March 28, 2016

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 Sierra Club Wyoming Chapter and Wyoming Wildlife Advocates on the Wyoming Game and Fish Department (WGFD) draft Chronic Wasting Disease (CWD) Plan (dated February 25, 2016). Our members, boards, 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 and supporters throughout Wyoming 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 use of natural winter ranges, predation, and seasonal migrations can be maintained to ensure that healthy, free-ranging wildlife populations are in balance with high quality habitat.

We submitted extensive comments dated December 22, 2015 on the previous WGFD draft CWD Plan. Please incorporate those comments, including the references, in their entirety for this February 25, 2016, version of the WGFD draft CWD Plan. As stated in our earlier comments, Wyoming’s CWD Management Plan should be comprehensive and proactive. It should commit the WGFD to aggressively implement available tactics and tools recommended by CWD experts in the face of this geographically expanding disease to “slow the spread and/or reduce the prevalence of the disease” (Draft Plan, p. 2). Such tactics and tools currently available fall into three categories:

...


3) Conserving populations of predators to allow them to attend to cervid herds and selectively cull diseased individuals from the herds. (Alberta 2008: pp. 24, 31, & 45; Smith 2012: p. 226; Wild et al. 2011: pp. 79, 85, 88)" (SCWC/WWA 12-22-15 comments pp. 4-5)

We appreciate the positive changes made to this latest version of the WGFD draft CWD Plan, including the following specific improvements:

1. Addition of “and entities of higher education, universities, and other researchers” to partner with for surveillance and research about CWD (Executive Summary).

2. Addition of "other media and social media outlets" for dispersal of CWD information to the public (Executive Summary).

3. Explicit Goals, including:
   • Manage deer, elk, moose and their habitats in Wyoming to delay the spread of CWD and reduce the effects of CWD on wildlife health and human enjoyment of wildlife resources.
   • Monitor the change in spatial distribution and prevalence of CWD over time.
   • Reduce the rate of spread and prevalence of CWD.
   • Coordinate CWD management and research with other state, federal and tribal agencies and entities of higher education universities and other researchers.
   • Adapt CWD management in response to surveillance and research findings.
   • Provide timely, complete and accurate CWD information to the public. (p.1)

4. Improved introduction with the addition of the paragraph on pp. 1-2.

5. Addition of "eradication remains the ultimate desired outcome", p. 2.

6. Addition of “Wyoming white-tailed deer (Edmunds, 2013), and in Wyoming mule deer (DeVivo, pers. Comm.)” offering up more
examples where it is known that “CWD may have a population level impact”, pp. 2-3.

7. Recognition that some CWD-affected herds may be subjected to “some level of hunting season restrictions”, p. 3.

8. Addition of the phrase, “or those killed by predators” (p. 3), is an improvement because it may allow the WGFD to determine the rate that predators select CWD affected prey.

9. Improved language, p. 4: “To provide for additional surveillance opportunities, WGFD will provide training on recognition of CWD clinical signs and collecting CWD samples for testing to WGFD employees, other state and federal employees, hunters, outfitters, and the general public as needed or requested.” However, as suggested below, the WGFD should have regular meetings statewide to inform the public about CWD, including recognition of clinical signs, much as the Department does for Living in Large Carnivore Country workshops.

10. Excellent addition, p. 5, “The WGFD will coordinate and collaborate with state, federal, tribal agencies and entities of higher education, universities and other researchers on relevant CWD management and research issues as requested or needed. The WGFD encourages other state, federal, tribal agencies and entities of higher education, universities and other researchers to initiate inter-agency CWD coordination meetings as well.”

11. Addition of “Small scale culling may be considered in some circumstances to slow disease spread” (p. 5).

12. Addition of “and contribute to increased persistence of prions in the soil and uptake by vegetation” (p. 6).

13. Addition of “however if CWD becomes established on a feedground, populations and hunting opportunity may decrease overtime (sic),” p. 7. The qualifier “may” is unnecessary and should be replaced by “will likely”.

14. Addition that the Department will, “Consider the potential role of predators to remove CWD infected animals and carcasses to reduce CWD transmission (Krumm, 2010; Wild, 2011),” p. 8. The Department should add “and scavengers” after the word predators.

