

Wyoming Wildlife Advocates

Comments on the

Wyoming Draft Grizzly Bear Management Plan

April 7, 2016



To: Wyoming Game and Fish Department

From: Wyoming Wildlife Advocates

Re: Public comments on the Draft Wyoming Grizzly Bear Management Plan

Background

On March 11, 2016 the US Fish and Wildlife Service published its proposed rule concerning delisting of the Greater Yellowstone Ecosystem population of grizzly bears in the Federal Register, along with it's draft Conservation Strategy, and draft supplement to the 1993 Grizzly Bear Recovery Plan. By publishing these documents, the USFWS has begun the process of delisting the grizzly bear population of the GYE and removing the protections they currently have under the Endangered Species Act.

On March 15, 2016 Wyoming released it's updated draft Grizzly Bear Management Plan (herein "WyGBMP") which started a 30-day public comment period. This document, along with applicable Wyoming statutes and Wyoming Game and Fish Commission regulations, is designed to describe and define the "regulatory framework" under which Wyoming will assume management of the portion of the GYE grizzly bear population that will come under its authority once the delisting process is complete.

It is important to note that this plan also includes as its Appendix I a draft "Memorandum of Agreement Regarding the Management and Allocation of Discretionary Mortality of Grizzly Bears in the Greater Yellowstone Ecosystem (aka the "Tri-State Agreement", which is how it will be referred to herein). This important document is a key document for all three states and is incorporated into each state's grizzly bear management plan and the USFWS' draft Conservation Strategy.

The WyGBMP "covers all areas under state management jurisdiction: the entire state of Wyoming excluding Yellowstone National Park (YNP), Grand Teton National Park (GTNP), and Tribal lands within the Wind River Reservation (WRR)." (WyGBMP page iv)

Following are our comments on the Wyoming Draft Grizzly Bear Management Plan.

The example of Wyoming gray wolf management

It should be noted up front that perceptions about the assumption of management authority

over grizzlies by the state of Wyoming suffer from the recent example of gray wolf delisting. In the case of wolves, Wyoming managed the controversial predators so aggressively that a federal judge felt compelled to judicially relist a portion of Wyoming's wolf population.

Many, ourselves included, worry that the example of the wolves will be repeated, and there is very little in the WyGBMP that gives us comfort that that will not be the case.

The plan suffers from the use of generalized language and lack of detail concerning intentions and management practices

Throughout the plan, the usage of generalized language and lack of detail, is rife. The general public, who are not expert in grizzly bear matters, are not well equipped to recognize these failings with the WyGBMP.

The WyGBMP would benefit from increased detail in nearly all aspects of the plan.

Demographic Recovery Criteria

Demographic Recovery Criteria are at the heart of the WyGBMP and yet the use of the phrase points out an important nuance: Once the GYE population of grizzly bears is delisted, recovery is not the issue, sustaining and maintaining recovery is.

DEMOGRAPHIC RECOVERY CRITERION 1:

Criteria 1 is intended to ensure "sufficient reproduction to offset mortality to ensure population viability." (WyGBMP, p2)

The WyGBMP commits to a minimum population of 500 grizzly bears and at least 48 females with cubs in the Demographic Monitoring Area (DMA).

If the estimate of total population size drops below 500 or counts of females with cubs go below 48 unduplicated females with cubs in 3 consecutive years, this criterion will not be met." (WyGBMP, p3)

The problem with adopting this criteria is that if the estimated total population falls below 500 there is no mechanism to prevent another two years of decline. Given a record level of known and probable mortality in 2015, if such high levels of mortality persist, the total grizzly population could fall precipitously within a few years, especially if hunting is instituted, as expected. The estimate for total population fell from 757 in 2014 to 717 in 2015. Furthermore, known and probable mortality of 61 bears does not include bears that died but have not been discovered.

2015 total known and unknown mortality may approach, and perhaps even exceed, 100 bears, an obviously unsustainable level for such a slow reproducing species.

Acknowledging that a single year of under-500 population may be caused by an anomaly,

we recommend a two year time frame, with the second year serving to confirm or refute whether the population is in fact under 500.

While it is not within the purview of the WyGBMP, an estimated total population below 500 should trigger an immediate resumption of ESA protection.

