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Wyoming
Chapter



December 22, 2015

Wyoming Game and Fish Department
Attn: CWD Plan
3030 Energy Lane
Casper, WY 82604

To the Wyoming Game and Fish Department:

Please accept these comments from the Sierra Club Wyoming Chapter and Wyoming Wildlife Advocates on the Draft Update of the CWD Management Plan. Our members, board, and staff in Wyoming and throughout the United States value and appreciate the wildlife in Wyoming including deer, elk, moose and the predators and scavengers that attend these cervids. As you know, consumptive and nonconsumptive uses of wildlife are significant drivers of Wyoming's economy, accounting for hundreds of millions of dollars every year. (USFWS 2011) Our members include hunters and other wildlife enthusiasts who believe that both prey and predator wildlife species should be managed holistically so that natural processes such as natural winter ranges, predation, and migrations can be stewarded to restore and balance healthy wildlife populations with healthy habitat.

1. Introduction

"Health is an expression of the interdependence of earth systems, social systems and the interplay of humans, animals and other species." (EcoHealth 2014)

Fatal chronic wasting disease (CWD) is relentlessly expanding throughout Wyoming. In 2015 alone, according to Wyoming Game and Fish Department (WGFD) news releases (October 12, 28, November 16, 27, and December 8 and 15) and a November 4 posting by basinsradio.com, and 2 WGFD maps (WGFD December 1, 2015), at least 4 new elk Hunt Areas have turned up positive, and 5 new deer Hunt Areas have revealed at least one CWD-positive animal. According to our calculations, for deer Hunt Areas alone, the CWD endemic zone in Wyoming has increased more than 3.2 million acres in 2015. Whereas, the average yearly increase in Wyoming's CWD Deer Hunt Area Endemic Area since 2001 has been 1.8 million acres. (Wyoming Wildlife Advocates 2015: map)

CWD was established in deer in southeast Wyoming in previous decades; unfortunately the WGFD does not report positive cervids in already known positive Hunt Areas until the year-end report, usually in the spring of the following year. Wyoming's CWD Endemic Area, already saturated in the southeast, is expanding outward in virtually all directions of the compass; northeast, north, northwest, west, and south. (WWA 2015; WGFD 2015, 2015a) Wyoming is a significant part of the largest prion disease epidemic in the world involving wild cervids throughout contiguous portions of Colorado, Kansas, Utah, Wyoming, South Dakota and Nebraska. (USGS 2015: map)

Even though CWD is a relatively slow moving fatal epidemic among wild cervid herds, after decades of infection, some free roaming elk and deer herds have suffered or may suffer population decreases due to CWD (DeVivo et al. 2015; Monello et al. 2013:277; Smith 2012:113; WGFD 2011:180), and the infectious prions remain in soils, plants and water and continue to infect and kill cervids. (Johnson 2014: in Abstract). Elk and deer in captive facilities experience amplified herd-wide effects from CWD that spread through densely concentrated cervids and infect greater percentages of the herd(s). Experts say that this may be the fate awaiting feedground elk herds in western Wyoming. "(A) review of relevant literature indicates that congregating elk at very high densities at feedgrounds is likely to increase the spread of the disease because of an increased number and rate of potentially infectious contacts with infected individuals and an infected environment." (Johnson 2014: in Abstract)

The State of Wyoming including the Governor's Office, the State Department of Health, County Health Officials, and the Wyoming Game and Fish Department and Commission must not dismiss this CWD epidemic as insignificant. These public servants must educate the public about all facets of this serious disease and its ramifications, must make all pertinent information easily available to the public and interest groups, and must manage wildlife to ensure healthy wildlife and healthy human communities for the future. We have reviewed the literature about CWD and the Draft CWD Management Plan. The Draft Plan has some good elements but needs significant improvement and we offer these recommendations:

2. The WGFD must hold more public meetings

The two proposed community meetings announced by the WGFD at the release of the Draft CWD Plan are important, but there needs to be more than just two; the January 5, 2016, deadline for public review and comments must be postponed until after more CWD meetings are held throughout Wyoming. Since the CWD Endemic Area spans the state, public meetings must be held, at a minimum, in all 8 WGFD Regions to ensure all communities have an opportunity to be informed and participate. The Game and Fish Department must lead safe, open, and comprehensive discussions in communities throughout the state in time for citizens to have all their questions answered and be able to offer informed comments on the Draft Plan. Animal and human health professionals with adequate knowledge of CWD including contemporary research and the ecology of the disease should lead the discussions.