16. Appropriate notation that the Department will educate the public about, “how the public can minimize the spread of CWD during the hunting season and throughout the year” (p. 8 under Component III. Public Information). However, the WGFD should also inform the public about how the Department can minimize the spread of CWD, including phasing out elk feedgrounds. It is well known and indeed a recommendation of virtually all CWD expert reports (Alberta 2008; CCWHC 2004; Colorado 2002) that eliminating baiting and feeding is necessary to reduce artificial densities of cervids and mitigate the intraspecies transmission of infectious diseases and suppress the amplification of CWD prevalence in an area.

17. Recognition of additional funding sources, “(e.g. Wyoming Wildlife/Livestock Disease Research Partnership, USDA-APHIS, Wyoming Governor’s Big Game License Coalition, Wyoming Wildlife and Natural Resource Trust, University of Wyoming)”, (p. 9 at Component IV. Funding).

18. Significant improvement to the draft Plan that Krumm et al., 2010, Pritzkow et al., 2015, and Wild et al., 2011 are included in the Literature Cited, pp. 9-10. See below for another critically important reference that should also be included.

Additional Improvements Needed:

We appreciate the above important improvements to the previous draft plan, and we also urge the WGFD to adopt the additional improvements described below to further strengthen the CWD Management Plan and more effectively protect Wyoming cervids from this devastating disease.

The WGFD has significantly modified the paragraph on page 6 that describes how the Department will acquire hay for winter feeding on elk feedgrounds. The Department cites Pritzkow (2015) that plants can “bind, retain, uptake and transport prions” (p. 6). The Department should also add that plants containing infectious prions fed to lab animals resulted in infection of those animals. (Pritzkow et al. 2015: p. 1170) The draft CWD Management Plan states, “The WGFD will attempt to only use hay for elk feedgrounds from outside the CWD endemic area. Additionally, the WGFD will communicate with the appropriate land management agency(s) as it pertains to elk feedground hay use and CWD.” (p. 6) This is far short of being sufficient to prevent the establishment of this disease on or around elk feedgrounds due to transportation of hay containing infectious prions. As noted in our December 22, 2015 comments (pp. 6-7), “The State of Wyoming human and animal health officials must prevent the importation of infectious plants and plant materials (e.g., 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.” (Sierra Club/Wyoming Wildlife Advocates, December 22, 2015). Since the CWD endemic areas are well known in Wyoming, there is no reason why the Department cannot prevent hay, alfalfa pellets or any plant-based animal feed from being transferred from those areas to elk feedgrounds. The Department should not allow importation of hay originating from within endemic hunt areas or adjacent to endemic hunt areas. Furthermore, the Department and other animal and human health officials should develop and implement regulations and processes to prevent any plant materials from entering Wyoming from within or adjacent to CWD endemic areas.

As for the Department communicating “with the appropriate land management agency(s) as it pertains to elk feedground hay use and CWD,” the Department must go farther to ensure that public lands (USFS, BLM, etc.) are not contaminated with infectious prions as the result of feeding elk. Other serious diseases such as hoof rot, brucellosis, and pasteurella already are endemic to the Department’s elk feedgrounds on public lands. This is not acceptable to the general public, it should not be acceptable to the WGFD, and it should not be allowed by the federal land management agencies.

The Department needs to further explain what is meant by, “The data will be reviewed and management actions will be considered to minimize the spread of CWD for the specific feedground(s) and surrounding areas.” This ominous sentence is in the paragraph describing what actions will be taken “If a single case of CWD is confirmed in a deer, elk, or moose in or adjacent to an elk herd unit with feedgrounds . . . “ the Department will intensify surveillance in those areas (p. 7). How would the Department “minimize the spread” of CWD in those areas? As discussed in Wyckoff, et al. (2015), Edmunds (2013), and DeVivo (2015), there may be non-symptomatic infected and infectious elk, white-tailed deer, and mule deer respectively that are carriers and distributors of infectious prions. Will the Department capture and conduct live tests on those species in the CWD positive hunt areas to such an extent as to indicate with a high level of confidence whether the disease exists at a certain percentage in the cervid populations? Will tests be done on soils and plants to determine if infectious CWD prions exist in those hunt areas? And, if it is found that infectious CWD prions and/or infected cervids are detected in those areas, what type of actions could possibly follow to “minimize the spread”?

