

Elk Feedground Steering Committee
Wyoming Game and Fish Department
5400 Bishop Blvd
Cheyenne, WY 82009

Re: Comments on the draft Elk Feedgrounds Management Plan

Dear WGFD Elk Feedground Steering Committee,

Sierra Club Wyoming and Wyoming Wildlife Advocates submit these comments on the Draft Elk Feedgrounds Management Plan as released for stakeholder and public review in June 2023. Our organizations have a long history of working with the Wyoming Game and Fish Department (WGFD). Both of our organizations have been involved in this issue for over a decade, and recently participated in the lengthy stakeholder process since 2021. We sent recommendations and scientific studies to the WGFD during the process of the creation of a chronic wasting disease management plan. We submitted exhaustive recommendations prior to the Draft Elk Feedgrounds Management Plan's public release. Additionally, we are pleased to share a report detailing alternative strategies for elk management, without the need for annual artificial feeding, commissioned by WWA and SCWY - [Management Alternatives for Elk Feedgrounds in Wyoming and Surrounding States](#).

Our organizations are deeply invested in wildlife management in Wyoming, and we collectively represent thousands of residents across the state who highly value maintaining healthy wildlife populations for a multitude of reasons, including hunting, wildlife watching, ecological stability, and intrinsic values. We hope the completed elk management plan supports a transition to science-based wildlife management strategies that offer the best possible opportunity for healthy, free-ranging ungulates to survive far into the future.

Thank you for the opportunity to provide comments on the Draft Elk Feedground Management Plan. We hope our comments convey the need for urgent action from all stakeholders to protect the health of our elk population. Detailed below are our key takeaways from the draft plan, outlining our areas of opposition and support, as well as recommendations to improve the plan.

Topline Comments

Our overarching goal in providing these comments is to support a transition to science-based wildlife management strategies that offer the best possible opportunity for healthy, free-ranging ungulates to survive far into the future. We will summarize our topline comments and then go into technical sections of the WGFD Draft Elk Feedgrounds Management Plan.

First, the draft plan timeline for any meaningful action is far too slow to affect the trajectory of wildlife diseases, most notably chronic wasting disease (CWD). We urge the steering committee to adopt a final management plan that includes a well-defined, clear plan to begin a controlled phase out of artificial feeding in the winter of 2023-2024, with artificial feeding ceasing on all feedgrounds operated by the State of Wyoming by 2028.

Second, maintaining healthy, abundant, and free-ranging elk should be a foundational goal for the WGFD, but unfortunately, that is not the case with this draft plan. The plan's driving principles lack any reference to the health of Wyoming elk populations, or the overall stability of the ecosystem. Instead, this draft plan prioritizes the desires of livestock and outfitting operations over the health of Wyoming elk populations and our ecosystem.

And third, Wyoming is the only intermountain state that routinely feeds large numbers of elk during winter months. As shown in the Management Alternatives Report, linked above, other states like Montana, Colorado, and Idaho have large herds of elk (as many or more than Wyoming) but do not consistently employ winter feedlots for elk to placate livestock owners or outfitters. Wyoming's continuation of artificial feeding is out-of-line with scientific recommendations, and fundamentally harmful to the health of elk.

One of the biggest concerns we have with the draft plan is that the Wyoming Game and Fish Department fails to provide leadership in the management of a species that is held in the public trust. The Wyoming Game and Fish Department has an obligation to protect wildlife for all Wyomingites. Moving to a more ecologically grounded model of elk management, one that emphasizes environmental health and resource sustainability, will require a paradigm shift – a change in mindset of state and federal agencies and collaboration with private interests.¹

A Comment on the Development of the Plan

Page 3 of the plan states, "This plan was developed with significant input by stakeholders..." which doesn't accurately describe the input that we were able to offer. Stakeholder meetings were generally the WGFD disseminating information to the stakeholders. There was only one meeting where we were able to express our concerns and offer ideas about what we think should be in the plan. The plan was created behind closed doors among the steering committee, using input from this single meeting but we didn't have a chance to offer meaningful feedback on the draft before it was released to the public. We offered to send scientific reports to the other stakeholder groups and were not given the opportunity to do so by the steering committee.

Further, the same page also has a statement, "This plan creates a process and venue to discuss and analyze ways to reduce our reliance on supplemental feeding in places where it's feasible, and in a way that protects the values and objectives feedgrounds achieve today." What values are being protected here? The value of private property? The individual value of an outfitting business? What about the value of elk to be healthy? What about the value of the public having ecosystems that lead to healthy populations of deer and elk without the prevalence of an illness that is 100% fatal? What about the value of hunters having undiseased meat to feed to their families? These values seem to be missing from this discussion and should be more important than values held up by feedgrounds due to the fact that they are values that provide benefit for the public good, not only special interests.