DEMOGRAPHIC RECOVERY CRITERION 2:

Criteria 2 is intended to ensure "adequate distribution of breeding females throughout the area." (WyGBMP, p2)

The WyGBMP commits to "Sixteen of 18 grizzly bear management units within the Recovery Zone must be occupied by females with young, with no 2 adjacent bear management units unoccupied, during a 6-year sum of observations." (WyGBMP, p3)

A 6-year sum of observations means a BMU is considered occupied if it has a female with young in at least 1 year of each 6-year period. (WyGBMP, p3)

As the recovery criteria that directly addresses and defines grizzly bear distribution throughout the DMA, we believe a six-year time frame is overly generous. By the time failure to meet this criteria becomes actionable, distribution could be seriously impacted. We recommend a four- year time frame for this criteria.

DEMOGRAPHIC RECOVERY CRITERION 3:

Criteria 3 is intended to provide "an annual evaluation of total human-caused mortality that will ensure a recovered population." (WyGBMP, p2)

Maintain the population around the 2002-2014 Chao 2 modeled average (= 674; 95% CI = 600-747; 90% CI = 612-735) by maintaining annual mortality limits for independent females, independent males, and dependent young as shown." (WyGBMP, p4)

While ostensibly committing to a target range and defining a "hard floor" for the grizzly population, in reality, the WyGBMP only commits to a population of 500. (See above).

If mortality limits are exceeded for any sex/age class for three consecutive years **and** any annual population estimate falls below 612 (the lower bound of the 90% confidence interval), the IGBST Study Team will produce a Biology and Monitoring Review to inform the appropriate management response." (WyGBMP, p4) (bold not in original)

This clause places too high a bar on the triggering of a review. By the time mortality limits are exceeded for any sex/age class for three consecutive years, the population could fall well below the lower bounds of the target range, or given the right circumstances, below the 500 minimum target.

We recommend a two-year mortality time frame and unbundling the population target of 612 from the excessive mortality target.

In other words, a review should be triggered if mortality limits are exceeded for two consecutive years.

Separately, a review should be triggered upon any annual population estimate below 612.

These two items are each indicative of a distressed population and the occurrence of either should trigger a review.

GENERAL DISCUSSION OF DEMOGRAPHIC RECOVERY CRITERION

It should be remembered that the Demographic Recovery Criterion were developed to recover grizzly bears while under a protected regulatory regime that prohibited hunting. Even under that protective regime, mortality related to hunter conflict was a major cause of mortality.

Sustaining that recovery, especially in light of a less-protected status and presumed hunting pressure, requires an altered paradigm. The WyGBMP fails to provide that altered paradigm, and instead appears to approach the hunting of grizzlies as if hunting is an inconsequential addition to the original paradigm.

Given the language in the WyGBMP it is clear that Wyoming is very interested in the minimum allowable numbers that satisfy the demographic criteria. In this and other respects, the WyGBMP appears to resemble wolf delisting.

While the three states are obligated to satisfy the demographic criteria, there is nothing that says they can't manage for numbers that well exceed the criteria. We would like to see Wyoming acknowledge that grizzly bears have economic value above and beyond their value to the hunting community and manage accordingly.

The USFWS delisting proposal and the WyGBMP both rely on a proposed Discrete Population Segment status that is uncertain because of ongoing litigation.

The concept of a distinct population segments is the subject of ongoing litigation regarding wolves in the Midwest.

The Endangered Species Act ostensibly allows the listing and delisting of species, subspecies, and distinct population segments (DPS) of vertebrate animals. To qualify as a DPS under Service policy, a population segment must be both "discrete" and biologically or ecologically "significant" to the species as a whole.

And yet, the concept of "distinct population segments" is not scientifically derived. Discrete population segments are an artificial construct designed by the USFWS to give itself greater flexibility under the ESA. Whether that is a justified goal will not be debated here, as the issue will be decided in the courts.

The term "distinct population segment" (DPS) is not commonly used in scientific discourse,

so the USFWS and NMFS developed the "Policy Regarding the Recognition of Distinct Vertebrate Population Segments Under the Endangered Species Act" to provide a consistent interpretation of this term for the purposes of listing, delisting, and reclassifying vertebrates under the ESA." (61 FR 4722; February 7, 1996)

The USFWS has not performed a Distinct Population Segment analysis on the GYE grizzly population and has in fact, deferred such analysis until such time as the Northern Continental Divide Ecosystem grizzly population is proposed for delisting. We believe that such deferral is an invitation to additional litigation.

