

# DRAFT COLORADO WOLF RESTORATION AND MANAGEMENT PLAN

## SUGGESTED COMMENTS

January-February 2023

CPW DRAFT WOLF MANAGEMENT PLAN: <https://cpw.state.co.us/Documents/Wolves/DRAFT-CO-Wolf-Plan.pdf>

COMMENT BEFORE FEB. 22: <https://cpw.state.co.us/aboutus/Pages/Submit-Public-Comments.aspx>

- **Phased Management of Wolves:** Remove references to *Phase 4 (game species status)*
  - The voters defined the wolf as a nongame species (Prop 114)
  - The SAG recommended that no decision about Phase 4 be included in the plan
- **Delisting criteria from Phase 2 (state threatened) to Phase 3 (nongame)**
  - Revise delisting numbers upward based on best available science
    - The criteria do not meet the standard of a “self-sustaining population” (Prop 114), as defined in conservation biology (Redford et al. 2011)
    - CPW must analyze and apply the meaning of self-sustaining (per Redford et al. 2011) and use that guidance in the plan
    - The plan criteria depend on outdated estimates from the Northern Rockies, which had little scientific data and do not apply directly to Colorado
    - Carrying capacity estimates are 750 to 1500 wolves in Colorado (Carroll et al. 2003, 2006)
    - Standard conservation biology requires 100 breeding individuals (50 breeding pairs) to avoid inbreeding (the 100/1000 rule; Frankham et al. 2014)
  - Add a geographic component to delisting criteria
    - Conservation science is clear that geographic distribution is an important part of recovery. Restoration means resilient across the species’ range
    - 200 wolves could occupy as little as 8% of available habitat
- **Background and Key Concepts (Ch. 2):** Clarify scientific concepts and cite science
  - Additive and compensatory predation
    - Wolf predation may replace that by bears, lions, and other predators; discuss this
  - Recent findings from Yellowstone
    - Review and incorporate the findings from Yellowstone (Smith et al. 2020)
- Incorporate individual animal welfare concerns, e.g., for wolves injured during handling
- **Impact-Based Management (Ch.5):** Begin with the SAG consensus that “Nonlethal methods should be explored and encouraged before lethal; lethal methods should not generally be a first line of defense” as the overarching policy
- In *Impact: Ungulate populations*, lethal control should only be considered if prey species are not only below objectives but also undergoing an unacceptably severe decline; and causality is clear
- Change *Impact: Populations of wildlife species other than ungulate prey to species of concern* (other threatened and endangered species), as discussed and recommended by the SAG
- In *Impact: Agency wolf management*, specify “to avoid conflict with human activities”
- **Wolf-Livestock Interactions (Ch. 6):** Expand **Conflict Prevention Program** into a full program
  - Conflict prevention receives less than one page of discussion (p. 50), it should be expanded and recognize the opportunities to work with non-profit groups to implement methods
  - Incorporate the full SAG consensus recommendation for conflict prevention
  - Describe the many available techniques for conflict reduction/ prevention

- Recognize that only 17% of wolf packs become involved in livestock depredation; the majority of wolves never attack livestock
- **Modify Compensation Program guidelines**
  - The draft compensation plan is much more generous than intended in Prop 114
  - As written the compensation guidelines, especially with the short attention given to conflict reduction, could result in unacceptably high compensation payments. CPW must evaluate the potential cost of the program at least partly through careful analysis of compensation for losses of livestock to wolves in other states
  - Incentivize prevention over compensation to the maximum extent possible
  - There is no SAG recommendation; the draft plan is based on the ranchers' alternative
  - If paying for missing livestock at all, pay only 50% (rather than 100%) as these are probable, not verified losses
  - Incorporate a sunset clause ending the wolf-specific program at the transition from Phase 2 to Phase 3 (harmonizing with the existing game damage program)
- **Expand discussion of positive impacts of wolves**
  - Use CSU data specifically addressing the economic values of wolves (e.g., Hoag et al. 2022)
  - More comprehensively recognize the potential positive effects of wolf predation on ungulate distribution and disease
  - Address the non-monetary benefits of wolves, including existence value
  - The land deserves to be made whole from, and the public deserves to be compensated for, the decades of loss
- **Ungulate Population Monitoring (Ch. 7)**
  - Specifically recognize that elk numbers and hunter harvest in the Northern Rockies have increased since wolf restoration
  - Recognize more explicitly the likelihood that while some may blame wolves for potential reductions in hunting opportunity, the ability to scientifically demonstrate such an effect is highly questionable
- **Education and Outreach (Ch. 8):** More explicitly outline what methods, where and when CPW will reach out to inform the public about both positive and negative impacts of wolves
- **Funding (Ch. 9):** Cite requirement in CRS 33-2-105.8 of general fund support for wolf management

Carroll, C., M.K. Phillips, N.H. Schumaker, and D.W. Smith. 2003. [Impacts of landscape change on wolf restoration success: Planning a reintroduction program based on static and dynamic models](#). *Conservation Biology* 17:536-548.

Carroll, C., M.K. Phillips, C.A. Lopez-Gonzalez, and N.H. Schumaker. 2006. [Defining recovery goals and strategies for endangered species: The wolf as a case study](#). *BioScience* 56(1):25-37.

Frankham, R., C.J.A. Bradshaw, and B.W. Brook. 2014. [Genetics in conservation management: Revised recommendations for the 50/500 rules, Red List criteria and population viability analyses](#). *Biological Conservation* 170:56-63.

Hoag, D., S. Breck, K. Crooks, and B. Niemiec. 2022. [Economic consequences of the wolf comeback in the western United States](#). *Western Economic Forum* 20(1): 61-70.

Redford, K.H., G. Amato, J. Baillie, P. Beldomenico, E.L. Bennett, N. Clum, R. Cook, G. Fonseca, S. Hedges, F. Launay, S. Lieberman, G. M. Mace, A. Murayama, A. Putnam, J.G. Robinson, H. Rosenbaum, E.W. Sanderson, S.N. Stuart, P. Thomas, and J. Thorbjarnarson. 2011. [What does it mean to successfully conserve a \(vertebrate\) species?](#) *BioScience* 61(1):39-48.

Smith, D.W., D.R. Stahler, and D.R. MacNulty (eds.). *Yellowstone Wolves: Science and Discovery in the World's First National Park*. University of Chicago Press, Chicago, Illinois.