¹ Where Elk Roam—Conservation and Biopolitics of Our National Elk Herd. Bruce L. Smith, 2012. Lyons Press, Guilford, Connecticut, USA.

Throughout the plan, it is referenced that management actions will not take place without “public support.” How will this public support be measured? Who is the public, and what methodologies will the WGFD employ to truly understand public support for elk? In order to assess public support, we strongly urge the WGFD to utilize polling methodologies grounded in social science best practices and make this information available to all Wyomingites. Authorizing the feeding of wildlife on public lands is a discretionary call by state and federal agencies. Since nothing in law requires feeding, the public is free to demand an end to this practice.

Technical Comments

Feedground phaseouts and termination plans

We are encouraged to see that the WGFD has identified feedground phase-out as a potential research priority. We believe that shortening the span of feeding over five years or less on feedgrounds, in combination with allocating winter forage areas on public lands, will lead elk to reestablish their migration patterns that have been lost to feeding. There is one concerning section in the Feedground phase-out section of the draft plan. The last sentence of the second paragraph in that section mentioned that “aerial drones would drive elk to desirable native ranges.” This is an outrageous claim that would harass and endanger elk. The Alaska Fish and Game Department, California Department of Fish and Wildlife, and many other state departments all have publicly opposed drones in relation to wildlife. U.S. Fish & Wildlife Service’s website states “aerial drones disrupt wildlife habitats and scare away animals. Drones can also be noisy and intrusive, which can interfere with natural behaviors and cause stress to animals.” Rocky Mountain Elk Foundation states on its website that “it can also pose a threat to wildlife by causing increased stress and even death for some animals.”² The WGFD should nix the use of aerial drones from the final elk feedgrounds management plan and all FMAPs.

Feedground Management Alteration

There is no safe level of feeding. The proposed management alterations described in the plan are not sufficient to mitigate the threat of CWD on feedgrounds, detailed below:

A CWD-infected animal sheds prions up to 24 months before succumbing to the always-fatal disease. Carcass removal without a cessation of feeding will not counteract the spread of CWD. Static to moving feedgrounds would work to reestablish migration routes, however using this as a long term strategy for feeding elk only exacerbates the threat of CWD on the landscape. If the goal is to keep disease transmission rates low, any expansion or movement of feedgrounds runs directly counter to this objective.

Additionally, the economic costs of feedground management alterations are astronomical: money to buy heavy equipment, hire more elk feeders, snow groomers, create moving feedgrounds, decontaminating soil at feedgrounds, disposing of carcasses, acquiring hay, and monitoring of feedgrounds for disease is all money that can be spent instead reducing conflicts between elk and livestock. Further, none of these measures reduce the transmission of CWD.

² <https://www.rmef.org/elk-network/avoid-harassing-wildlife-with-drones/>

Along with the many difficulties that moving feedgrounds or feedgrounds expansions raise, WGFD says it best themselves on page 44: "Prion contamination would also occur in a broader area by expanding the feeding areas." The net economic, environmental, and social consequences are far too costly to even consider expanding feeding areas. We urge the WGFD to reduce or eliminate feeding programs, not expand.

The Continued Threat of CWD and Other Diseases to Elk

During the final stakeholder meeting in Pinedale on August 30, Brian Nesvik was quoted as saying, "I know if we had been feeding pronghorn, it would have been a lot worse this winter." That was in reference to the fact that pronghorn just experienced a hard winter on top of a *mycoplasma bovis* outbreak that killed hundreds of pronghorn. Does the department want to be standing in a room ten years from now saying that it was worse because we were feeding elk in reference to what will happen when chronic wasting disease reaches the feedgrounds? Both Sam Allen and Hank Edwards (and before that Mary Woods) have continually said that prevalence rates will get worse and will likely be impossible to reduce in a fed population of elk. Already, rates in some free-ranging populations of deer in the state are between 30 and >75 percent. In the July 2023 Commission meeting, Sam Allen also stated, "A lot of studies have shown when you start to hit 5-10% prevalence in certain herds, it becomes harder to manage because we switch into a more environmental transmission model rather than that animal to animal transmission model. So while I think we should try things in different parts of the state, I really think that in some of our areas where low prevalence or no prevalence, that is the time to start setting up our management plans now so that we are ready to act when we do identify CWD in those areas and we can be successful easier and sooner on." And Hank Edwards followed up by saying, "I would add if I may, that CWD management is not a single pronged approach, there's lots of things you can do. Whether you are trying to limit areas of congregation and maybe even sites of likely environmental transmission, maybe there are some things we can do there. It's not just killing older age bucks; I think that is important to keep in mind. Every herd is going to respond a little bit differently and the prescription for each herd is going to be different. Environmental transmission is the real worry for me." Feedgrounds will set up the exact situation for environmental transmission of the worst kind. Waiting another three years to even finalize plans for some feedground herds and then trying to contain it or keep prevalence rates low is going to become nearly impossible. Not a single shred of scientific evidence supports the feeding of wildlife. The Wildlife Society and AFWA both have statements against feeding wildlife. There is no doubt that feeding wildlife leads to negative effects on wildlife. Still, the WGFD has decided that continuing to feed wildlife is the trajectory they want to follow in order to appease special interests. With models showing that CWD prevalence rates reaching seven percent causing population declines, the end result of this plan will be a lot of diseased elk and decades of dealing with a disease that could have been kept at lower levels if the WGFD had acted appropriately to this threat now.