3. The WGFD must provide information about CWD to the public and survey Wyoming citizens and visitors about their attitudes toward CWD

During the public meeting held on December 7, 2015 in Jackson, the WGFD said “Wyoming hunters do not care much about CWD.” Yet, when pressed, it became apparent that no survey or other scientific indicators were used to support such a disturbing conclusion. The WGFD, prior to finalizing a CWD Plan, should conduct a valid survey of residents about CWD. One important question to ask is if people are even aware of the CWD epidemic in Wyoming and surrounding states. It is incumbent on the WGFD to inform its citizens about this lethal epidemic. And, since millions of visitors come to Wyoming every year to watch and appreciate wildlife, the awareness of and attitudes about CWD of those people who contribute more than a billion dollars to Wyoming’s economy must be assessed.

The WGFD must do a better job of distributing easily accessible, up-to-date information about CWD to the public given that the disease is spreading rapidly throughout the state. The WGFD must be forthcoming about the significance of this lethal disease in cervid herds in southeast Wyoming and as it expands toward the National Parks, the Elk Refuge and elk feedgrounds. The WGFD should inform the state’s big game hunting outfitters about CWD. At the December 7 meeting in Jackson the WGFD presenters did not appear to be aware of the recently completed research on CWD in mule deer in South Converse County; the WGFD personnel were unable or reluctant to answer several questions about CWD from the public. WGFD staff appeared unwilling to correct misinformation and misunderstandings among the public. The WGFD staff even gave the public the impression that since an elk herd in the Laramie Peaks spends part of the year aggregated on winter range, and “only” have a CWD prevalence of 6-7%, that alone is sufficient indication that when CWD hits elk feedgrounds there is little reason for concern among the public. This implication is counter to the virtual unanimity of wildlife scientists whose scientific opinions are based on a large body of peer-reviewed research; see several of the references used in these comments. Indeed, Peterson found that, “feedgrounds provide nearly ideal conditions for CWD transmission among free-roaming elk . . . (and) managers should expect CWD prevalence to reach at least an order of magnitude higher than typically seen for elk herds in CWD-endemic areas without feedgrounds.” (Peterson 2005:15) The WGFD should do a much better job of encouraging citizens and visitors, even its own staff, to learn about the vast CWD epidemic in the state and beyond.

4. Public health officials must participate in the CWD Plan and public education

“Given the wide rage (sic) of tissues known to have the prion it is theoretically possible, and even likely, that the prion could be present throughout an infected animal. . . . (I)ndividuals may want to consider the theoretical possibility that a yet-to-be-determined human health risk may exist before consuming CWD infected animals. To minimize exposure to prions, both the US Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO) recommend that animals that have tested positive for CWD not be consumed by humans.” (WDOH 2014)

“There is strong evidence that distinct CWD strains exist. . . . (Z)oonotic potential of CWD may also vary with CWD strains. In addition, diversity in host (cervid) and target (e.g., human) genotypes further complicates definitive findings of zoonotic and interspecies transmission potential of CWD. . . . The potential for interspecies CWD transmission (by cohabitating mammals) will only increase as the disease spreads and CWD prions continue to be shed into the environment. . . . Given that prion disease in humans can be difficult to diagnose and the asymptomatic incubation period can last decades, continued research, epidemiological

surveillance, and caution in handling risky material remain prudent as CWD continues to spread and the opportunity for interspecies transmission increases. Otherwise, similar to what occurred in the United Kingdom after detection of variant CJD and its subsequent link to BSE, years of prevention could be lost if zoonotic transmission of CWD is subsequently identified.” (Saunders et al. 2012: In “Reasons for Caution” section)

“These findings reinforce the importance of CWD surveillance and control programs for wild deer and elk to reduce human exposure to the CWD agent.” (Abrams 2011) Public health officials, such as the State and County Health Officers in Wyoming, must participate in the CWD community meetings, and explain to the public the latest scientific information about human health consequences from exposure to infectious prions. “Despite the fact that prions are only protein, studies continue to point at evolutionary behavior and selection pressures of prions which indicate that like other pathogens, prions are capable of evolving and adapting to their environment.” (Wyckoff et al. 2015:6)

The scale of exposure- and potential for exposure- of Wyoming residents to CWD prions must be quantified and made known to the public in the CWD Plan. Besides just cautioning Wyoming residents against eating CWD infected meat, and given the difficulty- in fact the near impossibility- of sterilizing or neutralizing infectious prions, the CWD Plan must caution against reusing butchering tools (knives, saws, hatchets) and game meat butchering/processing surfaces if it is suspected that such tools and surfaces were ever used to process an infected cervid.

5. Feasibility of infected carcass incineration and other disposal methods must be determined and revealed before finalizing the CWD Plan

The Draft CWD plan briefly mentions incineration of elk carcasses “from feedgrounds to limit soil contamination and the spread of CWD. Where elk carcass incineration is not possible, evaluate additional methods for carcasses (sic) disposal.” (Draft Plan:6) First of all, if elk feedgrounds were discontinued there wouldn’t be the need for such an extermination and incineration program for Wyoming’s treasured wildlife herds. Additionally, since infectious prions are a nearly indestructible environmental biohazard, the WGFD must fully inform the public about methods and effectiveness of disposal of infected carcasses of all cervid species, not only elk, prior to completion of the CWD Plan. Since there is the possibility for infectious prions to get into surface and subsurface waters, soils, and into plants, and since the CDC and WHO advise people not to consume infectious CWD prions, the Wyoming Department of Health and any county health department and federal land managers where incineration and/or disposal is to take place, including downwind jurisdictions, must be part of the team of qualified public servants and scientists crafting the incineration and disposal plan- with full public participation and disclosure- to protect human and animal health.

6. The WGFD CWD Management Plan must be based on science and utilize tools that are available now

Even though eradication may not be feasible in the short term, there are some tools available now that CWD experts recommend using in the face of this geographically expanding disease to “slow the spread and/or reduce the prevalence of the disease” (Draft Plan:2). Such tools fall into three categories (references and pages in the referenced materials in parentheses):

- 1) Reducing densities- and possibly populations- of vulnerable cervids. (Alberta 2008: 2, 24, 25, 32, & 41; CCWHC 2004: 21; Monello et al. 2013: 277; Smith 2012:226)
- 2) Banning artificial baiting and feeding of cervids. (Alberta 2008: 40 & 41; CCWHC 2004: 20 & 21; Colorado 2002:11)
- 3) Conserve populations of predators to allow them to attend to cervid herds and selectively cull diseased individuals from the herds. (Alberta 2008: 24, 31, & 45; Smith 2012: 226; Wild et al. 2011: 79, 85, 88)

To the credit of the Draft CWD Plan it references the “panel of 60 wildlife disease experts” who met in Alberta, Canada, in 2008, and laid out some elements for Disease Management (Draft Plan:2). According to the Final Report of that Chronic Wasting Disease Workshop it “represents the collective experience and wisdom of the people who attended the chronic wasting disease (CWD) Workshop held in Edmonton, Alberta on August 8 and 9, 2008.” (Alberta 2008:1) Wyoming Game and Fish personnel attended that workshop. All of the above actions were recommended in the Final Report.

The above actions are also recommended by other renowned wildlife scientists as the references indicate. We agree that the CWD Management Plan must be based on “current” science; this is critically important to have an informed citizenry, an informed Game and Fish Department, informed public discussions, and effective interagency collaborations to help carve the best path forward for all.

The WGFD should include explicit quotes from the 2008 Report and other sources in the final version of the CWD Management Plan that describe proactive measures that the WGFD can take right away. When WGFD personnel speak at public presentations about CWD, or discuss and collaborate with other agencies, they should familiarize themselves with this report and other important scientific research about CWD.

7. Conserve predators to ensure healthy game herds

There is strong evidence from research and modeling by wildlife scientists that predators can help mitigate the effects of CWD in free-ranging herds of cervids. We offer here excerpts from “The Role of Predation in Disease Control: A Comparison of Selective and Nonselective Removal on Prion Disease Dynamics in Deer,” by Margaret A. Wild, PhD., et al. 2011, in *Journal of Wildlife Diseases*:

“(T)he role of predators should be considered in devising strategies for control of emerging or reemerging pathogens in natural populations.” (Wild et al, 2011:79)

“Nonselective predation could dampen epidemic dynamics by reducing host densities and contact rates or by lowering the total number of infected individuals in a host population (Heesterbeek and Roberts, 1995; Barlow, 1996; Packer et al., 2003). Similarly, selective predation on infected individuals could eliminate pathogens or prevent their establishment under some circumstances (Heesterbeek and Roberts, 1995; Gross and Miller, 2001; Packer et al., 2003).” (Wild et al.: 2011:78)

“(I)f predators prey selectively on diseased individuals, it is reasonable to expect that they might reduce disease prevalence much more rapidly than would occur if mortality were nonselective. Evidence that predators have a greater selectivity for diseased prey has been widely observed.” (Wild et al. 2011:79)

While reducing densities of vulnerable cervids is a recommended action to mitigate the effects of CWD and other diseases long-term (Alberta 2008: 2, etc.; CCWHC 2004: 21; Monello et al. 2013: 277; Smith 2012:226), “Thus far, control strategies relying on hunting or culling by humans to lower deer numbers and subsequently CWD prevalence have not yielded demonstrable effects (Conner et al. 2007).” (Wild et al. 2011:80)

“What is most clear [in our model] is a consistent and robust trend toward decreasing CWD prevalence in populations subject to predation, particularly selective predation, over a range of parameter estimates. . . .” (Wild et al. 2011:85 brackets added)

Even in cervid herds and areas not yet endemic for CWD, “Simulation results suggested that selective predation could also dampen or eliminate the emergence of CWD in new locations . . . , adding support to speculation that the absence of large predators presents an amplification risk factor for establishment of CWD (Samuel et al., 2003). . . . (O)ur simulations suggest that had selective predation by wolves been present during that period [of initial CWD eruption in cervids in Colorado], CWD may never have been established or detected.” (Wild et al., 2011: 85 brackets added). “(T)he absence of large predators, particularly wolves, over much of their native range in the United States . . . has likely played a significant role in the current unnatural distribution and prevalence of this [CWD] disease.” (Wild et al. 2011:86 brackets added)

“The prolonged clinical course and type of clinical abnormalities associated with CWD make it the prototypic disease for selection by predators. Chronic wasting disease produces subtle changes in behavior and body condition that progress over weeks or months to overt signs of end-stage disease typified by loss of attentiveness or response to external stimuli, emaciation, and weakness (Williams and Young, 1980, 1992; Wild et al. 2002).” (Wild et al. 2011:86) “(W)e believe that selective predation modeled at a rate four times higher than that of healthy deer is a reasonable, if not conservative, estimate.” (Id.)

“Although here we modeled wolf predation on deer, similar outcomes would be expected for wolf predation on other species susceptible to CWD. . . . We considered the wolf, a large coursing predator, to be most effective in selective removal of deer vulnerable from CWD infection; however, opportunistic mountain lions (Krum et al. 2009), and potentially coyote . . . packs, would likely benefit from lack of vigilance by CWD-affected deer as well.” (Wild et al. 2011:87) “We suggest that predation, particularly wolf predation, may be a useful tool for management of CWD.” (Id.)

The WGFCD CWD Management Plan must consider, include, and implement the beneficial effects that predators can have on the health of cervid herds in Wyoming.

8. Infectious prions can be in plants

Research indicates that infectious CWD prions can be taken up into different kinds of plants (e.g., alfalfa, tomato, maize, wheat grass) and, if consumed, can infect naïve cervids and other mammals.

“Our results suggest that prions can be taken up by plants and that contaminated plants may represent a previously unrecognized risk of human, domestic species and wildlife exposure to prions.” (Johnson et al. 2015: Abstract P.157 in Prion2015)
“Researchers also found that plants can uptake prions from contaminated soil and transport them to different parts of the plant, which can act as a carrier of infectivity. This suggests that plants may play an important role in environmental prion contamination and the horizontal transmission of the disease.” (Soto 2015)

The State of Wyoming human and animal health officials must prevent the importation of infectious plants and plant materials (e.g., hay, grains, vegetables, etc.) into Wyoming from CWD endemic areas of North America. The State of Wyoming human and animal health officials must also prevent infectious plants and plant materials (e.g., hay, grains, vegetables, etc.) from being moved from the CWD endemic area of Wyoming into non-endemic areas.

9. Research needed

There are many areas of research that the Wyoming Game and Fish Department should undertake or facilitate in partnership with the University of Wyoming, Colorado State University Prion Research Center or other entities. We offer some suggestions here:

- a. It is known that asymptomatic or subclinical individual elk and deer can shed infectious prions into the environment for months or years. “Our data reveal a previously unidentified sub-clinical prion-positive portion of the elk population that could represent silent carriers capable of significantly impacting CWD ecology.” (Wyckoff et al 2015: Abstract) “It remains unclear when animals begin shedding prions into the environment. . . . Further research is required to address the role of a carrier state in the ecology of CWD transmission.” (Id.: 5) The WGFD must facilitate research to determine the period of time that an infected but asymptomatic or subclinical deer, moose, or elk is shedding prions into the environment, at what spatial scale and what ramifications that has or may have on impacts from CWD to elk and deer herds throughout the state.
- b. “Our findings demonstrate that transmission of prions from mother to offspring can occur, and may be underestimated for all prion diseases.” (Nalls et al. 2015: Abstract P.136 in Prion2015) The WGFD must facilitate research to determine the extent of mother to offspring transmission of CWD prions in Wyoming’s cervid herds, and what impacts that may have on herds throughout the state.
- c. “Silty clay loam exhibits highly efficient prion binding, inferring a durable environmental reservoir, and an efficient mechanism for indirect horizontal CWD transmission.” (Denkers, et al. 2015 in Abstract 161 of Prion2015). “Soil may preserve chronic wasting disease (CWD) and scrapie infectivity in the environment, making consumption or inhalation of soil particles a plausible mechanism whereby naïve animals can be exposed to prions.” (Johnson et al. 2015: Abstract P.157 of

- Prion2015). “Spatial heterogeneity of CWD prevalence in endemic areas may possibly be linked to varying soil composition and in particular percent content of montmorillonite. Further research in this area is justified.” (Edmunds 2013:12) The WGFD must obtain and distribute to the public a surface soils map of Wyoming. Research is needed to determine where in Wyoming there are soils that amplify the effects of infectious prions. The WGFD should make such a soils map and relevant literature available to the public.
- d. The WGFD must investigate if natural mineral licks used by cervids can be locations of infectious prion deposits by infected cervids and uptake by naïve cervids. The WGFD should map such locations. The WGFD should locate all supplement mineral blocks placed for livestock that may be used by cervids as potential reservoirs of infectious CWD prions and potential locations of infection of naïve cervids. The WGFD should build a map of such mineral licks and mineral blocks within the CWD endemic zone, and along the expanding front of the CWD zone and make it available to the public.
 - e. The WGFD must investigate if there are improved live tests for CWD in cervids, and consider using these tests to determine, along with post mortem tests, what the prevalence of CWD is in cervid herds throughout Wyoming. The WGFD should also undertake adequate surveillance of live and dead cervids throughout the state to be able to detect to at least a 95% confidence level whether CWD exists in the cervid herds at a 1% or greater prevalence. The Department must make available to the public the prevalence and trends of CWD in cervid herds where it is known to exist.
 - f. At the very least, the CWD plan must include synopses of the information from studies by David Edmunds on CWD in white-tailed deer (2013), by Melia DeVivo et al. on CWD in mule deer (2015), by Ryan Monello, et al., on CWD in elk (2013 and 2014) and A. Christy Wyckoff et al. on CWD in elk (2015). The CWD Plan should include in its entirety the Appendix 7 (a review of relevant CWD literature) to the FSEIS for Alkali Creek elk feedground by Tyler Johnson (2014). The WGFD must make this information easily available to the public.
 - g. The WGFD should study densities of wintering elk and deer herds throughout Wyoming and the correlations between density levels, timing (days or months spent on winter ranges in dense concentrations), and prevalence of CWD and other diseases in elk, moose and deer herds.
 - h. The WGFD should identify cervid migration routes and movement patterns to determine the likelihood of cervids infected by CWD traveling from an endemic area into nonendemic areas and infecting naïve cervids and depositing infectious prions into the environment. The WGFD should implement actions described in these comments in both the endemic and the nonendemic areas to mitigate the impacts to cervid herds.
 - i. “Despite the fact that prions are only protein, studies continue to point at evolutionary behavior and selection pressures of prions which indicate that like other pathogens, prions are capable of evolving and adapting to their environment.”

(Wyckoff et al. 2015:6) The WGFD must conduct or facilitate research that determines how many different strains of CWD prions there are.

- j. The WGFD should archive all CWD relevant information on a website that is easily accessible by the public; such website could be cooperatively managed by WGFD, the University of Wyoming, and the Prion Research Center of Colorado State University.
- k. As stated above, the WGFD should survey resident and visitor hunters and non-consumptive users of wildlife about their awareness and attitudes about CWD.

Whether or not the WGFD has the capacity to conduct or partner on CWD research, the Department must facilitate the gathering of pertinent research on CWD and must make it readily and easily available to the public, and must consider, include, and implement the determinations from such research in management plans for Wyoming's wildlife. It is very important that the public and all interested entities are offered easy access to the latest information on CWD and other prion diseases. . The WGFD, in partnership with other agencies, academia, and non-governmental organizations, should significantly increase their efforts to educate the public about CWD.