For the USFWS (and state agencies) to rely on a distinct population segment status is a huge roll of the dice. If current litigation prevails, the delisted status of the GYE grizzly bear population as a DPS could possibly be negated with uncertain and likely chaotic results that may include a judicial relisting of bears under the ESA. While beyond the purview of the WyGBMP we believe that it would be in the best interests of all parties to wait for judicial clarification of this issue before delisting.

Grizzly Bear Foods Monitoring

The IGBST currently monitors the productivity of four common grizzly bear foods in the GYE: whitebark pine seeds, army cutworm moths, winter-killed ungulates, and spawning cutthroat trout. While these are some of the highest calorie food sources available to grizzly bears in the GYE (Mealey 1975, pp. 84–86; Pritchard and Robbins1990, p. 1647; Craighead et al. 1995, pp. 247–252), only whitebark pine seeds are known to have an influence on grizzly bear mortality risk and reproduction. There is no known relationship between grizzly bear mortality risk or reproduction and any other individual food (Schwartz et al. 2010, p. 662). (USFWS Proposed Rule, pages 156-7)

While often repeating the USFWS mantra that "changes in abundance of various food sources are not likely to negatively impact grizzly bears at the population scale due to their dietary plasticity" (IGBST 2013, van Manen et al. 2014, van Manen et al. 2015) it is interesting to note the tacit acknowledgement of the importance of the four foods that have been considered the "primary" food sources for many years. The WyGBMP does not mention by name any other food sources, nor does it contemplate monitoring other food sources with any specificity other than a statement that:

The Department will continue to identify areas of interest related to grizzly bear diet in order to better understand and manage the population. (WyGBMP p 13)

While government scientists have documented a huge array of food resources available to omnivorous grizzlies, it is obvious that one food source is not necessarily equivalent to another in quality and availability. Celery does not equal steak no matter what abundance there may be of it.

There are temporal and spatial aspects to the food resource that must be considered, as well as caloric and vulnerability costs associated with obtaining alternative food sources. While the USFWS, the IGBST and the WGFD all maintain that grizzly food sources are secure, many expert observers outside government employment feel that the science on

grizzly bear food security is far from settled.

The WyGBMP needs a much greater emphasis on grizzly food resources and needs to outline a plan to better understand and monitor grizzly food resources, especially in light of expected climate change.

Climate change and its effects

Climate change is the elephant in the room.

Climate forecasts generated by Yellowstone National Park's own scientists are ominous and the effects on the ecosystem and the grizzlies are unclear. There is general agreement that further disruptive ecosystem-wide changes are not only possible, but likely, and they will significantly impact grizzly bears.

In 2015, climate change is no longer a vague threat in our future; it is the changing reality we live with, and requires continuous planning and adaptation. Temperatures are warmer, snowpack is decreasing, springtime arrives sooner, and the growing season is longer. The authors in this issue describe how these changes have already impacted park resources, and they discuss different possible future climates in which the park is a very different place. Can you imagine Yellowstone without most of the forest that now covers 80% of the park? The certainty of an uncertain future is a difficult concept to embrace, and even harder to plan for, but we are doing ourselves and the next generation a disservice if we defer the discussion any longer. (Yellowstone Science 2015 23[1]p2)

Average spring and summer temperatures are expected to rise 3.5- 5.5°F above the 1950-1990 average by the mid-21st century (Westerling et al. 2011). Hot, dry summers as in 1988 are expected to occur with increasing frequency throughout the 21st Century and will become the norm by the latter part of the century. Such climate conditions would be similar to current conditions in the southwestern U.S. and outside the conditions that have been documented in the GYE for most of the past 10,000 years. (Yellowstone Science 201523[1]p7)

Both the USFWS and WyGBMP dismiss climate change as a factor affecting the GYE grizzly bear's future. And yet, it appears in the Proposed Rule repeatedly as a factor to be considered. The only reference to climate change in the WyGBMP is the following:

Changes in climate may affect regional vegetation, hydrology, fire regimes, and pathogen prevalence, which may in turn influence the abundance, range, and elevational distribution of foods consumed by GYA grizzly bears (Gunther et al. 2014). (WyGBMP, page 13)

And yet, the plan fails to elaborate on any of these potential effects, nor does it contemplate monitoring such effects.

