not to apply for compensation included dissatisfaction with the confirmation process (too much validation and paperwork), a lack of trust and satisfaction with state government employees, and a belief that current compensation programs were not the right solution to wolf-livestock conflict.

Cattle grazing on a public allotment with wolf and grizzly bear activity
Over half of respondents who had received compensation for past depredation believed the compensation available to them was not representative of their actual losses to wolves, and that compensation for indirect losses is needed. Most respondents also thought a multiplier should be used to account for depredated animals never detected for confirmation.

**Factors Driving Intent to Apply for Compensation:**

- **Trust in State Government**: the greater a respondent’s concern with state involvement in their operations, the more likely they were to intend to apply for compensation.
- **Community Perceptions**: the greater number of neighbors and/or community members a respondent believed were applying for compensation, the more likely they were to intend to apply.
- **State of Residence**: if a respondent was from Colorado or New Mexico, the more likely they were to intend to apply.
- **Attitude**: the more negative a respondent’s attitude toward being compensated, the less likely they were to intend to apply.
- **Financial Risk**: the more financially vulnerable a respondent felt they would be without compensation, the more likely they were to intend.

**Implications for Colorado Policy and Management**

Livestock producers want depredation support programs that provide diverse payment and engagement options, while including compensation for direct losses.

Colorado producers were interested in both access to a cost-share for nonlethal financial and technical support and a habitat lease option, but only when paired with compensation for direct losses. Across all states, programs without payments for direct losses were extremely unpopular.

Programs with diverse payment and engagement options can provide flexibility for the context-specific needs of each operation, while also helping to cover additional conflict-related costs. 80% of respondents believed indirect losses were as, or more financially damaging than depredation. Although research on the impacts of indirect losses remains limited, programs that provide alternative means of support could greatly benefit operations where, for example, terrain makes detecting carcasses extremely difficult. This flexibility may also help to support landowner autonomy and ownership over wolf-related management needs.

**CPW District Wildlife Managers should encourage peer-to-peer interaction to increase depredation reporting and compensation use.** If effective and sustainable wolf management policies rely primarily on the accuracy of depredation data, CPW should focus efforts on promoting reporting among livestock producers. Since the reporting and compensation processes are connected, improving producer experience with both processes may help to promote reporting while also helping producers remain economically viable in the face of wolf and grizzly bear conflict.

**More Information**

For more information about this project please contact:

Rae Nickerson  
raenickerson91@gmail.com  
847-951-6477

Alex Few  
alex@westernlandowners.org  
307-271-2886

---

*We thank the focus group and survey participants who took time to participate in this research, as well as our partners Western Landowners Alliance, USDA-APHIS, and CSU Extension. This study was made possible by funding from the Center for Collaborative Conservation and Natural Resource Ecology Lab at CSU.*