The health of elk is not mentioned in the plan until page 7. The very objective that should be the very first concern of the WGFD in elk management is not a priority in this plan. This is in spite of the fact that several pages of the plan are dedicated to talking about the various diseases threatening elk herds and what a significant impact they could have on populations of elk in

Wyoming. The sideboards developed that are listed on page 7 are not in the best interest of the elk, but rather are goals focused on the financial benefit of a few. Is “maintaining publically supported elk population objectives” the best course of action if those populations are artificially inflated and beyond the carrying capacity of the land? What does science say about feeding elk and other wildlife? What evidence exists about how many elk Northwest Wyoming can support? Only choosing management of feedground options that are publicly supported is not following the science and is certainly not placing the health of elk first.

Without mandatory testing of elk for CWD (at least in the feedground herds) not enough data exists to actually determine prevalence rates accurately. Therefore, when it is perceived that there is a 10% prevalence rate in a feedground herd (or on a feedground), the prevalence rate could be much higher. Mandatory testing must be implemented in all herds using feedgrounds and should be implemented statewide. Funding and capacity for testing needs to be increased. The state of Montana has mandatory testing for CWD statewide.

Having a predetermined rate of 10% prevalence before actions are taken to phase-out or close a feedground doesn't take into account actual prevalence rates without mandatory testing, nor does it have a scientific basis. If the goal is to keep prevalence rates of CWD low (less than 7-13% based on when models show that there will be significant declines in populations of elk), then wouldn't it be better to “reduce feedground densities by 10% through population reductions, feeding modifications, or winter distributional shifts within one year” **now** instead of waiting for prevalence rates to climb to 10% when environmental transmission may be so great that we can no longer do anything about the disease? Waiting to kill elk, or training elk feedground operators to kill sick and weak elk is too late to actually have an impact on CWD prevalence rates.

In addition to CWD, other diseases are also horrible ways for elk to die and are also perpetuated by feeding. Simply reducing the days elk are fed and feeding in a low density pattern does not reduce densities enough to stop the transmission of diseases. Research referenced in the plan (Nagaraja et al. 2005) states, “outbreaks often end when the cause of abnormal concentrations of animals is relieved. The risk of disease occurrence increases in situations where animals occur in high density (typically die to artificial congregations of animals), muddy soil, extensive manure accumulation, and standing water.” Simply killing elk that appear sick or weak will not lower disease prevalence rates and is not a strategy to reduce diseases.

Feedground Management Action Plans (FMAPs)

The plan correctly identifies that, “Each elk feedground, feedground-complex, and herd present unique situations that necessitate customized management.” The individual circumstances that surround each feedground or feedground-complex are specialized to that feedground. Therefore, FMAPs are a good idea to look at each feedground or feedground herd to determine the most expeditious method(s) of phase out. Going feedground by feedground and developing plans for phase out while working with the public to “identify the obstacles and work with

stakeholders to determine potential solutions specific to each feedground” is exactly what the WGFD should be doing to develop plans to phase out feedgrounds as quickly as possible.

What we don’t want to see is the same thing that happened with the Brucellosis Management Action Plans (BMAP) where, “most options were not pursued as action items.” The options within those plans were feedground relocation, feedground phase-out, elk population reduction, providing incentives for changes in private cattle operations, game-proof fencing, elk test and slaughter, habitat enhancement, habitat acquisition, and elk vaccination.” How will the FMAPs be any different? Many of the aforementioned solutions are the same solutions needed to keep CWD prevalence low and to return to a healthier paradigm of elk management in Wyoming. The bottom line of the BMAP development was that, “Essentially, little change in elk brucellosis management occurred.” Here we are a decade later still battling brucellosis in areas with feedgrounds. How will the FMAPs not end up in the same position?

The WGFD has already identified that, “during years of low snow accumulations, habitats around Fall Creek, Scab Creek, Muddy Creek, Bench Corral, Green River Lakes, and Soda Lake elk feedgrounds can support elk wintering on native ranges.” These feedgrounds are ideal candidates for FMAPs that prioritize expeditious phase out of feeding. FMAPs defer any potential phaseout to at least 3 years in the future. We don’t have three years to head off the fatal threat of CWD.

Large carnivore relationship and reliance on elk populations

The draft report claims that wolves “complicate” livestock and feedground operations. We urge the WGFD to recognize the innate value of carnivores and scavengers in Wyoming, in part because they act as a form of biological control by culling sick ungulates, reducing the spread of diseases including brucellosis and CWD³. The WGFD and managing agencies should acknowledge and defend the important ecological role of scavengers and large carnivores, and support further research into the influence of predation and scavenging on diseases in prey species.

On page 14, the draft plan states, “Since the reintroduction of grey wolves to the Greater Yellowstone Ecosystem (GYE) in 1994⁴, some elk that typically wintered on native winter ranges in the Gros Ventre and upper Green River have been displaced off winter ranges to feedgrounds”. This statement ignores the fact that feedgrounds on their own are an attractant. Artificial feeding draws elk to the feedgrounds, and has ultimately caused the cessation of long-distance migration patterns and displacement of herds. The statement condenses multiple, complex factors into one untrue declaration.

There is one paragraph in the “Brucellosis” section on page 23 that could be added to the “Large carnivore relationship and reliance on elk populations” section. It states: “Predators play both beneficial and complicating roles with respect to disease on elk feedgrounds. Wolves can create an additional elk feedground management dynamic by disrupting feeding operations and

³ WGFD 2007

⁴ Wolves were reintroduced to Yellowstone National Park on January 12, 1995

increase the potential for elk damage and commingling with cattle (Dean et al. 2003), but can also improve management by moving elk away from elk feedgrounds to spring transitional ranges. Additionally, predators can play an important role in reducing disease transmission by scavenging aborted fetuses and removing a source of brucellosis transmission (Maichak et al. 2009). In recognition of this, the removal of predators such as coyotes and foxes is not permitted on Department elk feedgrounds.”

It's worth noting that there are zero restrictions on killing coyotes, foxes, raccoons, or other mesocarnivores deemed “predators” throughout the state of Wyoming (except in National Parks and a few other places). Even if these predators are not killed on feedgrounds themselves, they are killed in nearly every area surrounding the feedgrounds daily. Through aerial gunning, trapping, and now night hunting on public lands, these animals are not allowed to serve their ecological purposes of cleansing the herds by predation and scavenging due to constant hunting pressure.

When wolves made an inroad into Grand Teton National Park and started to colonize territory in the Gros Ventre Mountains close to feedgrounds, elk started behaving more normally and moving around to avoid predation. Wildlife managers at the Wyoming Game and Fish Department responded by increasing the quotas on wolves in the Gros Ventre Trophy Game hunting units so that elk would remain on the feedgrounds which is the exact opposite action of what we know is effective in predator/prey dynamics to reduce disease prevalence, as wolves cull sick and weak elk long before they show any signs or symptoms of disease^{5, 6}. By increasing quotas on wolf hunting in the Gros Ventres and allowing them to be listed as predators and killed with no season, the Department is working counter to what we know helps limit the spread of diseases. This is one more problem that could be solved by allowing predator/prey dynamics to play out on the landscape with livestock producers securing their cows and feed supplies in the winter and allowing elk to freely roam. In the winter of 2017-2018, elk were driven off of feedgrounds by wolves and there was not mass starvation (nor measurable starvation) of elk.

Federal Land Management

We find it promising to see that there are plans to engage with the BLM and USFS to seek out ways to increase elk wintering opportunities on public lands and reduce recreation on crucial elk native winter ranges. In fact, one of the stated goals of the 1990 Bridger-Teton Land and Resource Management Plan (Forest Plan)⁷ is to “help re-establish historic elk migration routes to provide increased viewing and hunting opportunities for outfitters and clients”. As has been demonstrated by other efforts to phase out feedgrounds, such as Big Piney, this goal is realistic and achievable. We know with the phase out of feedgrounds, allocated winter habitat set aside

⁵ Koshmrl, M. 2020. Wolves are moving Gros Ventre elk, but not so much killing them. Jackson Hole News and Guide. Retrieved from https://www.jhnewsandguide.com/news/environmental/wolves-are-moving-gros-ventre-elk-but-not-so-much-killing-them/article_a645ad54-39fd-5414-8a9c-41ba53210162.html

⁶ Koshmrl, M. 2018. Gros Ventre wolves targeted. 2018. Retrieved from https://www.jhnewsandguide.com/news/environmental/gros-ventre-wolves-targeted/article_8916d217-5d70-59d2-823c-99a8b2122201.html

⁷ (Objective 1.1(g)).

for elk is necessary. However, the timeline for implementing habitat enhancements or land management coordination cannot wait until BLM resource management plans or USFS forest plans are revised. Federal processes such as forest plans take years, if not decades, to complete. With a chronic wasting disease epidemic looming, there is no time to waste. There are many other options for the WGFD to pursue, such as special use authorizations or interagency agreements. Interagency agreements are useful tools to facilitate greater coordination among agencies with shared recipients or specific areas of expertise. The WGFD should work directly with the Shoshone and Bridger-Teton national forests to complete a participating agreement to start habitat enhancements for elk forage in 2024.