The effects of climate change may result in a number of changes to grizzly bear habitat, including a reduction in snowpack levels, shifts in denning times, shifts in the abundance and distribution of some natural food sources, and changes in fire regimes. Most grizzly

bear biologists in the United States and Canada do not expect habitat changes predicted under climate change scenarios to directly threaten grizzly bears (Servheen and Cross 2010, p. 4). These effects may even make habitat more suitable and food sources more abundant. (USFWS Proposed Rule page 95)

Already a well-documented, decades-long warming trend has been strongly implicated in the near total loss of one of the four "primary foods" consumed by grizzly bears: white bark pine.

Another primary food, the army cutworm moth, is clearly at risk and at "7.9 kcal/g, army cutworm moths have the highest reported gross energy value of any food consumed (French et al. 1994). (2015, YS science, 23[2] page 8)

We know relatively little about the variability of this food resource and whether the long-term availability of army cutworm moths is changing. (Yellowstone Science 2015 23(2), page 27)

Army cutworm moths aggregate on remote, high-elevation talus slopes where grizzly bears forage on them from mid-summer to late summer...Climate change may affect army cutworm moths by changing the distribution of plants that the moths feed on or the flowering times of the plants (Woiwod 1997, pp. 152–153). However, the GYE plant communities have a wide elevational range that would allow for distributional changes (Romme and Turner 1991, p. 382), and army cutworm moths display foraging plasticity (Burton et al. 1980, pp. 12–13). Therefore, potential changes to army cutworm moth availability are not likely to threaten the GYE grizzly bear population in the future.

This finding in the proposed rule is truly astonishing (Proposed Rule, page 158). It notes that the moths congregate at high elevation, yet does not acknowledge that warming trends will affect them, only stating that "GYE plant communities have a wide elevational range." In the face of ongoing warming trends, one must wonder how much higher-elevation habitat exists above the alpine zone where these moths are found!

As grizzly expert Doug Peacock recently wrote:

The threat of global warming should be enough in itself to preclude delisting. But the federal government is not impressed by climate change. As evidenced by a recent lawsuit over wolverines, Fish and Wildlife administrators dismiss the predictions of climate models as unreliable. The government wants accurate climate predictions out to 2085 before they act. That's crazy: Nobody has a clue if the bears, or their human constituencies, will even be around in 2085. (Outside Magazine, 3/9/16, http://www.outsideonline.com/2061226/oped-dont-delist-yellowstone-grizzly-bears).

[On April 4, 2016 a federal judged rule that the USFWS acted improperly and did not properly take into account the effects climate change would have on wolverines. The judge questioned why the USFWS flip-flopped on ESA protections for wolverines, and mad a comment which we believe applies equally to grizzly bears: "[T]he Court suspects that a possible answer to this question can be found in the immense political pressure that was brought to bear on this issue, particularly by a handful of western states."]

Failure to acknowledge and plan for well-documented ongoing warming trends is simply irresponsible.

The plan fails to use current information in its possession for charts in the plan, which is misleading. Other charts seem designed to obfuscate rather than clarify elements of the plan.

Figures 3,6,7, and 8 all represent data series that end in 2014. All four of these charts fail to disclose the data for 2015 which in all four cases would show adverse spikes on the charts.

Figure 11 shows side-by-side maps of "Verified grizzly bear-human conflicts" that at a quick glance would seem to be comparative of two time frames, but in fact the right-most map is inclusive of the data from the left map, thus misleading all but the most careful reader.

Conflict Management

Conflicts are at record levels and it is not simply because there are more bears. There are a number of factors at play. We believe that state and federal agencies have failed to adequately address prevention of conflicts with humans and livestock.

We believe that a proven and effective pro-active conflict prevention regime, as opposed to reactive conflict resolution, is a prerequisite of states assuming management authority over grizzlies. Grizzly bear managers have repeatedly critiqued existing management methods of conflict prevention and resolution and failed to implement the very strategies they themselves have proposed to reduce conflict. (See the recommendations in "Yellowstone Mortality and Conflict Reduction Report" 2009, Servheen, et al.)

Documented changes in food resources are driving grizzlies to roam farther to consume more meat, which in turn is putting them at greater risk of conflict with hunters and livestock with the prospect of unsustainable levels of mortality. That this problem is substantially worsening even prior to the authorization of hunting is problematic and raises the question of sustainability of the grizzly population under state management.

While the WyGBMP states that "All grizzly bear hunters must carry bear spray while engaged in the act of grizzly bear hunting (WGFC Regulation Chapter 16, pending)" it must be noted that ungulate hunting accounts for a substantial proportion of current mortality. Other than Grand Teton National Park - outside of WGFD jurisdiction - ungulate hunters in grizzly country are NOT required to carry bear spray. This is a no brainer and has been encouraged by advocacy groups and grizzly managers for years. And yet no requirement for ALL hunters to carry bear spray in grizzly country exists.

This is but one example of grizzly manager's failure to implement reasonable and necessary conflict management techniques and regulations.

The Department's conflict management program will focus on education and preemptive management strategies. (WyGBMP, p19)

Non-lethal control measure will be exercised whenever appropriate and practical (WyGBMP. P19)

We concur with these statements but believe more detail is necessary for the public to evaluate the the conflict management program envisioned by the WyGBMP. The WyGBMP is largely silent on what preemptive measures it intends to adopt.

In regards to conflict management on livestock grazing allotments the WyGBMP focuses on depredation compensation but is silent on other aspects of how it intends to reduce or manage conflict on public lands used for livestock grazing. We acknowledge that some aspects of this issue are beyond the purview of the WGFD and the WyGBMP but would like to see WGFD better define what is within it's authority regarding conflict management on grazing allotments on public lands.

The WyGBMP must contain more detail on conflict management strategies rather than relying on vague assurances.

Bear Dogs: the missing link in Wyoming grizzly bear management

No grizzly bear management program can be said to be "best practices" without a bear dog program.

While he was director of the Montana Fish Wildlife and Parks Department, Pat Graham said this of bear dogs:

I would classify the use of Karelian Bear Dogs as the single most important conservation tool that we use in dealing with grizzly bears, and the reason I say that is, grizzly bears eventually are going to come into contact with people, and when bears and people mix, the bears lose. And so whatever we can do to affect the behavior of those bears and keep them alive, and keep them in habitats that they'll be secure in, that's a real win for everybody. (Interview, https://www.youtube.com/watch?v=LO3Maw_DIW8 at 10:40)

Graham concluded that bear dogs "make the difference between whether we are able to recover an expanded grizzly bear population or whether we're not."

It would be difficult to find a stronger statement from a more senior wildlife manager regarding the use and benefits of bear dogs.

On page 18, the WyGBMP states that Department responses to conflict include "no action, aversive conditioning, deterrence, relocation and/or removal".

On page 20, in the section on Aversive Conditioning, Deterrence and Exclusion: "The Department may employ various options to prevent or reduce the potential for conflicts and/or depredations (e.g., electric fencing, bear proof structures or container, scare devices)."

And yet, the GBMP contains no mention of perhaps the single most effective method of

aversive conditioning: bear dogs.

A properly designed trap-and-release operation includes the use of bear dogs. Instead of just one or two personnel opening the trap and releasing a bear, a professional protocol would include three or four personnel, armed with a shotgun with cracker shells, a rifle with rubber bullets and the use of bear dogs. The simple idea is to use the release process as a teaching tool for the problem bear. Maximum noise, rubber bullets and barking dogs provide a level of aversive conditioning unmatched by any other method.

The reason bear dogs are so effective is this: bear dogs produce an aversive conditioning effect on bears that extends to the one thing almost all human habitation have in common: there are dogs around them. Grizzlies aversively conditioned to bear dogs will tend to avoid pet dogs, too, and thus human habitation.

Bear dogs are also useful in locating bears, and in circumstance where it is necessary, moving bears off carcasses or away from attractants.

Bears dogs keep bears alive and reduce conflict. Any management program that does not use bear dogs cannot be considered to be using best practices.