10. End artificial feeding of deer, moose, and elk statewide

Given the current diseases that exist in elk on WGFD feedgrounds, such as hoof rot, brucellosis, internal and external parasitic infestations, and the acknowledged risk of other diseases including CWD to cervids concentrated by artificial feeding, and the risk of catastrophic die-offs from CWD when CWD approaches elk herds that attend winter feedgrounds, the Wyoming Game and Fish Commission should ban artificial feeding of deer, moose and elk statewide, including closure of elk feedgrounds. There should be no exemptions to such a ban that allow artificial feeding and/or concentrating cervids. The Wyoming Game and Fish Commission and Department should also support the expeditious end of artificial feeding of elk on the National Elk Refuge.

11. Manage for healthy herds

The current model of wildlife management as implemented by the WGFD focuses on maximum numbers of deer and elk throughout the state regardless of the health of the deer and elk or their habitat. In order to combat CWD and other cervid diseases the Department must manage for a healthy ecosystem, as natural as possible. Rather than focus on numbers of deer and elk, the Game and Fish Department and other agencies (e.g., U.S. Fish and Wildlife Service, US Forest Service, Bureau of Land Management, National Park Service, and Tribal wildlife professionals) should help shift the emphasis to achieving healthier herds that are managed according to the carrying capacity of healthy habitat, especially native winter range. The important role of predators in keeping elk and deer healthy should also be emphasized and applied in wildlife management plans.

12. Funding to mitigate impacts from phasing out elk feedgrounds

The Draft CWD Plan indicates (in part) that closing elk feedgrounds can occur only if “will not cause damage/conflict/co-mingling issues with private property, stored crops, and domestic livestock” (Draft Plan:5) Since most all other states and provinces have already dealt with these types of conflicts, and since Wyoming passed legislation to mitigate such impacts, the WGFD must change the language in the CWD Plan away from implying a virtual impossibility of closing feedgrounds to language that offers solutions. For example, most conflicts are easily remedied by construction of fences around wintering livestock. As the WGFD well knows, there are a variety of funding sources available including the Wyoming Wildlife and Natural Resources Trust which can fund projects for the “mitigation of conflicts and reduction of potential disease transmission between wildlife and domestic livestock.” (WWNRT 2015) The CWD Plan must include a section about conflict mitigations and a section informing the public including ranchers of sources of funding to assist in mitigation projects.

13. Change policies and coordinate with other state and federal agencies

Wyoming’s current policies of managing for maximum numbers and dense concentrations of deer and elk, eradicating predators from much of Wyoming, and allowing winter feeding of deer and elk are the most archaic and harmful practices imaginable in the face of an advancing deadly disease like CWD. These policies run counter to healthy ecosystem management and are not in line with modern standards of wildlife management. Wyoming’s policies, if allowed to continue, will ensure that Yellowstone and Grand Teton National Parks, and the states of Idaho and Montana will be subjected to CWD in their deer, elk, and moose herds. The Draft Plan states that, “The WGFD will coordinate and collaborate with state, federal, and tribal agencies on relevant CWD management issues.” (Draft Plan:4) Condemning those jurisdictions to CWD epidemics is not coordination and collaboration. The WGFD must listen to scientists, and to other agencies who have taken steps to ban feeding and conserve predators, and must implement actions that do not inflict harm on Wyoming’s or other jurisdictions’ wildlife. To do nothing different than Wyoming’s status quo in managing predators and elk feedgrounds, for examples, would be irresponsible. This disease must be treated as an emerging serious ecosystem and public health issue of the highest order. The WGFD must align their policies with modern wildlife management standards, and must promote healthy ecosystems. Wyoming must be a “good neighbor” to National Parks and adjacent states, and manage for *healthy* herds of deer and elk.

14. Conclusion:

Wyoming’s CWD Endemic Area has already expanded more than 3.2 million acres in Wyoming in 2015; the CWD Endemic Area now covers more than half of Wyoming and is spreading towards Yellowstone and Grand Teton Parks, the National Elk Refuge, Idaho, and Montana (WWA 2015; WGFD 2015, 2015a). Time is of the essence to phase out elk feedgrounds and conserve abundant predators throughout the state to help keep our herds healthy.

Please incorporate into the CWD Management Plan the references cited in these comments. If the WGFD has difficulty finding any of these sources, we will gladly help locate them.

Please keep us apprised of any actions in this or any related matters.

Sincerely,

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