As identified in the draft plan, habitat enhancement is a crucial component of minimizing elk dependence on feedgrounds and reducing the prevalence of disease in elk. The draft plan discusses identifying potential treatment locations, inventorying existing habitat conditions, and developing a prescription or management action. As noted on page 31, the WGFD has worked with federal agencies and private landowners to implement habitat enhancement projects. This is encouraging to see; however, the timeline for implementation of habitat enhancements cannot wait until BLM resource management plans or USFS forest plans are revised every 20 years.

Current Social and Economic Values Related to Elk Feedgrounds

The statement, “The current social and economic benefits of feedgrounds are of value to all wildlife interests,” is not accurate. Our supporters have an interest in the elk and other wildlife of Wyoming but see neither social nor economic benefits from feedgrounds. The following sentence is more accurate: “disease impacts on elk populations in the future have the potential to negatively affect wildlife interests in western Wyoming, specifically related to elk numbers and diverse age class.” We contend that the long-term economic benefits of feedground phaseout outweigh the devastating potential consequences of CWD ravaging Wyoming elk populations. Deeper analysis is warranted to understand the social and economic consequences of this potentiality.

Hunting (hunter numbers and recreation days)

Hunting is certainly an economic benefit to Sublette and Teton Counties. However, the total numbers of hunters and outfitters is a drop in the bucket compared to the millions of people who come to these areas to watch wildlife. On page 16, the draft report states, “A total of 31 outfitters are authorized to hunt elk in the Jackson and Pinedale regions. Individual outfitters ranged from serving 1-38 hunters annually, and the average number of clients per outfitter ranged from 5-18. The average cost of a public-land, professionally outfitted elk hunt was approximately \$5,000 in 2021, generating between \$930,000 and \$1,235,000 in gross revenue annually for local outfitters.”⁸ “The total income from wildlife watching and wildlife-related tourism is estimated at “\$788 million and a total economic benefit of up to \$1 billion in business activity.” Several paragraphs break down the cost and revenue associated with hunting, but relatively little data is provided for recreational wildlife viewing. Having only one small paragraph about wildlife watching with no breakdowns of the amount wildlife watching brings in makes it seem as if it is insignificant when compared to hunting. A Wyoming Guides and Outfitters Association report

⁸ McWhirter et al. 2022

from 2015 says that total expenditures from big game hunting statewide were \$228 million⁹. That is only 30% of the expenditures wildlife watching brings. Wildlife watching is represented more in Northwest Wyoming than the rest of the state, so it stands that wildlife watching brings in a much higher value to Teton and Sublette Counties. There is no requirement that elk be in a specific area or in specific numbers. Keeping feedgrounds around so that 31 outfitters and a maximum of 1,178 clients of outfitters can benefit is neither what is best for the public good nor the good of the elk. A gross of \$1,235,000 for outfitters is not even comparable to the \$788 million that wildlife watchers bring to the state and region.

Agricultural Operations (damage, elk/cattle co-mingling, and disease transmission concerns)

The plan states on page 17 that efforts are underway to “design hunting seasons to target population segments responsible for damage, hazing, and/or lethal removal of animals in conflict situations, providing fencing materials for hay stackyards, and working with landowners to find additional solutions to minimize damage risk, such as adjusting cattle feeding locations, times, etc.” We support most of the damage mitigation measures that are already being implemented and can (and should) continue to be implemented and increased – other than lethal removal of elk outside of hunting seasons. In other parts of the plan, there are more effective ways of hazing elk away from cattle. The plan also states that manpower, equipment, and associated costs all go into mitigating elk damage and that verified elk damage is compensated by the Department. The average costs of feedgrounds to the Department is nearly \$3 million. Elk damage claims in Jackson and Pinedale regions average \$2,989.61/year. Damage management claims could increase 1,000 times to equal what is spent a year on feedgrounds and still be less than what is currently being spent on feedgrounds.

As a proactive measure, the Department could adapt successful actions from neighboring states, such as a robust mitigation and management program for damage caused by wildlife. Rather than react to damage on a case-by-case basis, a formal mitigation plan could offer peace of mind to livestock managers and establish consistent measures to mitigate future conflict and damage. These management strategies are detailed below in an excerpt from the Management Alternatives Report.

Livestock producer coordination and cooperation

Elk and wildlife in Northwest Wyoming are paying the price when it comes to livestock grazing on public lands. Ranching makes up only 3% of Wyoming jobs, but often decisions are made to benefit this small percentage of workers. Recreation and wildlife viewing on the other hand, account for 18% of Wyoming’s total employment, underlining the relative value of healthy, viable wildlife to our state economy. On bullet point six on page 41, the draft plan mentions that “shifting elk winter use from feedgrounds to native winter ranges will only be successful if sufficient forage is available.” A simple solution is available, prioritize public land allotments for wildlife first, then livestock second. Currently the Bridger-Teton National Forest is in the process of restocking retired allotments that could have been used for native forage for elk and deer. When and if conversations occur between federal agencies and the WGFD about the retirement

⁹ “Big Money: Big Game Hunting & Outfitting Economic Contributions Wyoming”
https://wyoga.org/wp-content/uploads/pdf/studies/southwick-study/2021_WYOGA_Report_Digital.pdf

of allotments, it must be determined that the Wyoming Game and Fish Department and federal agencies prioritize the health of elk and other wildlife over livestock.

A concern exists about the privatization of wildlife if landowners are compensated for elk occupancy on their property. Efforts to provide an incentive for ranchers to tolerate elk are often accompanied by special hunting licenses. The WGFD must be careful not to turn private lands into private hunting reserves by offering individual benefits to landowners other than compensation for lost forage on their property. Wyoming doesn't have game farms for a reason, let's make sure we keep it that way.

Climate Change Impacts

The disease portion (beginning page 20) of the plan states, "chronic or repeated stress is typically harmful [to wildlife]." In addition to the presence of diseases on the feedgrounds, climate change is affecting wildlife habitat with drought, wildfires, and reduced productivity of forage. These factors, combined with diseases, could put significant stress onto elk which could also lead to a reduction in population and reduced hunting and wildlife viewing opportunities in the future. The effects of climate change cannot be ignored and must also be addressed in the plan and future FMAPs.

Research Priorities

Added to the list of research priorities needs to be the economic analysis of a severe drop in elk populations due to high prevalence rates of CWD. A pilot project for feedground phase-out has already been achieved at North Piney (was assumed to be phased out as reported in the JCRs) and Alkali. Both of those feedgrounds (and the cessation of feeding at them) should be evaluated and examined as a model for the other feedgrounds. Similar challenges and opportunities are likely to exist that can provide insight into FMAPs for the other feedgrounds.

Data exists to show that there is enough forage available for current elk populations on land adjacent to feedgrounds for elk to survive through the winter. However, much of the forage is allotted to livestock grazing therefore leaving fewer resources for elk and other wildlife. The WGFD, Forest Service, BLM, and livestock permittees can work together to manage available habitat in the outlying Forest Service and BLM lands beyond the private ranches so there is residual forage from the summer season where the elk can winter undisturbed. We urge the WGFD to conduct research on current forage availability and future forage availability.

Wildlife Crossings and Reducing Wildlife-Vehicle Collisions

We commend the WGFD for working with NGOs and other government agencies like the Wyoming Department of Transportation toward the construction of more wildlife crossings and additional wildlife underpasses. Fencing can also be used to funnel elk into desirable locations away from heavily trafficked areas.

Additionally, fascinating research suggests that the presence of wolves makes roadways safer¹⁰. A 2021 research article titled, *Wolves make roadways safer, generating large economic returns to predator conservation*, supports ecological research emphasizing the role of predators in creating a “landscape of fear.” This stems from a behavioral response of ungulates rather than through a population decline from wolf predation. It suggests wolves control economic damages from overabundant ungulates in ways that human hunters cannot. It is time to let the solution to many of our problems – like CWD, wildlife-vehicle collisions, and elk overpopulation – be solved naturally by wolves.

Conclusion

We appreciate the willingness of the task force to seriously consider our comments as you develop the final management plan. Phasing out feedgrounds quickly is achievable, realistic, and necessary. Ending the harmful practice of winter feeding will ultimately help elk, mule deer, moose, other wildlife, hunters, wildlife watchers, and ordinary Wyoming residents by helping protect the stable and functioning ecosystems upon which we all depend.

This concludes our comments and recommendations for the Draft Elk Feedground Management Plan. Below, please see an extended excerpt of the report we have referenced throughout our comments, Management Alternatives for Feedgrounds. This report analyzes alternative elk management options employed in neighboring states, providing the groundwork for the WGFD to take meaningful action toward the phaseout of feedgrounds.

¹⁰ Raynor, J. L., Grainger, C. A., & Parker, D. P. (2021). Wolves make roadways safer, generating large economic returns to predator conservation. *Proceedings of the National Academy of Sciences*, 118(22), e2023251118. <https://doi.org/10.1073/pnas.2023251118>

Management Alternatives for Elk Feedgrounds¹¹

WGFD claims that the use of artificial feedgrounds is necessary to maintain adequate elk populations. Table 1 summarizes 2021 data provided from each state's wildlife agency regarding the statewide elk population, population objectives, and population trends over the past 25 years.

Table 1. Statewide elk populations and objectives recorded in the year 2021. (Idaho does not utilize statewide population objectives.)

State	Statewide Population	Statewide Population Objective	Population Trends Over the Past 25 years
Wyoming	117,000	85,300	Increase
Idaho	107,000	N/A	Increase
Montana	141,785	92,138	Increase
Colorado	308,901	233,000	Increase
Utah	84,390	78,990	Increase

According to this information (gathered from public records and direct conversations with wildlife managers in each state), Colorado sustains 2.6 times more elk than Wyoming. All five states report positive population growth rates over the last 20 years, and four states are exceeding their statewide elk population objectives (Idaho does not define statewide population objectives). Maintaining substantial elk populations generates a considerable amount of revenue for local and state economies. States strive to maintain robust elk populations in part to allow for ample hunting and recreational opportunities. Table 2 displays data gathered from each state's wildlife agency from 2021 describing elk hunting license numbers and success rates.


¹¹  Management Elk Feedgrounds Wyoming and Surrounding States.docx.pdf - A report by Faith Williams, 2023 - Sections X-X

Table 2. Hunting licenses issued by state in 2021.

State	Non Resident Licenses Issued	Resident Licenses Issued	Total licenses Issued	Hunter Success Rate (%)	Hunting License Revenue (\$)
Wyoming	14,199	60,324	74,523	43	14,243,765
Idaho	11,951	72,950	84,901	23	10,469,977
Montana	18,621	15,807	32,428	20	15,380,529
Colorado	26,406	59,082	85,488	23	25,456,509
Utah	43,000	186,261	229,261	24	9,428,874

This information shows that successful elk hunts take place in all these states, with hunter success ranging from 20% in Montana to nearly 43% in Wyoming. License sales generate substantial revenue for managing agencies in all states. The states that identify population objectives (Wyoming, Montana, Colorado, and Utah) all have statewide elk populations above stated objectives, with Wyoming, Montana, and Colorado averaging 1.4 times more elk than their stated population objectives. States are able to maintain robust elk populations and sell sufficient hunting tags to support strong economic gains in each state. When feedground proponents claim that winter feeding is necessary to support strong populations of elk in Wyoming, that suggests the state may lack suitable winter habitat or adequate natural forage in comparison to other states where supplemental feeding is not utilized. Below, we take a closer look at habitat in Wyoming and surrounding states.

Habitat and Winter Forage Availability in Intermountain West

Wyoming, Idaho, Utah, Colorado, and Montana all have varying topography ranging from high elevation mountains to broad river basins and high plains. Western Wyoming is more mountainous with extensive forested areas while high-elevation prairie grasslands and shrublands are more dominant in the eastern regions of the state. The entire state is a large plateau intersected by mountain ranges and valleys. Similarly, Colorado, Idaho, Montana, and Utah terrain includes high elevation alpine areas, extensive forested mountain ranges, and basins with shrublands and grasslands. Most of the southern half of Utah consists of dry desert basins, canyonlands, and plateaus.

Elk typically migrate seasonally between higher elevation summer habitat to lower elevation grasslands and shrublands during winter months (Henderson, 1992). While grass and woody browse are all consumed by elk, grass species seem to be preferred where they are available. Across the western U.S., deep snow conditions can limit grass availability during the winter, causing elk to include more shrubs in their diet. According to the WGFD, winter diets for elk in Wyoming usually are dominated by antelope bitterbrush, mountain mahogany, serviceberry, and willow. When snow depth limits small shrub and grass availability, elk diets

shift to include more aspen, conifers, sagebrush, willow, and other taller browse.

Table 3 lists the percentages of public and private land in Wyoming and surrounding states as well as the percentage of those public lands dominated by shrublands and grasslands (habitats containing preferred winter grazing and browse for elk).

Table 3. Percent of state occupied by public lands and percent of public lands occupied by specific habitat. Data gathered from BLM Public Land Statistics 2021.

State	Private Land	Public Land	Public Lands Occupied by Shrublands	Public Lands Occupied by Grasslands
WY	44.1%	55.9%	82%	.13%
MT	62.5%	37.5%	38%	55%
UT	24.8%	75.2%	71%	.06%
ID	29.6%	70.4%	61%	34%
CO	56.7%	43.3%	54%	.05%

Wyoming, Utah, and Idaho are all more than 50% public land, which is where natural food resources are expected to be most accessible with the least potential conflict for elk. However, Utah may not be a useful comparison in this regard because so much of that state's public land is the dry desert canyonlands of the southern half (or more) of the state, terrain that provides less than ideal elk habitat. More of Wyoming's public land is classified as shrubland than any of the other states. While many other characteristics including elevation, topography, aspect, slope, livestock grazing intensity, and other factors clearly influence winter forage availability, quality, and accessibility, this data suggests that Wyoming's abundant public lands should offer reasonably abundant grass and shrublands for natural winter forage for elk, as much or more than surrounding states that have less public land (Montana and Colorado) and less shrublands on public lands (all four other states).

Livestock Management and Conflict Mitigation in Intermountain States

Another frequently heard justification for the use of feedgrounds is the claim that winter feeding is necessary to prevent elk from co-mingling with livestock and to prevent damage to private property, primarily stored winter hay. The livestock industry in Wyoming strongly supports feedgrounds because of the perception that feedgrounds are the only effective way to prevent elk from eating hay meant for livestock, and to keep elk separated from livestock on haylines to reduce the risk of disease transmission (primarily brucellosis) from elk to cattle.

Wyoming ranks fourth out of the five states in abundance of cattle and sheep in the state (Table 4), suggesting that neighboring states such as Colorado, Montana, and Idaho probably face similar or even greater potential for interactions between elk and livestock, and unwelcome elk consumption of livestock feed. Again, Utah is a bit of an outlier given that so much of the state is desert canyonlands and as unsuitable for livestock as it is for large numbers of elk. These other states, plus northern Utah where most of the state's elk and livestock are concentrated, successfully mitigate conflicts with livestock operations through appropriate fencing, hazing, livestock herding, and other strategies. No state other than Wyoming routinely uses season-long annual artificial feeding to mitigate wildlife conflicts with livestock or damage to private property, even though surrounding states face the same challenges including competition between cattle and ungulates for forage on public land, pressure from livestock owners to prioritize livestock use of public land forage over wildlife use, co-mingled public and private land, loss of winter range to private ownership, human-caused barriers to natural elk migration between summer and winter ranges, and the inherent attraction of artificial food sources like livestock feed lines and ranch haystacks.

Table 4. Number of cattle and sheep by state. Data from U.S. Dept. of Agriculture, 2021.

State	# Of Cattle	# Of Sheep
Wyoming	1,320,000	340,000
Colorado	2,620,000	425,000
Montana	2,200,000	200,000
Idaho	2,500,000	220,000
Utah	740,000	280,000

Mitigation Strategies used in Intermountain States

In contrast to surrounding states, Wyoming does not have an official mitigation or prevention plan for livestock damage caused by elk. The WGFD considers compensation for damage or losses on a case by case basis. The WGFD routinely engages in hazing and additional feeding to lure elk away from livestock on private lands. While other states do sometimes use temporary feeding to deter elk from private property, Idaho, Utah, and Colorado all have formal prevention and mitigation plans in place that describe additional methods to prevent and treat damage caused by wildlife.

Some strategies listed in these plans include:

- Provide materials to reduce or prevent wildlife impacts such as fencing, gates and panels
- Provide advice and assistance for hazing animals away from green or stored crops
- Authorize special hunts or issue permits to kill a certain number of animals on a

property

- *Work with landowners on crop agreements, such as paying landowners to allow wildlife to forage in their crops.*

Although Montana does not have a written mitigation plan, Montana Fish, Wildlife and Parks does provide a mitigation program known as the Game Damage Program. Landowners may be eligible for game damage assistance if they allow public hunting during established hunting seasons. Assistance may include hazing, repellents, temporary or permanent stockyard fencing, damage hunts, kill permits, or supplemental game damage licenses.

Colorado not only has a written mitigation plan in place, but has a series of additional programs to compensate land owners, encourage hunting in problem areas, and establish long term preventative measures for damage caused by elk. For example, the Habitat Partnership Program (HPP) is a wildlife conflict resolution program administered by Colorado Parks and Wildlife (CPW) that aims “to reduce wildlife conflicts, especially those associated with fence and forage, and to help the Division meet game management objectives through duties deemed appropriate by the Director” (CPW, 2021). HPP is fully funded by big game hunting licenses and allocates these funds to projects regarding habitat manipulation, fencing, game damage, information/education, monitoring/research, equipment, conservation easement transaction costs and administrative necessities. Other programs in place to work with landowners to mitigate and prevent property damage caused by elk include the Landowner Preference Program and the Landowner Recognition Program.

Fundamentally, when elk use habitats on or near private land, landowners and agency personnel must work together to identify a suite of strategies to prevent problems to the greatest extent possible, and to mitigate problems that cannot be completely avoided through damage payments and the like. This is the approach taken by states surrounding Wyoming, and there is no apparent reason why it would not work in Wyoming as well. While some states like Utah and Idaho also use temporary baiting to draw elk away from private property, all surrounding states successfully use alternative measures and work with landowners to create incentives for coexistence with elk. Wyoming could choose to do the same.”