We have world-class wildlife resources in Wyoming; we expect world-class wildlife management. The WyGBMP must articulate a conflict management regime and standard operating procedures that include the use of bear dogs.

Hunting

Regulated hunting may be a component of the Department's grizzly bear management program. Hunting, along with other management tools, may be utilized to ensure the long-term conservation of grizzly bears in Wyoming by maintaining the population within a healthy, sustainable range and by potentially limiting occupancy of unsuitable habitats. Public take may also be directed, when appropriate, to areas with high frequencies of human-grizzly bear conflicts.

Oh, quit with the fiction that officials are still deciding whether to hunt grizzlies already! While technically accurate, as the WGFC has not yet set seasons, the only question is when and where hunting will commence not whether it will. To continue this fiction only damages the credibility of wildlife agencies and officials.

We have concerns over any hunting season that would occur when both females and males are in the field. Identifying the difference between males and females is problematic at best and many experienced researchers will admit to having difficulty doing so under field conditions. We note that an experienced employee of WGFD was prosecuted because he illegally shot a grizzly bear he believed was a black bear. Identifying males vs. females is much more difficult than identifying grizzly vs. black bears.

We concur with an educational program that educates hunters how to identify males vs. females, but fear that such a program will be of little value in reducing accidental

take of females.

We concur with the idea of an early spring hunt in that it protects mother bears and their offspring who are relatively late in emerging from winter hibernation. A fall hunt would unduly jeopardize females that have chased off cubs, are likely pregnant, and are without cubs by their side.

We have concerns with any late fall hunt that overlaps with ungulate hunting, which is a recipe for even greater hunter-caused mortality.

Female grizzly bears with dependent young (cubs of the year, yearlings, 2-year olds) and dependent young will be protected from hunter harvest. (WyGBMP, p14)

While we, of course, agree with this policy, it has, in conjunction with other aspects of the plan, some apparently overlooked unintended consequences and this is the aspect of hunting that concerns us the most.

The mortality limits were originally designed within a non-hunting framework and to apply them to a population that is being hunted (at least to the extent articulated below), produces distortions that have significant repercussions on the population as a whole.

First the mortality limits are designed to apply to the entire population. But the National Parks within the DMA do not and will not allow hunting. Nor are they allocated any discretionary morality under the Tri-State Agreement. Therefore, that "focuses" the discretionary mortality of the entire female population onto the population of female bears outside the parks.

Second, since at any given time approximately $\frac{2}{3}$ have cubs at side, the female population-level discretionary mortality is further "focused" on the $\frac{1}{3}$ of female grizzlies outside the parks that will reproduce the following year.

Thus a whole-population-level of hunting-related mortality would actually be "focused" on a very small subset of female bears, namely those outside the parks and who are without cubs.

This imposes a substantial, perhaps unsustainable, damper on recruitment of cubs into the population.

It has long been recognized that reproductive age females are the most important cohort of the grizzly population and the WyGBMP fails to adequately protect that cohort and in doing so will likely run afoul of Demographic Recovery Criteria 1 in short order.

We are concerned that baiting of black bears might be allowed within the DMA. The WyGBMP is silent on this subject. Cross referencing the DMA with WGFD black bear hunt area maps it looks like baiting of black bears could occur in all or parts of Hunt Areas 29, 24, 19, 20 and perhaps several more. We would recommend no baiting for black bears in any grizzly occupied territory, and certainly none within the DMA.

The WyGBMP is also silent on whether trapping or hounding of grizzly bears would be allowed. Both of these practices are abhorrent to significant portions of the general public and would result in a "black eye" for Wyoming potentially resulting in damage to the tourism-based economy of northwestern Wyoming.

We are concerned that WyGBMP is almost completely silent as to how those bears outside the DMA will be managed, and in conjunction with the "socially unacceptable: and similar language contained with the WyGBMP, we fear that, in effect, a vermin zone will be created wherein unlimited or nearly unlimited take will be permitted.

Given all of the above factors, and the comparative example of wolf delisting, we are concerned, even alarmed, by what appears to us to be an attempt to whack the population back to the legal minimum population allowed by law, and to put them back into the parks from whence they came.

Law Enforcement

"The Commission will ensure the fair, consistent and effective enforcement of laws and regulations related to grizzly bears. As is the case with all Wyoming wildlife, the Department's law enforcement charge and mission is a high priority. The Department will invest in the protection of the grizzly bear population, the thorough investigation of reported and discovered violations and will work with local prosecutors to adjudicate violations appropriately and in accordance with state law." (WyGBMP, p25)

While the sentiments are outstanding, recent history shows that actual practice differs in many cases.

Although federal and state law enforcement officers were never able to visit the backcountry site due to 'logistical and funding obstacles,' the incident was determined to be self-defense. ("What happens when hunters and grizzlies collide," JHN&G, Oct 7, 2015)

Investigations into hunter-related grizzly mortalities hit an all-time high in 2015, tripling the previous record, a data point that does not appear in figure 8 because the data set does not include the readily available information from 2015. Nineteen investigations were opened in 2015 and, as of the date of these comments, 18 still appear as "under investigation".

While these investigations occurred throughout the GYE, Wyoming, with the greater share of grizzlies and territory, clearly accounts for the bulk of these investigations.

The WyGBMP must articulate a more robust and effective law enforcement regime and demonstrate that it is properly funded.

Funding of post delisting management

The short section entitled "Grizzly Bear Management Costs and Funding" states that: "Total future costs are difficult to predict, however costs associated with data collection

and conflict management will vastly exceed any revenue generated by the grizzly bear program" (WyGBMP, p26) and goes on to enumerate the past costs of grizzly management, but is silent on how it intends to fund conflict management, monitoring and other related costs of post-delisting management. Wyoming, well known for its boom and bust cycles, has just entered the "bust" part of the cycle and it is unclear when tax revenues will recover. Given this current budgetary crisis, it is necessary for the plan to contemplate funding amounts and sources. It cannot be assumed that the funds will just be there.

"The adequacy of the regulatory mechanisms demonstrated by this Conservation Strategy are dependent upon funding being available to fully implement the management and monitoring actions detailed in this document." (Draft 2016 Conservation Strategy, p14)

Clearly, adequate funding is an overriding concern that touches on all aspects of postdelisting grizzly bear management, and as such, must be directly addressed in a meaningful way in the WyGBMP.

Conflicted state game and fish agencies pose a significant risk to grizzly recovery

Often overlooked are the inherent conflicts of interests that exist when a state game and fish agency is charged with managing trophy game species as well as predators. The revenue derived from sales of licenses for ungulate hunting constitute one of the largest sources of revenue of the typical game and fish agency, while predator management is a drain on financial resources.

Costs associated with data collection and conflict management will vastly exceed any revenue generated by the grizzly bear program. (WyGBMP, p26)

Furthermore, grizzlies prey on the ungulates that Wyoming invests heavily in, thus creating a bias towards protecting that investment and against maintaining a recovered population of grizzly bears.

This leads to a situation where money, not science, may become a determining factor in decision making. In fact, the WyGBMP already contemplates a means of better balancing revenue with expenses:

Public take may also be directed, when appropriate, to areas with high frequencies of human-grizzly bear conflicts. If implemented, this strategy will evaluate the use of hunter harvest to replace some of the mortality that might otherwise result from agency take in conflict situations. (WyGBMP, p14)

Yet, other than the following tangential reference, the WyGBMP provides no guidance on how to manage and balance this conflict of interest:

The Department also has interest in research addressing how an intact large carnivore guild may directly and indirectly impact ungulate populations in northwest Wyoming. This research question has management, social and ecological implications... There are also

multiple questions related to efficacy of management strategies for population. (WyGBMP, p15)

This conflict of interest lies at the heart of the mistrust many feel towards the WGFD and must be addressed in a meaningful way in the WyGBMP.

The WyGBMP mentions the related concepts of "socially suitable", "socially acceptable", "social concerns", social implications" and "social tolerance" but provides neither a definition of these concepts, nor a way of measuring and monitoring them.

Apparently, the WyGBMP has an uncertain relationship with these "social" concepts, but little inclination to define or monitor them. With the exception of "socially acceptable" which appears in the plan twice, each of the above phrases appears exactly once in the WyGBMP. Without definition, these terms provide state managers with a Mack truck-sized hole through which they can drive through almost any geographical limitation they chose to declare. The fact that the Wyoming range — which most consider prime grizzly habitat — is considered to be socially unacceptable is belied by the fact that grizzlies have already colonized a significant portion. We consider this is "socially unacceptable" designation as a sign that Wyoming intends to remove these bears, most likely through the mechanism of trophy hunting.

Connectivity

While largely within the purview of Idaho and Montana, connectivity should be addressed in the WyGBMP and the Tri-State Agreement. Connectivity, long desired by conservation groups and grizzly managers alike, is the single most effective way to keep the GYE population of grizzly bears from being re-listed under the ESA.

The plan should address ways and means of cooperating with Montana and Idaho in regards to achieving connectivity with other populations of grizzly bears.

The Tri-State Agreement (attached to the WyGBMP as Appendix I)

The draft Tri-State Agreement, in its current form, is problematic in many ways. Even though it was presumably negotiated over several months, vetted by attorneys, and has the presumed blessing of the USFWS, it has the appearance and feel of a hastily drawn up agreement. Furthermore, in some particulars it seems at odds with the USFWS Proposed Rule. We strongly believe this agreement is inadequate, inarticulate, and lacks necessary detail. We recommend the states revisit this document.

a. The Tri-State Agreement, like the WyGBMP, relies on a Discrete Population Segment status that is uncertain because of ongoing litigation. It is uncertain what impact a ruling

- adverse to the DPS designation would have ongrizzlies, on GYE grizzly delisting as a whole, or on this Agreement.
- b. In the agreement it states that "The Parties intend this MOA to be consistent with the 2007 interagency Final Conservation Strategy for the Grizzly Bear in the Greater Yellowstone Area (Strategy) and individual state management plans, and with revisions to these documents made in conjunction with the delisting process." (WyGBMP, page 38) It is unclear whether "2007" is a typographical or editing error, and whether it should actually refer to the Draft 2016 Conservation Strategy. Given that the agreement was ostensibly subject to months of discussion and has presumably been vetted by attorneys representing three states, it has to be assumed that it is not a typographical or editing error. If it is in fact an error, it would be indicative of a lack of seriousness and professionalism in drafting and preparing the agreement.
- c. There is no discretionary mortality allocated to the National Park Service nor the Wind River Reservation. It is unclear whether NPS or WRR discretionary mortality would be allowed discretionary mortality within the framework of the Tri State Agreement or whether any such morality would be in addition to the discretionary mortality contemplated in the Agreement. That there will be mortality on both NPS and WRR lands is indisputable. How will that affect the Tri-State Agreement calculations of discretionary mortality?
- d. It seems that there is no mechanism whereby excessive non-discretionary mortality moderates discretionary mortality. Indeed the phrase "non-discretionary mortality" appears just once in the Tri-State Agreement, when it is defined on page 34.
- e. Neither is there any mention of unreported/undocumented mortality in the agreement, although on page 6 of the WyGBMP does cite that "Total mortality estimates of independent males and females will include unreported/undocumented mortalities based on the method described in Cherry et al. (2002). For clarity, this should be in the Tri-State Agreement as well.
- f. The parties agree only to "Maintain a minimum population size of 500 bears in the GYE" This language ignores the Demographic Monitoring Area and the Primary Conservation Area (aka the "Recovery Zone") and seems an example of sloppy draftsmanship.
- g. Neither the Tri-State agreement nor the WyGBMP contains an example of the discretionary mortality calculation based on current population estimates. This calculation is independent of Wyoming Game and Fish Commission regulations and the season setting and quota process. In a recent interview with Wyoming Public Radio, Director Talbott said that WGFD has not done the calculation. This is not remotely plausible. The agreement was negotiated by three states, under the auspices of the USFWS, and nobody knows what the calculation's results are? Impossible. Any reasonable and prudent person would consider that formulating a calculation within a legal document without knowing the the effect and result of that calculation is, quite simply, irresponsible and negligent. WGFD must provide the public with a sample calculation of the maximum allowable discretionary mortality based on the current population estimates so the public can judge for itself whether the proposed levels of mortality are reasonable.

This concludes our public comments on the Wyoming Draft Grizzly Bear Management Plan.

Thank you for considering these comments.

Sincerely,

Kent Nelson Executive Director Wyoming Wildlife Advocates PO Box 1772, Wilson, WY 83014

End of comments