

# 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.

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## 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	
<b>Livestock interactions</b>						
<b>Present but not biting, wounding grasping or killing or chasing; no prior attacks</b>	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		
<b>Observed in act of biting, wounding, grasping or killing -OR- Observed in the act of chasing</b>	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 <b>BITING, WOUNDING, GRASPING or KILLING</b> 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 <b>CHASING</b> (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)  <u>Nonlethal tools should be explored and encouraged before lethal; lethal management should not generally be a first line of defense.</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>	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>	<b>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.</b>  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)
<b>Other Wildlife Species Interactions</b>					
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
<b>Other Situations</b>					
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>	<b><i>To be consistent with current game damage, this would not be allowed</i></b>
	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>	<b><i>To be consistent with current game damage, this would not be allowed</i></b>
	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

		<b>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)</b>		
<b>Depredation Condition:</b>				
<b>Phase</b>		<b>1, 2,3</b>	<b>1 &amp; 2</b>	<b>3</b>
<b>First Name</b>	<b>Last Name</b>	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
<b>Total support/no objection (1, 2, or 3)</b>		<b>14</b>	<b>14</b>	<b>14</b>
<b>Total objections (4 or 5)</b>		<b>1</b>	<b>1</b>	<b>1</b>
<b>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.</b>				
<b>*Consensus scale:</b>				
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
<b>Total support/no objection (1, 2, or 3)</b>		14
<b>Total objections (4 or 5)</b>		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.		
<b>*Consensus scale:</b>		
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 <b>will require:</b> 1) data or other information indicating that wolves are a major cause of ungulate herds not meeting objectives; <b>and will consider:</b> 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
<b>Total support/no objection (1, 2, or 3)</b>		10	12
<b>Total objections (4 or 5)</b>		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.			
<b>*Consensus scale:</b>			
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
<b>Total support/no objection (1, 2, or 3)</b>		8	13
<b>Total objections (4 or 5)</b>		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.			
<b>*Consensus scale:</b>			
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.*