Additional areas in the CWD Plan that should be improved are:

1. In the Introduction, p. 1-2, the Department should add that, in addition to describing clinical symptoms of cervids in the clinical and advanced stages of the disease, infected cervids can also be carriers and dispersers of infectious prions through feces, urine, and saliva (Wyckoff et al. 2015).
2. The description of the geographic extent of the CWD Endemic Area, p. 2, is incomplete. To correct this error, the Department should add “eastern slopes of the Wind River Mountains, and southern Green River Basin in southwestern Wyoming” (see WGFD map, slide #16, presentation by Dr. M. Wood to the Wyoming Game and Fish Commission, March 22, 2016; also see map by Sierra Club Wyoming Chapter/Wyoming Wildlife Advocates “Chronic Wasting Disease in Wyoming Endemic Deer Hunt Areas – March 2016” which includes as CWD+ Deer Hunt Area 92 southwest of Lander, appended to these comments.)

3. The descriptor “especially west of the Continental Divide” (p. 3) should be removed. The wildlife resources throughout the state are important to Wyoming’s residents and visitors. It is possible that proactive efforts throughout Wyoming will actually have positive impacts on the cervid herds west of the Continental Divide and elsewhere. For instance, if predators are allowed to effectively attend the cervid herds in the middle or eastern part of Wyoming and reduce the prevalence of CWD, a low prevalence of CWD may not overwhelm the positive effects of the predators in the western and northwestern parts of Wyoming. Another example of statewide proactive efforts would be the elimination of artificially feeding cervids throughout Wyoming, which may help keep the prevalence of CWD lower. Also, reducing the numbers and densities of cervids in other areas of Wyoming may assist in keeping CWD prevalence lower as it moves across the state and across the Continental Divide into Teton, Lincoln, and Sublette Counties.

4. The WGFD CWD Management Plan should include the following reference: Prion Amplification and Hierarchical Bayesian Modeling Refine Detection of Prion Infection, by A. Christy Wyckoff, N. Galloway, C. Meyerett-Reid, J. Powers T. Spraker, R. Monello, B. Pulford, M. Wild, M. Antolin, K. VerCauteran, & M. Zabel. 2015. Scientific Reports 5:8358 DOI:10.1038/srep08358. This paper adjusts the estimate of 13% CWD prevalence in elk in Rocky Mountain National Park (Monello et al. 2014) up to 18%.

As we explained in our December 22, 2015 comments on the previous draft CWD Plan, we encourage the WGFD to have more public meetings throughout Wyoming. We do not believe the two meetings held last December to explain the previous draft CWD Management Plan provide adequate public education and engagement prior to adoption of a final plan by the Commission. The WGFD must fully explain in person to the public the Department’s plans for incinerators in communities to dispose of CWD infected cervids, and the potential impacts to air...
and water quality and to human health. We also recommend that the Department conduct surveys of Wyoming hunters and wildlife enthusiasts, residents and visitors, to determine how these constituents feel about hunting or viewing wildlife affected by CWD.

We also commented previously about the need for an easy-to-use archive of CWD information so the public can easily find current CWD information. The Department should work with other agencies, researchers and universities to contribute to and maintain this important resource.

Appended to these comments is the latest iteration of a map (created March 2016) that shows the expansion of the CWD Endemic Area across Wyoming since before the year 2000. Wyoming currently has 37.6 million acres in the CWD endemic area. The map also shows the most recent 15 months’ expansion of the CWD endemic area in Wyoming of some 4 million acres, and the rapidly decreasing distance between CWD, elk feedgrounds, Grand Teton and Yellowstone National Parks, and the National Elk Refuge.

Again, to mitigate the effects of CWD on wild cervids virtually all CWD expert reports and published research on CWD recommend:

1. Reduce densities and possibly populations of vulnerable cervids,
2. Ban artificial baiting and feeding of cervids; and,
3. Conserve populations of predators to allow them to attend cervid herds and selectively cull diseased individuals.

We continue to encourage the Department to include these currently available and important elements in a comprehensive CWD Management Plan. As discussed at the Wyoming Game and Fish Commission meeting on March 22, 2016 in Rawlins, we all agree that it has been a serious mistake to treat Wyoming’s treasured wildlife for years as the “do nothing control” for other jurisdictions to compare their CWD mitigation programs to. Wyoming must manage wildlife to ensure healthy wildlife and healthy human communities for the future. Time is of the essence for Wyoming to implement a proactive comprehensive program to mitigate the impacts of this deadly disease on our wildlife and renowned landscapes.

Thank you for your consideration of our comments. Please keep us apprised of any actions in this and related matters.

Sincerely,

Lloyd Dorsey
Conservation Director
Sierra Club Wyoming Chapter
Appended map: Chronic Wasting Disease in Wyoming Endemic Deer Hunt Areas – March 2016

References:


