Grizzly Demographic Objectives for the NCDE
ARM Public Comment Hearing Summaries

Public hearings were held in September in Great Falls, Conrad, Missoula, and Kalispell. Approximately 190 people signed in on the sign in sheets, although FWP estimates the total number of attendance at the four hearings was probably closer to 225. Commenters in Great Falls and Conrad were overall in support of the ARM, as they expressed a desire for grizzly bears to be delisted from the Endangered Species Act and management to be turned over to Montana FWP. The public in Great Falls and Conrad were concerned about safety of themselves and their families as well as for livestock loss as the grizzly bear has expanded out eastwards from the Rocky Mountain Front and has become more prominent and common in the towns and areas surrounding Choteau, Valier, Sun River, Conrad, and the Colonies. Commenters in Missoula and Kalispell by and large shared an opposite opinion, with the exception of a few commenters. The public in the areas and towns surrounding Missoula, Kalispell, Whitefish, the Bitterroot, and the Blackfeet Reservation were overall opposed to the ARM, as they expressed concerns that managing for a number of 800 was not enough to ensure viability or connectivity and linkage of grizzly bear populations. The public in Missoula and Kalispell largely expressed an adoration for grizzly bears, with strong oppositions to issues outside the scope of the ARM rule, such as hunting and delisting.

A summary of the individual oral comments given at the hearings is provided below. **This is <u>not</u> a word for word transcription, and the comment recordings are available upon request.**

<u>9/18/18 Great Falls</u>

Number of attendees that signed in: 21

Blair Gjesvold: Appreciated the presentation and thought process of objectives for connectivity. Thinks a lot of the connectivity has already been accomplished. A lot of bears are coming down from the Canadian Rockies, out of the Bob, are much bigger and more aggressive – which is irrelevant to the objectives of a population base, but other groups and people don't know what we live with and are buying connectivity land. Concerned about how much further east we are going to allow people to purchase land and make the connectivity into further lands east. Big problem from Valier to Fairfield. Bears are showing up everywhere. As far as past Dutton. People from Valier to Fairfield can't even take a walk without a weapon or bear spray. It's becoming a problem wherever there is a feed lot or any access to food, bears are migrating and having cubs and maintaining a population in that area. There has been a bear in Choteau, in town. We have bear drills, not fire drills. Appreciate what FWP is doing with objectives, but when it comes to zone 3 and bears moving further and further encroaching onto ranches, daughter can't even walk her children without being armed, which is a little ridiculous. If they reach the objectives and there are more, we should be allowed to do more than haze them. Somewhere down the line we are going to have to

have a hunting season to move bears back into intended zone. Bears are a wonderful thing, but humans have to have a way to protect ourselves.

Nick Gevock, Conservation Director for Montana Wildlife Federation: Agency did good job on this plan. Population goal is reasonable. We think FWP should manage for a minimum of 1000 bears. Mention of connectivity is excellent. Trying to get bears to connect with Cabinet Yaak, Selkirk and Selway-Bitterroot and GYE. Yellowstone and NCDE are only about 70 miles apart. Conflict prevention is essential. Cleaning up boneyards has shown some success. No livestock depredations east of Hwy 89 yet this year. FWP needs to be engaged in forest planning as several National Forests are conducting new plans now. Hopefully agency will comment on road densities, habitat protection and wilderness designations in those areas. Need statewide management plan as bears expand in numbers and range. MWF is strong supporter of hunting as a management tool. If it's modeled the same as Yellowstone with zones and quotas, think the agency did excellent job. Funding always an issue in wildlife management, and hunting licenses would not cover the cost of managing the species so we need to look at broadening base of funding. Overall it's a good plan and should strengthen case for federal delisting.

John Vollertsen: Thanks to Cecily Costello. My interpretation of ESA, Section 8, is that the Dept. of Interior can make a delisting decision without these objectives in place, contrary to the data presented to us. When looking at the numbers, what I'm concerned about is in a newspaper article, in 2004 there were 543 bears from DNA hair samples but in same article number went to 765. Robust statistic to make that big of a jump because data collection, how could you miss a bear? No way you're going to get them all and there were bears outside of the ecosystem that weren't counted. Cecily told me last year she had a sample data that would indicate how many bears were missed, and it was about 97 bears that she came up with missed in terms of pre-2004 bears. If you take 543 number, and 18 other bears that were detected, that would take the number to 660, actual DNA bears, pretty significant. If project out at 2.3% annual growth rate, over 13 years, that 765 grows to 1028, according to my calculation. Which pretty well coincides with what Cecily has shown us. If you take 660 actual DNA bears, that number at 2.3, expands to 887 bears. Considerable variation there. Time is up. Will submit written comment by Oct 26.

Locke Mellott, from Shelby: Thanks for the meetings Thinks most Montanans want grizzly bear management and mismanagement has occurred for the last decade, which has had repercussions across the state. Sun River elk herd is 36-38% down, FWP has told me that's from grizzly bears hitting calves, I know there is truth to that and I appreciate the printouts ready to give hunters who are frustrated that there was 100 cow quota on the Sun River. The black bears have kind of disappeared since 2013, tracks don't lie, there's hardly any black bears left on the front. Wish Daniel Ash would take action and I feel for FWP employees that are doing best they can, but I know it has to come from higher up, but thanks for starting some proactive management.

John Warner, lives 4 miles south of Sun River: Raises sheep and had 2 kills last week (Sept 9). Wouldn't wish this one anyone in livestock business. Dynamics of ranch have changed, being in the field to irrigate requires carrying bear spray and watching over your shoulder. Grandkids can't go out to the pond anymore. Neighbors say they see them all the time. We have apple trees, hay feeders, grain storage, chickens and list goes on and on, bears in Zone 3 have more rights than we do. Animal right groups who like to see them will fight delisting with money. All the talk that FWP did today was good but I think we need to talk beyond those areas.

9/19/18 Conrad

Number of attendees that signed in: 47

David McEwen, representing Montana Woolgrowers Association: Support the ARM at this time. Written comment will also be submitted.

Dave McEwen, personal comment: Supports ARM with contingencies and considerations. Emphasis on females and female mortality needs considered especially when it comes to conflict bears. Acceptability and tolerance of bears on the prairie is being destroyed. The ARM mentions management, management to me is boots on the ground. People need to move from recovery mode to management mode. Expressed concern that the meeting was held in Conrad which isn't in Zone 1.

Trina Bradley, VP of Marias River Livestock Association and rancher in Zone 1: Accustomed to seeing grizzlies on regular basis. Ranch is on Birch Creek, 20 miles South of Swift Dam, provides acres of perfect habitat for bears and other wildlife. Encouraged by the ARM. Happy to see population and mortalities will be monitored in the PCA and Zone 1. No concerns that numbers will drop below 800, and based on the number of females with 3-4 cubs on the Rocky Mountain Front, confident that grizzly population is thriving and will continue to do so. Appreciate department's transparency, and coming to Conrad to meet with the people affected by grizzlies and the decisions made. (Supplemental written comment handed in).

Butch Gillespie, ranches 25 miles north of Conrad, and past VP of Marias River Livestock Association: In mid-80s, it was just give us 300 bears and we'll be happy, and now we're up to 1000 and that's just in the designated area, doesn't count the ones on the prairie. Time to get delisting done. We could care less about numbers, what we care about is our safety. Big city such as NYC would never tolerate what we are tolerating. Livestock losses – mortalities keep increasing. Not near enough money to fund it. We just want to be safe – bottomline.

Nick Gevock, Conservation Director for Montana Wildlife Federation: Agency did a good job, population proposals are more than adequate to ensure maintaining the population. We have some points within the conservation strategy, call to connectivity to other populations is excellent, but will take a lot of work. Those core areas are roughly 80% public land and 20% private, calls for need for conflict

management. The same model used to recover these bears in the Bob Marshall and Glacier will not be adequate on landscapes with farms, ranches and communities. Hope people are aware of growing efforts of carcass management and attractants to reduce conflicts. Agency needs to continue to comment on forest plans, road densities, and habitat protection. Thinks a statewide management plan needs to be implemented. Would outline where bears are most desired, where connectivity corridors are, future conflict prevention and hunting management for future conservation. Regulated hunting is sound wildlife management tool. Think agency did good job on Yellowstone grizzlies and hunt could be modeled same way. Funding is issue -grizzly hunting licenses will not come close to managing the species. Need to broaden base to pay for management. Time to move forward and let the state prove it can manage the species.

Lew Jones, area rancher and Senator: Have experienced firsthand what grizzlies can do, significant livestock loss. Support the ARM. Recommend Zone 3 portion be drawn as far east as possible to offer delisting tools there. Recommend continued growth of boots on the ground. Wesley Sarmento (FWP Bear biologist) has done a lot to help with conflict management in the local area. Human safety. We want to hold this conversation in a pre-manner, not post-manner after the death of a child. Appreciate work FWP has done to try to move towards delisting. Hopefully control of issue can be turned over to the state. Unrealistic to assume the issue will go away. Delisting could be a tool for bear management with the rapid growth of bear population.

David Walomer, VP at Pondera Colony: No winner or loser in God's eye, it's what's right and what's wrong. It is wrong to intentionally kill a grizzly bear just to kill it, and it's equally wrong to be a prisoner to a grizzly bear on your own property.

John Vollertsen: Last night in Great Falls I started talking about the number of grizzly bears. I'm fairly comfortable with managing bears around 800, good estimate. How the numbers have changed over the years. 2013 article over 1000 bears in ecosystem, now recently in GF Tribune, between 1000-1300, fairly consistent with Cecily's modeling. Think it's overstated. I've collected items and articles, and in 1990s, sheep producers lost 18 sheep to grizzly bears, a few years later another article said a grizzly killed 65 sheep. A more recent article references a more collaborative spirit, how state, federal and private resources come together to abate grizzly problems. Probably not successful but at least an attempt at it. No judgement from me toward farmers and ranchers. I think we need to pay attention to symbolism. Large carnivores are something Americans like to think about in the American West, but they don't have to put up with them. Funding is a good thing to address in our comments. As bears move east, exponential in logistics, costs, and everything else associated with managing bears, and who is going to pay for that? Think the state should stay close to the federal dollar. We need to talk about safety, property damage.

Steve Skelton, ranch in the Blackleaf West of Bynum: Support of ARM to manage bears. As an American citizen, I have the right to bear, own and defend property. Right now I can't defend my property. Grizzly is an apex predator. We are

vulnerable, helpless, and can't do anything, because it's tied up in government bureaucracy. Misappropriation of funds have been spent for decades on recovery of grizzlies at taxpayers' pockets. Grizzly bears recovered a long time ago. Bears are growing at monumental rates and no one wants to address. We have models and scales, but boots on ground tells us its blowing up. Government attitude towards public safety is not forefront. Bears are recovered. We need to establish public assurance that we are safe. Tired of walking out of house armed, not letting grandkids run around. They keep moving east. What if they were in the Bozeman or Missoula? Time to take a stand and take control.

Brian Benzing, works for farmer/rancher north of Conrad: Telling us that we have to put up with grizzly bears is no different than telling a banker he's going to have to tolerate an armed bank robber. The potential that grizzly bears have to threaten us and our livelihood is the same. Not saying we should get rid of all the bears but would appreciate consideration of what we put up with.

Maggie Nutter, past President of Marias River Livestock Association and District Board Director for US Cattlemen's Association: Fourth generation rancher in Sweetgrass Hills. Haven't seen grizzly bears there in a lot of years until just recently. It's hard to change your lifestyle. Lifestyle changes are sad, putting bear spray on kids and wondering if they'll come back. Support the ARM. Problem females should be removed from population. Zone 3 needs moved out. Also concerned about private property and ranches in Zone 1. Understand the need for a core recovery area and a buffer zone, but those people and their livestock and families need special consideration. It comes down to a human safety issue. You can replace a cow or sheep, but not our children or grandchildren.

Jim Morren from Conrad: Support the ARM with some concerns. Its focused on how many bears in how big of an area, I don't think it goes far enough. If expanded plans to include more bears in a larger area, establishment of viable population wouldn't take so long. Western boundary should be moved to Pacific Coast, and Eastern Boundary, Zone 3, to the Atlantic Coast. Compromise could be to Mississippi River. Efficiencies could be gained. FWP should think bigger. (Supplemental written comment handed in)

9/26/18 Missoula

Number of attendees that signed in: 66

Mike Bader, Independent Consultant in Missoula: 800-1000 bears will not be sufficient to ensure viability. Scientists have found that 2500-5000 are needed for genetic variation. NCDE isn't big enough for this many, so the 4 other subpopulations should be linked. Error in Conservation Strategy on the 2004 point estimate and in the estimated population growth rate. Incorrect calculation of only a 5% chance population was in decline, and it's more like 25%. Bears that die outside the core areas are not counted and included in growth rates. Counted when they are born but now when they

die. FWP uses “ghost” bears to achieve parameters. Can’t separate habitat from demographics and survivability. Should start over the document in a way that is scientifically and legally sufficient. (Supplemental written comment handed in)

James Jimmy St. Goddard: Grizzlies have more rights than man, science and DNA is different, this science is made up. Recent decision in the GYE case, this is exactly the same as the Yellowstone Ecosystem. So this is overstepping legal bounds. This needs to be addressed by the state committee. It will take 100-200 years to get where you want, and the 800 number is imaginary. Why throw something out like that when it’s so important to the public, 78% of the US want this bear to be left alone. It’s a sacred, spiritual being. Zinke is not providing the trusted responsibility to the federal recognized Indian or to the sacred bear. Freedom of Religious Act, he’s not providing that, why?. Money? millions of dollars to kill my grizzly. These bears are more important than cows.

Jeff Juel: Population numbers seem far less relevant than geographic distribution. Logical or reasonable measure of distribution or connectivity would be natural recovery of all identified ecosystems. If grizzlies aren’t making it to Selway-Bitterroot, then recovery isn’t achieved. Habitat isn’t adequately protected, people aren’t being managed to learn how to live with bears. It would make more sense to focus state efforts across all ecosystems. Resources are wasted when focused on just the NCDE.

Mark Beck from Missoula: Thanks for the meeting. Love bears. Lived with them in WY and AK and had them in my yard and never had conflict. Appreciate them and believe humans and bears can live together. Managing populations for the minimum viable numbers is in poor stewardship of our ecosystem and managing this one population from the range without considering number with connectivity and trying to populate areas as this 800 number is not current good science. It would make more sense to manage entire range instead of isolating this particular population from the rest. Range is historic, concentration of difference population areas in this range is artificially caused by humans. Would be better to manage entire range so bears can go back to their historic range. People like bears. Bears belong, cows don’t. More tourist dollars, interest, and spiritual value in having bears over entire range.

Bethany Cotton, Wildlife Program Manager at WildEarth Guardians, and wildlife attorney in Missoula: Thanks for the process. Impressive that state is stepping up, but part of the tension is a product of state limiting comment period to Chapter 2 of Conservation Strategy. Frustration because of what is actually up for comment is such a narrow piece of the Conservation Strategy, huge flaw in the process, need to be able to address the rest of the issues and look at the full Conservation Strategy. State has an opportunity and responsibility to change this approach and step up. Federal agencies have failed to put CS out for public notice, so this is an opportunity for the state to do so. It is now 5 years old, and changes have happened. ARM must include funding mechanism to ensure that monitoring does occur and include a commitment to alter the model to account for bears leaving DMA, and it needs to

include measurable criteria to achieve and ensure connectivity, not just monitoring, it is not an adequate regulatory mechanism under the ESA if it is not an enforceable criteria. FWP is wrong that the decision in the GYE case does not impact this. Read a quote from page 14 of that decision: "The Service's approach-evidenced first by this delisting and by its proposal to delist the other significant population, the Northern Continental Divide population--does not square with the ESA as a matter of statutory interpretation or policy. Here, the Service is engaged in a process of real-time "balkanization" criticized by the D.C. Circuit in *Humane Society:* Moreover, it is illogical for the Service to determine that, because the populations have not interbred for many generations-making them biologically distinct from one another-it is appropriate, without further analysis, to reduce the chance that they will interbreed in the future. The ESA does not permit the Service to use the distinct population segment designation to circumvent analysis of a species' overall well-being." (quote pulled from the decision.)

Tom Buchler, from Stevensville and Board Member of Montana Wildlife Federation: Montana should be proud of restoration of the population in the NCDE. Was a biologist in the 70s-90s, and a lot has happened since that we tend to forget. Demographic objective of 800 is sound, robust, at same time it could be a little higher. Independent mortality, and survival rates are good. Connectivity is a significant issue, more emphasis should be put on that. Will be difficult, different landscapes, used to be mostly federal land, today lots of private land. Conflict prevention is important. Forest planning is going to be a big issue. Also, need a statewide management plan, for future hunting, conflict prevention, etc. Could all be formalized in a statewide plan. Funding – need to look at other sources other than federal funding.

Darrel Guist: To actually recover the grizzly bear, we need to protect linkage habitats and wilderness to preserve opportunity for bears to naturally move. Don't think we can delist and segment. Full force of federal law should be brought to protect these habitats.

9/27/18 Kalispell

Number of attendees that signed in: 55

Keith Hammer, Swan View Coalition: Why are we listening to FWP talk about possible grizzly numbers in NCDE? Courts have ruled that agencies must focus on the whole picture, not just a segment, and they must focus on habitat. Rule shouldn't be focused on 800 bears in NCDE, should be focused on determining how many bears are needed to reconnect the ecosystems and habitat necessary to sustain them. Population experts say 5000-9000 grizzly bears are needed in interconnected populations to maintain genetic diversity. Populations will never be reconnected if GYE and NCDE are delisting and hunted. 800 number will turn into a goal. Quit trying to divide ecosystems and link them together instead with more bears. (Supplemental written comment handed in.)

Brian Peck, Wildlife Consultant from Columbia Falls: Cecily did good job of going through what proposed rule contains. Putting all population and numbers into one basket rubber stamps flawed Conservation Strategy and is illegal, in 1997 federal court case ruled that FWS cannot base claims of recovery on population numbers, trends or occupancy of BMUS. If FWP follows the same path as FWS it won't lead to recovery, delisting or to regaining state control. How can FWP get FWS to make some changes. FWP has leverage as a signatory of the Conservation Strategy – can use it to make sure that it follows science, obeys the law, and leads to recovery. Grizzly populations can't be delisted one distinct population segment at a time, impacts to the entire lower 48 must be considered. Focusing only on NCDE and only 800 doesn't get grizzly recovered. In the same 1997 case, FWS was ordered to develop habitat based recovery criteria before delisting an ecosystem, and were to contain quality and quantity of habitat necessary to maintain a recovered population. FWS instead has come up with surrogate recovery criteria that has to do with security, not quality and quantity. FWP biologists are experts and can work with FWS to come up with real habitat recovery criteria. Need to have landscape level linkage zones, those based off bears habitat needs. Stick with Amendment 19 of Flathead Forest Plan, has solid standards for road densities and bears.

Arlene Montgomery, Program Director for Friends of the Wild Swan: Does not support the rule. It doesn't address habitat that grizzlies need, such as security, food sources, or impacts that roads have on them. These are important parameters that contribute to whether the bear population increases or decreases. Connectivity between the ecosystems is critical to maintaining genetic diversity. To accomplish linkage, there has to be habitat of sufficient size, adequate food sources and security, were bears can live and it may take years for them to make journey between ecosystems. Only 800 bears in the NCDE is not enough for connectivity. This rule will codify grizzly population objectives making FWP official policy that must be followed when bears are delisted. Sets in stone how many bears FWP will allow in the NCDE and only be amended or repealed through another rulemaking process. Once bear is delisted, state will manage for this low population threshold and would likely support a sport hunting season which we oppose. This year's mortality is 36 bears, 3 killed this week. A rule that focuses solely on counting bears and computer modeling doesn't represent the threats or full extent of what is necessary to recover them. State and Federal agencies selected an arbitrary point in time to determine that grizzlies are recovered, even though they are only found in a few remnant areas of their former range, only 2%. Not based on science or law, and now the state wants to set these low numbers in law, we believe it's a bad idea. Recovery is more than a paper exercise and it's premature to proceed with this proposal until these issues are addressed.

John Fuller, Flathead local: Wants to speak in defense of those who have had adverse opportunities to meet bears on their own habitat. For 15 years I operated a safari booking agency in southern African nations. Endangered animals is acute there, particularly elephant. We have a problem here in America where we treasure liberty

and freedom, and our ancestors spend millions to eliminate the bear, and now it's told that bears are more valuable then human lives. It's immoral for large numbers of people in Montana to have decreased standard of living and decreased opportunity because of love of bears. We should do what has been done in many South African Nations, and make the bear more valuable than a horse. Don't allow them, or the opportunities to control the numbers, we make the price of the bear more valuable. In South African nations where elephant is economic entity, there is no poaching because everyone has opportunity to profit from trophy hunting. If you put up a dozen bear tags here, you could fund FWP. Refusing to recognize the economic value of something means you have no incentive for people to obey the law and protect the bear other than dictatorial methods by government which will bring a need for more game wardens. When bear is delisted, we should create a bear that is worth more than a horse.

Allen Chrisman, representing Chrisman-Wiley(sp?) Family Forest in Northfork: Been on property for 60 years, 5 miles South of Canadian border. We've seen grizzly populations recover significantly. In the 60s they were absent, except for the occasional track. FWP has done excellent job in educating private landowners about removing attractants and securing food storage, carcasses, fruit trees, and livestock against bear predation. We're proud to provide high quality habitat for grizzlies as is evident from our game cameras and personal observations. Last grizzly I saw was Tuesday, sow with 2 cubs. We do everything we can to try to provide habitat while we coexist with them. We believe recovery has been successful and we should celebrate that accomplish and move for delisting. We don't see a problem with a limited permitted hunting season. It would restore the fear of humans. Want them to continue to run from us. Thanks for presentation tonight and opportunity to comment.

Charles Overcast from Whitefish: Too bad the grizzly can't complain about the loss of its habitat. Cover that remains is left only on creeks and rivers. Forests need more protection for the sake of the grizzly and other animals that call woods and streams home. Pretty soon there'll be nothing left to manage outside protected areas.

Pady Dusing from Kalispell, and has a place in East Glacier on Blackfeet Reservation: Live here over 30 years. Sincere concern of delisting grizzly in NCDE. Grizzly studies from 2004-2017, I have researched and come to conclusion that grizzly population needs continued protection under the ESA, for at least 5 more years to collect further data and continue monitoring. Between 2004-2012, approx. 30% of monitored cubs died, 22% of yearlings died. Mortality rates for both male and female, in 2013: 33 died, 2014: 21 died, 2015: 22 died, 2016: 22 died, 2017: 29 died, this year thus far I thought 27 but someone said a few minutes ago 36. Documented females with no offspring coming out of hibernation in 2014 was 13.6%, in 2015 it was 37.8%, 2016 it was 48.8%, and 2017 25% of females. In 1975 we were down to 136 grizzlies total, recovery number was determined to be 800 and was set at that time. But in 1975, there wasn't climate change and forest health, food sources, and how fires would play a role. Questions to consider and monitor: (1) direct correlation of abundance/lack of

huckleberries and following spring coming out of hibernation and females with no offspring (2). Is there a trend with hotter summers, lack of moisture, climate change (3) If so that equals decreased berries, and decreased fertility, (4) monitor cub and yearling mortality rates and (5) correlation of food sources and body fat to sustain hibernation and survive hotter summers, climate change. Bears are entitled on ESA and are entitled to protection and conservation.

Ted Peterson from Kalispell: Big flaw in number, it doesn't count for catastrophic failure of bear population, examples of disease, CWD in deer, bird flu in Asia, etc. If something like this comes along, they're gone, would like to see this number at least doubled. It's not enough to take care of things FWP isn't looking at. So far its pretty good, they are healthy and we are dealing with them with bear spray, etc. We need to learn to live with the bear and we need to think about the long term The opening statement says the coastal range was in recovery system as far as I've known there's never been a grizzly in western WA or OR? Was there ever? Did we fail there?

Debo Powers, President of North Fork Preservation Association in Polebridge. Polebridge is in heart of grizzly nation. Our organization stands behind the Blackfeet Nation and 200 tribes who have said the grizzly is sacred and shouldn't be hunted. Thanks to FWP for showing restraint and prohibiting trophy hunt of grizzlies this year near YNP. Hopefully that prohibition will continue throughout MT indefinitely no matter what happens with delisting. The NCDE is heart of grizzly nation, so important that this population stays strong and increases and that they get a chance to move into other areas, towards YNP and Cabinet-Yaak, Selway, Bitterroots, and Cascades. This population needs to be so big that those bears can disperse because unless we have connection between the small populations we won't have genetically viable metapopulation. To us, this number isn't large enough to provide connectivity. Grizzly should have same status as bald eagles, delisted but never hunted. We have learned how to live with them in harmony, take care of attractants and garbage and we have very few conflicts. Don't understand why if there are 1047 bears right now, why would you propose a number less than that? Whatever the number is at the time of delisting, we shouldn't have less than that.

Sarah Lundstrum, National Parks Conservation Association in Whitefish: Thanks for the hearing and for us to have some input. Want to focus on objective 3, connectivity is important. Monitoring demographics and dispersal is not connectivity. We need a greater focus on connectivity. Delisting YNP and NCDE could cause problems for the other lower 48 bears. This population is going to be the source population for other places. The Conservation Strategy is a baseline, FWP can and should do better and be more creative and visionary on how they manage bears. Includes better and more conservative management in Zone 2 to have connectivity between GYE and NCDE. It could mean having demographic standards and thresholds for bears that are most likely to disperse. How do we allow younger bears to move into areas and can safely move between habitats. Commission needs to take a hard look at

how these demographic standards will affect the lower 48 as a whole, which is what Yellowstone ruling said, have to look at the whole population not just one distinct segment.

Ben Schaefer from Anaconda: (First asked about how many grizzly bear attacks there were in MT vs black bear attacks. Neil Anderson answered, did not know the number off the top of his head but certainly more grizzly attacks than black bear.) Why is the grizzly more important than a packrat? What's the difference? Not a whole lot, they both can cause damage, they're both cool, but people would pay thousands to hunt these remarkable animals, and we could then put this money towards paying for more research to FWP, the hunting license money goes to FWP and our game wardens. There are more grizzly attacks than black bear attacks and the reason is because grizzly bears don't fear men anymore. Our forests should be safe for everyone, people who don't hunt, everyone should have it safe to enjoy. They should be hunted and have the fear of man put back into them like the black bear, which run when you see them.

Audubon
FLATHEAD

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Kalispell, MT 59904-9173
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September 16, 2018
Grizzly Bear ARM – Wildlife Division
Department of Fish, Wildlife and Parks,
P.O. Box 200701
Helena, Montana, 59620-0701

Dear Department of Fish, Wildlife and Parks,

Flathead Audubon Society represents about 400 members from northwest Montana. Our mission is to conserve birds, wildlife habitat and ecosystem diversity; promote awareness and appreciation of the natural world through education and advocacy; work with diverse groups and agencies to achieve sound decisions on natural resource issues; provide community services such as school programs, work projects, and field trips.

We have reviewed the proposed NEW RULE I GRIZZLY BEAR DEMOGRAPHIC OBJECTIVES FOR THE NORTHERN CONTINENTAL DIVIDE ECOSYSTEM and submit the following comments.

We support adoption of the proposed rule. Adoption of the rule will formalize the Department's intent to manage for grizzly bears in a manner that will support an adequately sized, well distributed population over time. Adoption of the NCDE Grizzly Bear Conservation Strategy is included in the proposed rule (MAR Notice No. 12-505, pages 1641, 1642) and the Strategy is designed for long-term maintenance of the grizzly bear population.

Thank you for the opportunity to support this proposal.

Sincerely,

Kay L. Mitchell

Kay Mitchell, President
Flathead Audubon Society

Grizzly Demographic Objectives in the NCDE ARM 12-505
Written Comment

Name: David Walrod 406-531-0334
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E-mail: davidwalrod@bresnan.net

I am 100% For The Delisting of the Grizzly Bear And the Very Well Thought out Management Plans That THE Have Been set forth.

My Hope is Agencies don't Give up And Continue working Towards THE Goal of Delisting These Amazing Animals. We All Are Excited To See How Well THE Bears Are doing And The Expansion of their Ranges Into New areas where They Have Not Been Seen In Many years.

Managent of the Bears should/Must Include Limited And Controlled Hunting. People In Montana To Include Sportsman do NOT WANT To See Numbers of Bears Decline But Their Numbers Are Such That Limited Hunting Should Be Allowed. It's A Natural progression And A Cost effective & Warranted means of Keeping Numbers In check And Allowing Hunters A Once In A Lifetime opportunity.

It was sportsman, FWP departments, Sportsman groups And Taxes such As THE Robertson/Pitman Act That Has Made This Recovery Possible. It "HAS NOT" Been Animal Rights groups or folks Such As Them who Have Made this Recovery Possible. They Have Done Little To Nothing In terms of Dollars, Research or On THE Ground work That was Done To Get These Bears Back on The Landscape. Do Not Give up, Never Give up!

All comments must be received by 10/26/18 at 11:59 pm, and can be sent to:
Grizzly Bear ARM Comments – Wildlife Division,
PO Box 200701, Helena, MT 59620-0701
or emailed to FWPGRIZZLYBEARARM@mt.gov
Thank you for your comment.

Stephen V. Mayernik
128 Lone Spring Rd.
Stockett, MT 59480

10-15-18

RECEIVED
OCT 17 2018
FISH, WILDLIFE & PARKS
WILDLIFE DIVISION

MT Dept. FWP, Wildlife Division:

Re: Grizzly Bear ARM

The primary responibility of government is to protect its citizens. That includes from Grizzly Bears. The pioneers in our state spent many years making Montana a safe place. That safety is now threatened.

Have read an article which summarizes the ARM proposal. It seems reasonable. You have a Primary Conservation Area (Core Area) and buffer zones.

However two points need consideration:

1. Most likely - buffer zones will be too large and should be reduced in size - especially Zone 3 where there is already a serious threat to citizens from the Grizzlies.
2. Under no circumstances should any Grizzlies be tolerated outside of buffer zones. Any wandering outside of these zones must be removed by any means necessary. God forbid that someone's child shall be killed by these animals.

Sincerely;

Stephen V. Mayernik

As a rancher in Zone 1, I am accustomed to seeing grizzlies on a regular basis. Our ranch is situated on Birch Creek, about 20 miles east of Swift Dam, which provides acres of perfect habitat for bears and other wildlife.

I am encouraged by this proposed rule, specifically because it will not base population numbers on just one year, but a six year average. I am also happy to see that the population and mortalities will only be monitored in the PCA and Zone 1. Since our population of grizzlies is already much higher, (estimated at 1,000 bears in 2017 by FWP) I have no concerns about our numbers dropping any lower than 800. Considering the number of females with three and four cubs that have been sighted on the Rocky Mountain Front, I am confident that the grizzly population is thriving and will continue to do so.

I appreciate your transparency, and you traveling to Conrad to meet with the people actually affected by grizzlies, and more importantly, your decisions. I trust you will keep us all informed of important decisions coming in the future as well.

Thank you.

Trina Jo Bradley

Vice President, Marias River Livestock Association

October 25, 2018

Grizzly Bear ARM – Wildlife Division
Department of Fish, Wildlife and Parks
P.O. Box 20070
Helena, Montana, 59620-0701
FWPGRIZZLYBEARARM@mt.gov

RE: Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem

The Rocky Mountain Elk Foundation (RMEF) appreciates the opportunity to comment on the Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem (NCDE).

RMEF is a national nonprofit organization with more than 227,000 members (13,380 in Montana) and a mission to ensure the future of elk, other wildlife, their habitat and our hunting heritage. RMEF's members include hunters, ranchers, guides, outfitters, other business owners, wildlife enthusiasts and other conservationists who have both recreational and economic interests in hunting and enjoying elk.

Since its creation in 1984, RMEF has permanently protected and enhanced more than 7.4 million acres of North America's most vital habitat for elk and other wildlife, some of which overlaps with grizzly bear occupied territory. This work includes land acquisitions, exchanges, conservation easements and improving habitat quality through stewardship projects such as prescribed burns, thinning, weed treatments, planting native vegetation, removing old barbed-wire fence and installing wildlife-friendly fence.

RMEF has a long history of conservation work in the NCDE that has benefitted elk and other wildlife, including grizzlies. In the NCDE, RMEF and RMEF's partners helped permanently protect more than 42,000 acres of key wildlife habitat through conservation easements and fee land acquisitions valued at over $26 million. In addition, RMEF has directly contributed over $770,000 and leveraged an additional $3.4 million to help enhance wildlife habitat on over 85,000 acres in the NCDE. RMEF permanent land protection and habitat enhancement efforts have directly benefitted private, state, and federal (including U.S. Forest Service and Department of the Interior) lands within the NCDE. Grizzly bears have and will continue to benefit from RMEF's land protection and habitat enhancement efforts.

In addition, within the NCDE, RMEF has contributed over $315,000 to 31 wildlife management and wildlife research projects, with an additional $941,000 provided by RMEF partners. These wildlife management and scientific research projects have helped to contribute to the understanding of wildlife populations, ecology and habitat needs, including increasing understanding of grizzly bears.

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RMEF has long advocated for state management of grizzlies, which is in line with RMEF's support of the North American Model of Wildlife Conservation, under which state management of wildlife along with the financial contributions from hunters has dramatically increased wildlife populations across the United States in the last 100 years. This model, developed in response to decimation of wildlife populations in the mid-1800s due to market hunting and habitat loss, established hunters and anglers as the leaders in wildlife conservation in North America. Hunters and other recreational users of wildlife formed associations and organizations dedicated to the conservation of wildlife through habitat restoration, land protection, and the support of science-based management of wildlife for the benefit of citizens.[1]

In January of 2018 RMEF provided a letter in support of the U.S. Fish & Wildlife Service Grizzly Bear Recovery Plan, Draft Supplement: Habitat-based Recovery Criteria for the NCDE. Each of the three habitat-based criteria are associated with a stable to increasing grizzly bear population with specific values to be maintained – at or improved upon – baseline levels. RMEF supports the proposed Grizzly Bear Demographic Objectives for the NCDE, following the NCDE Grizzly Bear Conservation Strategy: a) maintain a well-distributed grizzly bear population within the demographic monitoring area; b) manage mortalities from all sources to support an estimated probability of at least 90% that the grizzly bear population within the demographic monitoring area remains above 800 bears, considering the uncertainty associated with all of the demographic parameters; and c) monitor demographic and genetic connectivity among populations.

RMEF recognizes and appreciates the collaborative efforts of federal and state agencies and the tribes in development of the NCDE Grizzly Bear Conservation Strategy which is intended to guide management of grizzly bears once they are delisted.

RMEF also recognizes Montana Fish, Wildlife and Park's commitment to maintaining recovered grizzly bear populations in the NCDE through this proposed action to ensure adequate regulatory mechanisms are in place for future management of grizzly bears.

RMEF supports the North American Model of Wildlife Conservation and state management of wildlife, which is an essential element of RMEF's strong history of habitat conservation and enhancement in Montana. RMEF continues to support and encourage the use of sound science to guide management actions, such as the Grizzly Bear Demographic Objectives for the NCDE, and appreciates the opportunity to formally provide such support.

Sincerely,

Blake L. Henning
Chief Conservation Officer

5705 Grant Creek Rd. | Missoula, MT 59808-8249 | (800) CALL ELK | WWW.RMEF.ORG

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[1] For a review of the North American Model, see the following three articles, attached to these comments:

Organ, J.F., V. Geist, S.P. Mahoney, S. Williams, P.R. Krausman, G.R. Batcheller, T.A. Decker, R. Carmichael, P. Nanjappa, R. Regan, R.A. Medellin, R. Cantu, R.E. McCabe, S. Craven, G.M. Vecellio, and D.J. Decker. 2012. *The North American Model of Wildlife Conservation*. The Wildlife Society Technical Review 12-04. The Wildlife Society, Bethesda, Maryland, USA.

Shane P. Mahoney & John J. Jackson III (2013): *Enshrining hunting as a foundation for conservation – the North American Model*, International Journal of Environmental Studies, 70:3, 448-459

John F. Organ, *Chapter 13: The North American Model of Wildlife Conservation and the Public Trust Doctrine*, in *North American Wildlife Policy and Law*, 125 (Bruce D. Leopold, Winifred B. Kessler & James L. Cummins, eds., Boone and Crockett Club 2018).

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The North American Model of Wildlife Conservation

Technical Review 12-04
December 2012

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The North American Model of Wildlife Conservation

The Wildlife Society and The Boone and Crockett Club

Technical Review 12-04 - December 2012

Citation

Organ, J.F., V. Geist, S.P. Mahoney, S. Williams, P.R. Krausman, G.R. Batcheller, T.A. Decker, R. Carmichael, P. Nanjappa, R. Regan, R.A. Medellin, R. Cantu, R.E. McCabe, S. Craven, G.M. Vecellio, and D.J. Decker. 2012. The North American Model of Wildlife Conservation. The Wildlife Society Technical Review 12-04. The Wildlife Society, Bethesda, Maryland, USA.

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Cover Images

Front cover, clockwise from upper left: 1) Canada lynx *(Lynx canadensis)* kittens removed from den for marking and data collection as part of a long-term research study. Credit: John F. Organ; 2) A mixed flock of ducks and geese fly from a wetland area. Credit: Steve Hillebrand/USFWS; 3) A researcher attaches a radio transmitter to a short-horned lizard *(Phrynosoma hernandesi)* in Colorado's Pawnee National Grassland. Credit: Laura Martin; 4) Rifle hunter Ron Jolly admires a mature white-tailed buck harvested by his wife on the family's farm in Alabama. Credit: Tes Randle Jolly; 5) Caribou running along a northern peninsula of Newfoundland are part of a herd compositional survey. Credit: John F. Organ; 6) Wildlife veterinarian Lisa Wolfe assesses a captive mule deer during studies of density dependence in Colorado. Credit: Ken Logan/ Colorado Division of Wildlife.

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*** The findings and conclusions in this article are those of the author and do not necessarily represent the views of the U.S. Fish and Wildlife Service.***

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Foreword

Weighing a fawn during studies of density dependence in Colorado. Courtesy of the Colorado Division of Wildlife.

Presidents of The Wildlife Society (TWS) occasionally appoint ad hoc committees to study and report on selected conservation issues. The reports ordinarily appear as technical reviews or position statements. Technical reviews present technical information and the views of the appointed committee members, but not necessarily the views of their employers.

This technical review focuses on the set of principles known as the North American Model of Wildlife Conservation and was developed in partnership with the Boone and Crockett Club. The review is copyrighted by TWS, but individuals are granted permission to make single copies for non-commercial purposes. All technical reviews and position statements are available in digital format at www.wildlife.org/. Hard copies may be requested or purchased from:

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Acknowledgments

Commissioners representing Canada, Mexico, and the United States at the 1909 North American Conservation Congress. President Theodore Roosevelt sits at center. Credit: Forest History Society.

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Executive Summary

Bison (Bison bison) in Yellowstone National Park. Credit: Jim Peaco, NPS.

The North American Model of Wildlife Conservation is a set of principles that, collectively applied, has led to the form, function, and successes of wildlife conservation and management in the United States and Canada. This technical review documents the history and development of these principles, and evaluates current and potential future challenges to their application. Describing the Model as North American is done in a conceptual, not a geographical, context. Wildlife conservation and management in Mexico developed at a different time and under different circumstances than in the U.S. and Canada. The latter two were hand in hand. The history, development, and status of wildlife conservation and management in Mexico are outlined separately as part of this review.

It is not the intent or purpose of this review to revise, modify, or otherwise alter what has heretofore been put forward as the Model. Indeed, the Model itself is not a monolith carved in stone; it is a means for us to understand, evaluate, and celebrate how conservation has been achieved in the U.S. and Canada, and to assess whether we are prepared to address challenges that lay ahead. Simply adding to, deleting, or modifying the existing principles will not in itself advance conservation. Understanding the evidentiary basis for the principles is essential to preventing their erosion, and necessary for the conceptual thinking required to anticipate future challenges. A brief summary of some of the challenges and concerns follows:

1. Wildlife resources are a public trust. Challenges include (1) inappropriate claims of ownership of wildlife; (2) unregulated commercial sale of live wildlife; (3) prohibitions or unreasonable restrictions on access to and use of wildlife; and (4) a value system endorsing an animal-rights doctrine and consequently antithetical to the premise of public ownership of wildlife.

2. Markets for game are eliminated. Commercial trade exists for reptiles, amphibians, and fish. In addition, some game species are actively traded. A robust market for access to wildlife occurring across the country exists in the form of leases, reserved permits, and shooting preserves.

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3. Allocation of wildlife is by law. Application and enforcement of laws to all taxa are inconsistent. Although state authority over the allocation of the take of resident game species is well defined, county, local, or housing-development ordinances may effectively supersede state authority. Decisions on land use, even on public lands, indirectly impact allocation of wildlife due to land use changes associated with land development.

4. Wildlife can be killed only for a legitimate purpose. Take of certain species of mammals, birds, reptiles, and amphibians does not correspond to traditionally accepted notions of legitimate use.

5. Wildlife is considered an international resource. Many positive agreements and cooperative efforts have been established among the U.S., Canada, Mexico, and other nations for conserving wildlife. Many more species need consideration. Restrictive permitting procedures, although designed to protect wildlife resources, inhibit trans-border collaborations. Construction of a wall to prevent illegal immigration from Mexico to the U.S. will have negative effects on trans-border wildlife movements and interactions.

6. Science is the proper tool to discharge wildlife policy. Wildlife management appears to be increasingly politicized. The rapid turnover rate of state agency directors, the makeup of boards and commissions, the organizational structure of some agencies, and examples of politics meddling in science have challenged the science foundation.

7. Democracy of hunting is standard. Reduction in, and access to, huntable lands compromise the principle of egalitarianism in hunting opportunity. Restrictive firearms legislation can act as a barrier hindering participation.

To help address these challenges, this review presents several recommendations. These are offered as actions deemed necessary to ensure relevancy of the Model in the future.

Trapping raccoons (Procyon lotor) in Missouri, biologist Dave Hamilton (now deceased) helped assess traps for the BMP program. Courtesy of Thomas Decker.

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Introduction

International trade in wildlife products came under greater scrutiny with the ratification of CITES by the U.S. in 1975. Credit: John and Karen Hollingsworth, USFWS.

Wildlife conservation varies worldwide in its form, function, and underlying principles. In recent years, efforts have been directed to describe the key attributes that collectively make wildlife conservation in North America unique. Although efforts to articulate wildlife conservation in North America have come of late, awareness among practitioners in the U.S and Canada that their wildlife conservation programs differed from others around the world has existed for decades. Describing these attributes or principles can serve many purposes: foster celebration of the profession's maturation and accomplishments; serve as an educational tool; and identify gaps, shortcomings, or areas in need of expansion to address contemporary or future challenges. The intent of this technical review is to contribute to all of these purposes.

A model is a description of a system that accounts for its key properties (Soukhanov 1988). The concept that wildlife conservation in North America could be described as a model was first articulated by Geist (Geist 1995, Geist et al. 2001), who coined the term "North American Model of Wildlife Conservation"

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(Model). Geist's direct knowledge of and familiarity with wildlife conservation programs of other nations provided a perspective on Canada and the U.S. The concept was further developed by Mahoney (2004). Today, the Model has become the basis for policies developed by the Association of Fish and Wildlife Agencies (Prukop and Regan 2005) and The Wildlife Society (The Wildlife Society 2007). It was the key underpinning for U.S. Executive Order 13443 that led to the White House Conference on North American Wildlife Policy (Mahoney et al. 2008, Sporting Conservation Council 2008*a*) and fostered the Recreational Hunting and Wildlife Conservation Plan (Sporting Conservation Council 2008*b*).

Seven components or principles describe the key properties of the Model (Geist et al. 2001, Organ et al. 2010):

1. Wildlife resources are a public trust.

2. Markets for game are eliminated.

3. Allocation of wildlife is by law.

4. Wildlife can be killed only for a legitimate purpose.

5. Wildlife is considered an international resource.

6. Science is the proper tool to discharge wildlife policy.

7. Democracy of hunting is standard.

These seven components formed the foundation for wildlife conservation in Canada and the U.S., but questions have arisen as to the validity of certain components in contemporary times and whether scrutiny of conservation programs would deem many of these operationally intact. Additionally, the question as to whether the Model is inclusive of all wildlife conservation interests or exclusively narrow in its application has been posed (Beuchler and Servheen 2008). To address these questions we describe and analyze each component in terms of its development, current status, threats and challenges, and differences and commonalities in application within Canada and the U.S. This information is then used to further define the Model.

Wildlife conservation in Canada and the U.S. developed under unique temporal and social circumstances, and the resulting Model reflects that. Had it formed in another time and under other circumstances it would likely be different. Use of the term "North American" to describe the Model is conceptual rather than geographic. Mexico's wildlife conservation movement began its development and evolution at a different time and under different circumstances. It is unrealistic to expect that movement to mirror those of the U.S. and Canada. A description of the evolution and current status of wildlife conservation in Mexico is provided in Appendix I. Further work is warranted to compare how different temporal and social circumstances have led to different conservation approaches, identify what can be learned from those comparisons, and what is needed to advance wildlife conservation within Canada, Mexico, and the U.S.

Peregrine falcons were protected in the United States under the 1973 Endangered Species Act. Recovery efforts succeeded in their restoration and removal from the federal Endangered Species List. Credit: Craig Koppie, USFWS.

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Historical Overview

The exploration of North America by the French and English was fundamentally motivated by the wealth of the continent's renewable natural resources and an unfettered opportunity by individuals to exploit them (Cowan 1995). Today, wildlife conservation in Canada and the U.S. reflects this historic citizen access to the land and its natural resources. Indeed, the sense that these resources *belong* to the citizenry drives the democratic engagement in the conservation process and is the *raison d'etre* of North America's unique approach (Krausman, P., Gold, silver, and souls, unpublished presentation at The Wildlife Society Annual Conference, 22 September 2009, Monterey, CA, USA).

Resource exploitation fueled the expansion of people across the continent and led to eventual disappearance of the frontier (Turner 1935). As elsewhere, the Industrial Revolution brought changes to North American society that altered the land and its wildlife. In 1820, 5 percent of Americans lived in cities; by 1860 20 percent were urban dwellers, a 4-fold increase that marks the greatest demographic shift ever to have occurred in America (Riess 1995). Markets for wildlife arose to feed these urban masses and festoon a new class of wealthy elites. Market hunters plied their trade first along coastal waters and interior forests. Then, with the advent of railways and refrigeration, they exploited bison *(Bison bison),* elk *(Cervus elaphus),* and other big game of western North America for transport back to cities in eastern North America. The market hunter left many once-abundant species teetering on the brink of extinction. Ironically, the sheer scale of this unmitigated exploitation was to have some influence on engendering a remarkable new phenomenon: protectionism and conservation (Mahoney 2007).

The increasing urban population, meanwhile, found themselves with something their countrymen on the farms did not have: leisure time. Hunting for the rigors and challenges of the chase under conditions of fair play became a favored pastime of many, particularly among those of means. This developed *in situ,* but there can be no doubt that European aristocratic perspectives toward hunting exerted some influence on these emerging trends (Herbert 1849). Threlfall (1995) noted that European commoners never ceased desiring to participate in the hunt, despite the best and brutal efforts of nobility to discourage them. In the U.S., conflicts soon arose between market hunters who profited on dead wildlife and this new breed of hunters who placed value on live wildlife and their sporting pursuit of it. These sport hunters organized and developed the first refuges for wildlife (Carroll's Island Club 1832, Gunpowder River in Maryland; Trefethen 1975) and laws to protect game (e.g., New York Sportsmen's Club 1844; Trefethen 1975).

Representative of these sport hunters was the highly influential George Bird Grinnell, a Yale-educated naturalist who accompanied George Armstrong Custer on his Black Hills expedition and who acquired the sporting journal *Forest and Stream* in 1879. Over the next 3 decades, Grinnell would turn *Forest and Stream* into a call for wildlife conservation (Reiger 1975). In 1885, he reviewed a book written by a fellow New Yorker about his hunting exploits in the Dakotas (Grinnell 1885). Grinnell's review was laudatory, but he criticized the author for some inaccuracies. The author, Theodore Roosevelt, went to meet Grinnell and the two realized that much had changed during the 10 years that divided their respective times in the West, and that big game animals had declined drastically. Their discussion inspired them to form the Boone and Crockett Club

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in 1887, an organization whose purpose would include to "take charge of all matters pertaining to the enactment and carrying out of game and fish laws" (Reiger 1975:234).

Roosevelt and Grinnell were also nation builders who felt America was a strong nation because, like Canada, its people had carved the country out of a wilderness frontier with self-reliance and pioneer skills. This harkened back to ideals regarding the impact of the frontier on shaping what it is to be an American; ideals articulated in the late 19th century by Turner (1935). Turner described the romantic notion of primitivism, for which the best antidote to the ills of an overly refined and civilized modern world was a return to a simpler, more primitive life (Cronon 1995). With no frontier and a growing urban populace, Roosevelt and Grinnell feared America would lose this edge. They believed Americans could cultivate pioneer skills and a sense of fair play through sport hunting, and thereby maintain the character of the nation (Cutright 1985, Miller 1992, Brands 1997). The Boone and Crockett Club had many influential members, and this was used to great effect in support of these ideals. Two of North America's most important and enduring conservation legacies were written by club members: the Lacey Act (Congressman John Lacey from Iowa, 1900) and the Migratory Bird Treaty Convention (Canadian Charles Gordon Hewitt, 1916). And, of course, President Theodore Roosevelt did more to conserve wildlife than any single individual in U.S. history through the institutionalization and popularization of conservation and by greatly expanding federal protected lands (Brinkley 2009).

Canada did not embrace the policies and practices of wildlife ownership and management as accepted in Great Britain, foremost among these being the tie of wildlife and hunting to landownership, and the sale of wildlife as a commodity in the marketplace. Even more remarkable is the fact that some of Canada's negotiators and movers who were instrumental in creating this new system of wildlife conservation were Englishmen, immigrants to Canada.

It appears that at the turn of the century, when both nations had become cognizant of wildlife's plight and grappled for solutions, like-minded elites arose on both sides of the border who knew and befriended each other, learned from each other's successes and

Early settlers killed wolves and other predators with abandon, blaming them for declines in game populations. Courtesy of Thomas J. Ryder.

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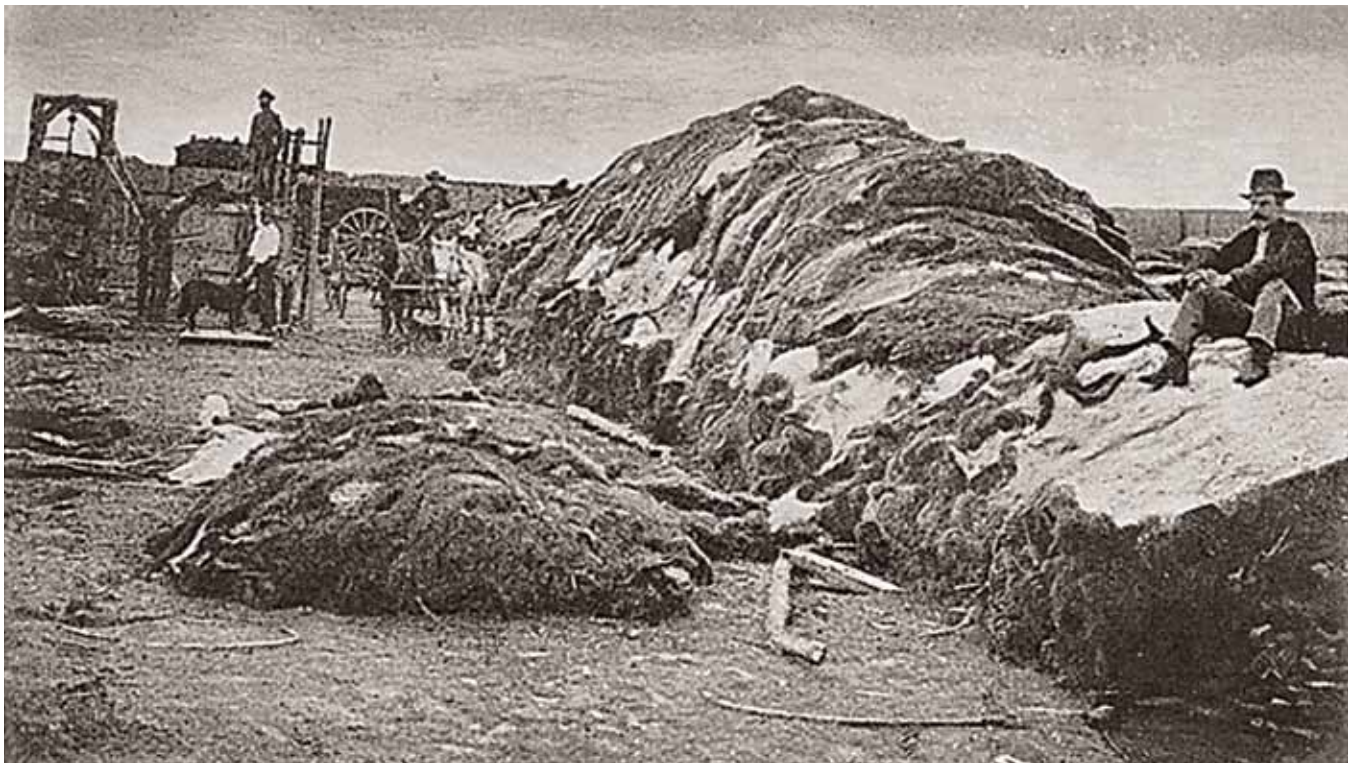

Some 40,000 bison pelts in Dodge City, Kansas await shipment to the East Coast in 1878—evidence of the rampant exploitation of the species. The end of market hunting and continuing conservation efforts have given bison a new foothold across parts of their historic range, including Yellowstone National Park. Courtesy of National Archives.

failures, and acted on them with insight and resolve. The Canadian effort revolved around the Commission on Conservation, which was constituted under The Conservation Act of 1909. The Commission was chaired until 1918 by Sir Clifford Sifton and consisted of 18 members and 12 ex-officio members (Geist 2000).

By the early 20th century, considerable wildlife conservation infrastructure was in place, but by the 1920s it was clear that the system's emphasis on restrictive game laws was insufficient in itself to stem wildlife's decline. Aldo Leopold, A. Willis Robertson, and other conservationists published an American Game Policy in 1930 (Leopold 1930) that proposed a program of restoration to augment conservation's legal framework. They called for a wildlife management profession with trained biologists, stable, equitable funding to enable their work and university programs to train them. Within 10 years much of what the policy called for had been realized, with the first game management curricula established at the University of Michigan and the University of Wisconsin and the creation of Cooperative Wildlife Research Units, the formation of The Wildlife Society, and the passage of the Pittman-Robertson Wildlife Restoration and Duck Stamp Acts. These accomplishments were all initially founded in the U.S. but many were endorsed and mirrored by various Canadian policies and programs.

Subsequent decades brought expanded legislation (e.g., U.S. Endangered Species Act, Canadian Species at Risk Act) and programs (e.g., Migratory Bird Joint Ventures, Teaming With Wildlife), but their principles had been set firmly in place. These principles arose amidst social and environmental circumstances that were unique to the world in their temporal juxtaposition.

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Implementation in Canada and the United States

Canada

Governance.— Responsibility for wildlife conservation is assigned by the Canadian Constitution and is shared between the provinces or territories and the federal government. Variations on almost all of the following occur in many parts of Canada, but the general situation is described below.

Provincial and territorial authority is detailed in the sub-federal jurisdictions' acts and laws respecting wildlife. Any authority not specified is considered "residual" and falls to the federal government, which is also responsible for wildlife on designated federal lands (i.e., national parks), all migratory wildlife that crosses international boundaries, marine mammals, and, in some instances, where the range or migration of a species occurs in 2 or more provinces or territories. The federal Species at Risk Act (2002) may have application where provincial or territorial measures to protect endangered and threatened wildlife are considered insufficient. The Act authorizes designation of threatened species and identification of measures to recover them. Exceptions and variations to the foregoing exist across Canada – specially in Quebec (civil code derived from French law) and the territories of Nunavut, Northwest Territories, and Yukon (territorial jurisdiction is more limited than is provincial in some matters) – but the basic model is that migratory, marine, and other federal trust species fall to the federal government, and everything else is within the purview of the provinces and territories. Federal, provincial, and territorial governments have established public wildlife agencies (e.g., the federal Canadian Wildlife Service) to devise and implement conservation programs. Tacitly or explicitly, the fundamental tenets of the Model are accepted and practiced in Canada.

Treaty Indians have jurisdiction over all animals on their Indian Reserves, except where endangered species legislation may be applied, and many aboriginal communities do not accept the legitimacy of any outside authority. In regards to aboriginal communities, courts in Canada are still defining matters of governance. Rights of access to wildlife by aboriginal people (i.e., they are allowed to take wildlife at any time on land to which they have right of access) was confirmed in the Constitution Act of 1982. These rights may be abrogated by government only after extensive consultation, and only for purposes of sustaining wildlife populations. A restriction on access to wildlife on aboriginal lands applies automatically to all Canadians.

Systematic consultation among federal, provincial, territorial, and, more recently, aboriginal authorities is extensive. Complexities of Canadian law and tradition have made apparent to wildlife managers that effective conservation programming requires close consultation among all jurisdictions. For decades, the annual Federal-Provincial Wildlife Conference was a fixture in Canada; it now has evolved into a structured contact among the jurisdictions through regular meetings of provincial, territorial, and federal wildlife-resource directors employed by public wildlife agencies. Other groups such as the Committee On the Status of Endangered Wildlife In Canada (COSEWIC) also operate on a foundation of inter-jurisdictional consultation and cooperation. In general, the goal of such groups is to agree on basic policy and program initiatives,

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but leave implementation to the legal authority, where it can be done in keeping with widely varying circumstances across Canada.

Canada is signatory to several international treaties and conventions, including the Migratory Bird Treaty with the U.S. and Mexico, its derivative North American Waterfowl Management Plan, the Convention on International Trade in Endangered Species of Fauna and Flora (CITES), and the Ramsar Convention on Wetlands (RAMSAR) – the international treaty for maintaining wetlands of international importance.

Management authority over wildlife is public. Although laws differ widely among jurisdictions with respect to captive animals, the basic principle is that wildlife is a public trust, and no private ownership is allowed. Landowners may be given special access privileges in recognition of their role in sustaining populations of certain species, but only in accordance with public law. Private conservation organizations have a vital role in conservation and work closely with public agencies. There are advisory boards in some provinces and territories, but public stewardship prevails. The governance model for wildlife conservation decision making is typically at the (elected) ministerial level. Boards and commissions do not have the significant role in Canada that they do in the U.S. Canada's political structure is based on the British parliamentary system, which affords less direct participation in public affairs than does the American congressional system.

Funding.— As mentioned above, Canada is governed under (its derivative of) the British parliamentary system, of which a fundamental aspect is the general revenue system of public finance, meaning no dedicated funds. All tax revenues, regardless of source, go into a central account and are then allocated by government according to its priorities. Canadian political tradition is that representatives are not elected to carry out the will of the people, but to exercise their good judgment on behalf of the people as to how tax money should be allocated. The peoples' will is expressed at election time. The rule of thumb is, for example, a gasoline tax or any portion thereof does not go to highway infrastructure. Instead, the government will decide how much goes to highways and what goes elsewhere, according to its priorities.

With regard to wildlife, the general revenue system explains why wildlife agencies in the U.S. are, overall, far better staffed and funded than are their Canadian counterparts. Canadian public agencies depend on general revenue tax dollars for their basic operations. Canada has no equivalent to the Pittman-Robertson Wildlife Restoration Program, and no dedicated sales tax. The Canadian funding mechanism also explains why research has all but disappeared from provincial and territorial agencies. Compounding this systemic reality is competition for public funds in Canada at all levels of government. Wildlife therefore must compete directly with health, education, and social services for funds on an annual basis. The result is that wildlife does not, in almost all circumstances, receive what its proponents and managers believe is its due. Usually, there is no provision for carrying over unspent funds from one fiscal year to the next, which tightens finances even further.

Recently, provincial governments are beginning to understand that many wildlife programs (i.e., hunting) generate significant dollars for the public purse. However, those dollars cannot be sustained with wildlife management funded under general revenue financing. Fortunately, certain old rules are gradually being relaxed, and dedicated funds are appearing in some provinces. The future for wildlife management will very much depend on how quickly and effectively the need for a new funding basis is communicated to governments.

At present, investment by non-governmental organizations, federal, provincial, and territorial cost-sharing agreements, and leveraged funds from outside Canada are critical to conservation

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programming in nearly all parts of the country. For example, revenues from the U.S. play a large role in Canadian waterfowl management. Provincial and territorial hunting programs usually depend on general revenues to a much higher degree than do endangered wildlife or habitat programs.

Scope.— What wildlife is and who manages it depends on which part of Canada is considered. Wildlife managed by a Wildlife Branch in one province or territory may not be considered wildlife in another, similar to different classifications of wildlife in different states in the U.S. There is general accord, however, on some major groups of species: ungulates, waterfowl, most furbearers, and birds are wildlife and the responsibility of professional wildlife managers everywhere. Wildlife legislation has, overall, become much more inclusive of late, and now commonly includes amphibians, reptiles, plants, and, in some instances, invertebrates. The structure, purview, and emphasis of provincial and territorial agencies vary significantly.

Defining which taxa constitute wildlife is essentially up to each province or territory. There is no over-arching federal legislation in this regard, although the federal government does make specific reference to species under its jurisdiction. Species defined as wildlife in the provinces and territories are accorded protection under legislation that differs in scope and type of application.

Wildlife agencies are the sole managers of problem wildlife in some provinces, while sharing or not having this responsibility in others. Always prefaced with the qualifier "generally," ungulates or waterfowl cannot be killed in defense of property; furbearers such as beaver *(Castor canadensis)* or predatory species that take livestock, including gray wolves *(Canis lupus),* can be. Species such as ground squirrels *(Spermophilus sp.),* pigeons *(Columba livia),* and English sparrows (*Passer domesticus)* are normally not given any protection under provincial or territorial legislation.

Some provinces and territories have outright prohibitions on holding species defined as wildlife in captivity, whereas others allow it for specific purposes, such as elk ranching or roadside zoos. In some provinces, a species is considered wildlife if not confined, and not wildlife if it is legally held. Responsibility for captive wildlife may be vested within a wildlife agency or other division of government such as agriculture.

United States

Governance.— Governance over wildlife management in the U.S. is divided between the federal government and individual states. The Public Trust Doctrine established the states as trustees of wildlife (Batcheller et al. 2010) except where the Constitution provided for federal oversight (Bean 1983). Three clauses of the Constitution provide for federal oversight: the Commerce Clause, Property Clause, and Supremacy Clause (federal treaty-making power). At the federal level, responsibilities for wildlife are assigned to agencies within the Departments of the Interior (Fish and Wildlife Service, Bureau of Land Management, National Park Service, Bureau of Reclamation, Bureau of Indian Affairs, Geological Survey), Agriculture (Forest Service, Animal and Plant Health Inspection Service, Natural Resource Conservation Service), Commerce (National Marine Fisheries Service for certain marine mammals), Environmental Protection Agency, and Department of Defense.

Within states, 2 governance models predominate: boards or commissions that make policy decisions and oversee an agency, and political appointees that make policy decisions and oversee an agency. Both models are products of representative democracy (Jacobson and Decker 2008). Representative democracy is the appointment or election of individuals responsible for making decisions that ostensibly fulfill public trust mandates.

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Dead bison. Credit: Wisconsin Historical Society.

Funding.— Fish and wildlife conservation funding in the U.S., at least at the state level, typically is characterized as a user-pay, user-benefit model. From the earliest days of active management and enforcement by nascent state fish and wildlife agencies, hunters, anglers, and trappers have funded restoration and conservation initiatives. License and permit fees, a motor boat fuels tax, and excise taxes on hunting, shooting sports, and angling products provide dedicated funding for habitat conservation, harvest management, research, restoration, and monitoring initiatives by state agencies. The excise tax programs have permanent, indefinite appropriation status, which means that the revenues are automatically distributed to the states each year and not subject to congressional whim.

To this day, the combination of sportsmen-derived funds described above comprise between 60 and 90 percent of the typical state fish and wildlife agency budget (U.S. Fish and Wildlife Service, unpublished data). In addition, sportsmen and women also donate volunteer time and dollars to national, regional, and local conservation organizations (e.g., Ducks Unlimited, National Wildlife Turkey Federation, Pheasants Forever, Rocky Mountain Elk Foundation, Quail Unlimited, Ruffed Grouse Society, The Nature Conservancy), in effect multiplying the conservation power of the agencies. Clearly the success of the Model is in no small measure indebted to hunter- and angler-conservationists and visionary industry leaders.

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For more than 2 decades, state fish and wildlife agencies have recognized the need for broader programs in light of new mandates, new threats, enhanced management attention to non-harvested species, and new constituent demands (e.g., bird watchers). Indeed, with the strong support of state fish and wildlife directors, the Association of Fish and Wildlife Agencies initiated the Teaming With Wildlife Program to focus action on securing new funding for wildlife diversity. At the national level, concerted attention has been given to developing a new excise tax on birding, hiking, camping, and other recreational equipment, one that would build off the success of the same tax for hunting, shooting sports, and angling equipment. This has yet to bear fruit, however, given the strong political opposition to new taxes, and potentially because the broader public may lack the vested interest that sportsmen and women have demonstrated in supporting user fees.

More recently, dedicated funding efforts have focused on royalties from energy development and carbon credits from climate change legislation as ways to fund wildlife adaptation programs. Even though dedicated funding has proved elusive, since 2000 the U.S. Fish and Wildlife Service – with congressional authorization – has implemented the State Wildlife Grants program, which has provided more than $600 million to state fish and wildlife agencies for species of greatest conservation need. At the state level, direct appropriations from the general fund, sales tax and lottery allocations, voluntary contributions via income-tax check-offs, and special license plates have been used to fund new programs by state fish and wildlife agencies.

Funding at the federal level is determined annually through the appropriations process and embedded in legislation such as the Farm Bill and the Interior Appropriations Act. The Land and Water Conservation Fund is an important source of revenue for federal national wildlife refuge land acquisition. Dedicated funding from the sale of federal Migratory Bird Hunting and Conservation Stamps also supports national wildlife refuge acquisitions.

As noted elsewhere, all wildlife species are public trust resources. The Model has thrived in large part because of the support of the hunting, angling, shooting sports, and boating communities, and industries for habitat and species management and conservation. Long-term declines in both hunter and angler participation place into question the sustainability of such a funding approach and beg the need for new funding to address new challenges. A few state fish and wildlife agencies, most notably Missouri and Arkansas, have successfully secured alternate funding to augment traditional sources (Jacobson et al. 2010a). Jacobson et al. (2010b) reflect on the difficult and all-too-real challenges facing fish and wildlife agencies in the midst of stable-to-declining traditional revenues such as hunter and angler license dollars.

Scope.— Wildlife conservation in the U.S. is broad, encompassing most terrestrial, aquatic, and marine vertebrates and invertebrates, and plants. The degree to which a given taxa receives conservation attention depends upon its legal status (e.g., furbearer, game, special concern, nongame, threatened, or endangered), whose jurisdiction it is under (i.e., federal trust species or state), the availability of funding, and its relative priority (e.g., species of greatest conservation need identified in a State Wildlife Action Plan).

Wood turtles and other reptile species are receiving increased management and protection in the U.S. with funding from the federal State Wildlife Grant Program, but international trade in turtles remains a threat to sustainability of their populations. Credit: John F. Organ.

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Review of Model Components

1. Wildlife Resources Are a Public Trust

The keystone component of the Model is the concept that wildlife is owned by no one and is held in trust for the benefit of present and future generations by government (Geist and Organ 2004). This is the legal foundation for federal, provincial, and state wildlife agencies. The common law basis in the U.S. is the Public Trust Doctrine, a Supreme Court decision in 1842 that declared certain resources could not be taken into private ownership (Martin v. Waddell; Batcheller et al. 2010).

Historical Development.— The U.S. Supreme Court ruling in 1842 denied a landowner's claim to exclude all others from taking oysters from certain mudflats in New Jersey (Martin v. Waddell; Bean 1983, Organ and Batcheller 2009). Chief Justice Roger Taney, in determining that the lands under navigable waters were held as a public trust, based the decision on his interpretation of the Magna Carta. The Magna Carta, in turn, had drawn upon Roman law that was first written as the Institutes of Justinian (A.D. 529; Adams 1993). The written codes of Justinian were based upon the 2nd century Institutes and Journal of Gaius, who codified the natural law of Greek philosophers (Slade et al.1977). The application of this fundamental concept of the public trust to natural resources, first written for posterity by the Romans, is as old as civilization itself. What the Romans recorded was, in part:

"By the law of nature these things are common to all mankind - the air, running water, the sea, and consequently the shore of the sea. No one, therefore, is forbidden to approach the seashore, provided that he respects habitations, monuments, and the buildings, which are not, like the sea, subject only to the law of nations." (Roman Law)

The roots of the Public Trust Doctrine in Roman law are complex. Joseph Sax, the pre-eminent scholar of the Public Trust Doctrine, traced these roots so that we may better understand the modern context (Sax 1970, 1999). The Romans had an elaborate property system that recognized different kinds of property serving different functions. Certain property belonged to the gods, certain property belonged to the state, and certain property belonged to individuals. Each of these kinds of property had a special status and had to be treated in a certain way. For example, the property might not be capable of being bought and sold. Other kinds of property included common property *(res communis).* Common property (1) could not be privately owned, and (2) was for common use by everyone. Roman law included wildlife *(ferae naturae)* within the law of things owned by no one *(res nullius).* These categories were probably for what the Romans perceived to be the nature of things that were abundant and not appropriate for private possession and sale (Horner 2000). Ownership of a wild animal occurred only when it was physically possessed, most typically when killed for food.

Roman civil law was adopted in substance by the English after the Magna Carta (A.D. 1215; Slade et al. 1977). English common law also recognized special kinds of property, but provided its own context. English common law disliked ownerless things, so the ownership of public resources was placed in the king (Horner 2000). These properties were owned by the king, but not for his private use. The king was a trustee, owning certain properties for someone else, which became a special responsibility (Sax 1999).

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English law applied in the American colonies, yet after independence and the formation of the U.S., there was no king to be the trustee. It was not until 1842 and the Supreme Court decision in Martin v. Waddell that trustee status was ascribed to the states. To understand how the ancient concept of public trust and the modern Public Trust Doctrine – neither one specific to wildlife – have both become a pillar of wildlife conservation, we must look at their legal essence.

Public Trust as Law.— Sax (1999) identified 4 fundamental concepts of public trust:

1. Public trust is common law. There is no legal code specific to the Public Trust Doctrine because it has never been officially enacted. It is "judge-made law" that is interpreted and evolves through court decisions. For the last century or so, most of our laws have been statutory coded laws, but for most of the development of the Anglo-American legal system, common law prevailed.

2. Public trust is state law. As such, there is no single law but many. Yet each embodies a unifying principle of the fundamental rights of all citizens.

3. Public trust is property law. One of the great strengths of the Public Trust Doctrine is that in asserting it, the state is asserting its own property rights - property rights that belong to the public - so the issue of "taking" becomes moot as one cannot be taking a property right from another while asserting such right.

4. Public trust is a public right. Trust property is owned by the public and held in trust for the benefit of the public. One does not have to have special status to make a claim but only must be a member of the public.

Because the Public Trust Doctrine is common law, and judge-made, it can never be repealed by a legislature. The traditional applications of public rights under the Public Trust Doctrine were for navigation, fishing, and commerce. The New England states of Massachusetts, Maine, and New Hampshire added fowling as a right. It was not until 1896 that wildlife became firmly established in law as a public trust resource of the states. Geer v. Connecticut became judge-made law that is the "heart and soul of the modern day public trust in wildlife" (Horner 2000:21). While transforming this principle into modern American law, and making the concept of wildlife as public trust resources distinctly American, the court stated:

"Whilst the fundamental principles upon which the common property in game rests have undergone no change, the development of free institutions has lead [sic] to the recognition of the fact that the power or control lodged in the State, resulting from the common ownership, is to be exercised, like all other powers of government, as a trust for the benefit of all people, and not as a prerogative for the advantage of the government, as distinct from the people, or for the benefit of private individuals as distinguished from the public" (161 U.S. 519, 1896).

The trustee status of states in regard to wildlife is transferred to the federal government in the U.S. when wildlife falls within parameters of the U.S. Constitution's Supremacy Clause (federal treaty-making power), Commerce Clause, and Property Clause. Chief Justice Taney, in articulating the Public Trust Doctrine in Martin v. Waddell in 1842 acknowledged this when he wrote that the powers assumed by the states were "subject only to the rights since surrendered by the Constitution to the general government" (41 U.S. 367 1842).

Current Status, Threats, and Challenges.— A review of the Public Trust Doctrine was completed recently, including an evaluation of current and anticipated threats that may weaken this pivotal doctrine (Batcheller et al. 2010). Several threats have been identified that directly or indirectly undermine existing state, provincial, and federal laws (Geist and

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Organ 2004). These threats include (1) inappropriate claims of ownership of wildlife; (2) unregulated commercial sale of live wildlife; (3) prohibitions or unreasonable restrictions on access to and use of wildlife; (4) and a value system endorsing an animal-rights doctrine and consequently antithetical to the premise of public ownership of wildlife (Organ and Mahoney 2007, Organ and Batcheller 2009).

In many jurisdictions, domesticated native or exotic animals with recently descended from wild stock may be owned. Typical uses of these animals include game farms and more traditional farms to produce meat from "wild" animals. Some game farms practice genetic husbandry to produce trophy class antlers or horns; others provide shooting opportunities in enclosed and fenced natural or semi-natural settings. The legal status of animals held in captivity under these conditions is equivocal. At its core, the key question is: do wild animals held in captivity, including fenced enclosures, remain as trust resources or are they private property? Is there a distinction between the status of a wild animal held within a fence (e.g., a wild ungulate jumping into an enclosure and then held in pseudo-captivity), and an animal deliberately housed within an enclosure and husbanded via traditional livestock practices? Although these are central issues germane to the Public Trust Doctrine, they have not been widely addressed in case law, thereby raising great uncertainty about its application to these situations. Moreover, commercialization places a monetary value on wildlife or wildlife parts and a concomitant incentive for their use, which threatens the premise of public ownership of wildlife.

From our history, we know that some forms of commercial use of wildlife are unsustainable, especially in the absence of strong legal and regulatory controls on harvest and marketing. However, in most jurisdictions some commercialization of wildlife is permissible under highly regulated legal regimes. For example, trapping is an important wildlife conservation tool and a legitimate use of renewable wildlife resources, but only under a system of strict controls to limit harvest and to provide for legal commerce. The regulation of commercial furbearer harvest is generally mature, but other forms of wildlife commercialization are poorly regulated, and some evidence suggests that the commercialization of taxa such as amphibians and reptiles may be harmful to native, wild populations. If the Public Trust Doctrine is to be fully applied to all wild fauna, these loopholes in the control of commercial use of reptiles and other taxa would need to be closed. An all-taxa approach to wildlife management would help ensure that all species receive benefits associated with public valuation and public ownership.

A central premise of the Public Trust Doctrine is access to wildlife, yet there is growing evidence that the public has a more difficult time finding places to hunt or trap on private land, and even in gaining easy access to public lands (Responsive Management/ National Shooting Sports Foundation 2008). In some instances, high fees are charged to gain access to private lands, or to use convenient private points of access to public lands. Many public wildlife agencies charge high fees for limited permits to hunt certain big game species. However, a large number of people cannot afford to pay high user fees (Duda et al. 1998). They may stop hunting if they are unable to find a place to hunt, cannot afford the fees, or are discouraged by crowding on public lands (Responsive Management and National Shooting Sports Foundation 2008). Worse, in some states, certain guides use baiting as a means of attracting game from public lands to private lands, where they are shot under an exclusive (and expensive) arrangement with the client. In a manner similar to fencing, these practices jeopardize another tenet, the "democracy of hunting," and significantly weaken the social benefits associated with the Public Trust Doctrine (Dunkley and Cattet 2003, Ermer et al. 2005).

The foundational notion of public ownership implies that society values wildlife and, by implication, understands the premise of wildness. The growth of certain wildlife populations and

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the associated human conflicts stemming from interactions between people and animals may lead to a devaluation of wildlife and wild places. For example, when coyotes *(Canis latrans)* attacked 2 small children in a suburban New York community, tolerance of coyotes diminished among community residents, with 9 out of 10 residents expressing concern about coyotes in their community (Siemer and Decker 2011). If those citizens learn that open and green spaces attracted coyotes in the first place, will they retain their value of wild places and creatures, or will they gravitate toward a devaluation of green spaces altogether? Similarly, the widely discussed notion of nature deficit disorder (Louv 2008) suggests that citizens may be growing increasingly ambivalent toward nature. If that is true, why should they care about maintaining wildlife in perpetual public trust? Finally, persons who accept an animal-rights world view categorically reject the concept of ownership of animals, rendering the central legal principles of the Public Trust Doctrine irrelevant. Strong leadership and concerted efforts on the part of wildlife professionals will be required to make the case that wild places are important, and that wildlife needs to be protected for one and all, as posited by the Public Trust Doctrine.

Batcheller et al. (2010) evaluated the status of the Public Trust Doctrine in the U.S. and Canada. In the U.S., the Public Trust Doctrine in its traditional form is strongly based in statutory and case law, especially as applied to navigable waterways. Recently, the Public Trust Doctrine has been applied to broader applications in case and statutory law, and specifically to other natural resources including wildlife. However, relatively few states have specific case law that clearly recognizes wildlife as a public trust resource. Many states, on the other hand, use either explicit or implicit statutory language to confer public trust status to wildlife resources. Batcheller et al. (2010:22) concluded that "bringing wildlife into the Public Trust Doctrine through statutory measures appears to be the best way to accomplish the goal of extending the Public Trust Doctrine in this area." To this end, statutory language that clearly puts wildlife in public ownership is necessary. In Canada, about one-half of the provinces and territories have language on the public ownership of wildlife in their statutes, but Canada's wildlife conservation institutions also would benefit from a comprehensive strengthening of the Public Trust Doctrine.

Canada, although following Great Britain in modeling much of its legal system, opted for the same basic policies governing wildlife as did the U.S. In Great Britain, wildlife became *de facto* private property of landowners (Threlfall 1995). An account of this effort to protect Canada's wildlife in cooperation with the U.S. was discussed by Hewitt (1921), including the establishment of wildlife treaties between the 2 countries. Historically, wildlife became a public resource in part by default because the Crown was the ward of huge tracts of land not claimed for settlement and was thus the de facto owner of the wildlife it contained. Moreover, as wildlife fed native populations, Canada's government had little choice but to safeguard that food supply.

Batcheller et al. (2010) provided model statutory language that would give an unequivocal legal underpinning to sustain the Public Trust Doctrine vis-á-vis wildlife conservation indefinitely.

2. Markets for Game Are Eliminated

The unregulated trafficking in meat, hides, and other parts of game animals and nongame birds in the 19th century led to drastic and, in some instances, catastrophic declines in populations. Elimination of markets for game animals and nongame birds was an essential step in halting declines of these particular species. It has since been held in principle that markets for game and nongame wildlife are unacceptable because they privatize a common resource and lead to declines. Exceptions have been made for furbearers because there is an active market in Canada and the U.S. for furbearer pelts and in some instances meat

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(e.g., muskrat *[Ondatra zibethicus]* and raccoon *[Procyon lotor]).* The underlying premise for fur markets is that they are highly regulated and serve a conservation purpose because harvests are within normal population fluctuation levels consistent with sustainable-use principles, help manage conflicts between furbearers and humans, and foster support for habitat conservation (Boggess et al. 1990, Geist et al. 2001, Prescott-Allen and Prescott-Allen 1996). Markets for taxa other than game, nongame birds, and furbearers exist in North America, but regulations and enforcement vary, and impacts on populations are not well understood.

Historical Development.— The first concerted efforts to eliminate markets for game animals were those of the New York Sportsmen's Club, formed in 1844 (Trefethen 1975) with objectives confined to protection and preservation of game, and funds appropriated solely for those purposes. The club's membership included many influential lawyers, judges, and politicians, who often acted in their official positions on behalf of the club. At a time when there was limited or no government oversight on wildlife, they drafted, led efforts to enact, and enforced the first game laws directed against market hunting. These laws were local to New York City, but because of the market that locale provided, the impact was notable.

The Boone and Crockett Club was responsible for important legislation at the state and federal levels. Co-founder George Bird Grinnell used his weekly journal *Forest and Stream* to communicate the need for elimination of game markets (e.g., Grinnell 1894). Club member Congressman John Lacey of Iowa sponsored the Yellowstone Park Protection Act which passed in 1894, becoming the first federal law to protect game from market hunting (Trefethen 1975). The Lacey Act of 1900 effectively made market hunting illegal nationwide and remains the most powerful legal tool to combat this activity. The Migratory Bird Treaty of 1916 between the U.S. and Canada, and subsequently many other nations including Mexico and Japan, provided the constitutional grounding for the Migratory Bird Treaty Act of 1918 and extended international protection for bird species from the market. The U.S. Endangered Species Act of 1973 and the Canadian Species at Risk Act of 2002 extended protection from the market to a multitude of other species.

Current Status, Threats, and Challenges.— Commercial trade for reptiles, amphibians, and fish is thriving (Nanjappa and Conrad 2011). In addition, some game species that we would expect to fall under the principles of the Model are actively traded. Deer *(Odocoileus* spp.*),* elk, ring-necked pheasants *(Phasianus colchicus),* quail, chukar *(Alectoris chukar),* and more exotic wildlife species are commonly bought and sold (Freese and Trauger 2000). Related to wildlife markets are contests and tournaments common in rural areas of the country. Big buck contests, coyote hunts, crow (*Corvus* spp.) hunts, and numerous other commercial contests imply a market-based hunting situation. The sale of furbearers, seal (Phocidae) fur, antlers, reproduced antlers, and a variety of other wildlife parts needs to be considered in light of the principle that markets for wildlife are eliminated. A robust market for access to wildlife occurring across the U.S. and Canada exists in the form of leases, reserved permits, and shooting preserves.

In contrast to hunting contests and tournaments, where a hunting (or fishing) license is required, markets for trade in amphibians, turtles, and reptiles are not consistently regulated (Nanjappa and Conrad 2011). Markets for pets, both native to North America and from international sources, are relatively open (Niraj et al. 2012). In addition, amphibians and turtles, in particular, are traded for meat. Freshwater turtles are declining sharply (Turtle Conservation Foundation 2010, International Union for Conservation of Nature 2009), primarily because of demands from Asian food markets. However, turtle harvests have been difficult to track because regulations are not widespread, and reporting requirements vary across states.

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3. Allocation of Wildlife Is by Law

Access to wildlife has been an inherent part of the North American experience, unlike many other nations where access is reserved for those with special privilege (e.g., aristocracy; Manning 1993). Wildlife is allocated to the public by law, as opposed to market principles, land ownership, or other status. Democratic processes and public input into law-making help ensure access is equitable.

Historical Development.— The seemingly unlimited resources of the New World were used to attract colonists from the Old World with prospects of pelts, hides, and feathers for trade and food for survival. These images mitigated the harsh reality of eking out an existence in the unforgiving wilds of North America. It was not long before the colonies began to enact regulations specific to wildlife. The first regulations on record focused on protection of livestock, essential to the survival and livelihood of settlers. In 1630 the General Court of the Massachusetts Bay Colony passed an act offering a reward to anyone who killed a wolf. In 1632 Virginia established a bounty on wolves (Trefethen 1975).

In a relatively short time game animals started to become scarce and protective regulations were warranted. In 1646, Portsmouth, Rhode Island, closed the white-tailed deer *(Odocoileus virginianus)* season from May 1 to November 1 and established a penalty of 5 pounds for hunting out-of-season. Connecticut adopted a law that stated that the killing of deer at unseasonable times of the year would be against the interests of the colony because it would result in decreased production (Trefethen 1975). In 1705, the General Assembly at Newport, Rhode Island, noted that large numbers of deer had been killed out of season, and deemed this detrimental to the future of the colony, and indeed the whole country if not prevented.

Alarming decreases in numbers of deer prompted the General Court of Massachusetts in 1739 to step up enforcement of the deer-season law it enacted in 1698. Each town was instructed to appoint 2 "deer reeves" to enforce the closed season. The fine for a conviction was 10 pounds, probably $1,000 today, with one-half the fine going to the deer reeve as his fee. Azariah Seldon of Hadley, Massachusetts, was convicted in 1763 of killing a deer out of season and assessed the full fine of 10 pounds. Another individual, unable to raise the fine, was put on the auction block and sold to the highest bidder for 2 months of forced labor. These laws and their enforcement probably served as a deterrent, but the continued habitat destruction and long open season with no bag limit took their toll. By the time of the American Revolution, many towns in the colonies abandoned the deer reeve office because there were so few deer to protect. Nevertheless, these laws and regulations reflected the thinking of the time, highlighted the need to preserve a food supply, and established a mechanism for protecting wildlife.

The efforts of the New York Sportsmen's Club and Boone and Crockett Club in development of game laws in the 19th century to address market hunting have been noted earlier. In 1897, the New York State Assembly passed the Adirondack Deer Law (sponsored by assemblymen who were Boone and Crockett Club members) that outlawed jacklighting deer at night and shooting deer after using hounds to drive them into deep water. Most notable about this law was that shooting deer in water was outlawed because of potential deleterious effects on the deer population, and jacklighting (e.g., spotlighting) was banned because it was unsportsmanlike (these laws remain intact today). The underlying principle was that a population or species, entirely independent of whether it was increasing or decreasing, should be protected from cruel or unsportsmanlike methods of killing (Sanger 1897). Audubon societies (the first ones were formed by Grinnell) and other nature groups allied with

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sportsmen and began to lobby for legislation to curtail the feather trade that was decimating many nongame bird species (Dunlap 1988).

Game laws, game agencies, and game commissions established by states in the late-19th and early-20th centuries focused primarily on eliminating commercial uses of wildlife (e.g., birds and the millinery trade) and on regulating numbers of game legally killed by sportsmen. Hunting methods were regulated to conform to accepted standards of fair chase as outlined by the Boone and Crockett Club, which would ideally minimize opportunities for hunters to exceed bag limits. Federal conservation programs were developed for protection of migratory birds through regulation, law enforcement, and refuge establishment. Federal conservation efforts also focused on predator control in an effort to benefit game populations and livestock ranchers (Meine 1988). At the beginning of the 20th century, game and songbird populations were in decline, and in some instances disastrously so, and both sportsmen and bird lovers felt that control of predators, including raptors, was necessary (Dunlap 1988, Mighetto 1991). As furbearer species such as beaver were restored, states established regulated fur trapping seasons so they could manage furbearers as valued resources while effectively minimizing human property and safety concerns (Shaw 1948).

Passage of the Pittman-Robertson Wildlife Restoration Act in 1937 ushered in an era of restoration, and the increase in scientific management led to fine-tuning the system of seasons and bag limits. Prior to restoration programs, population monitoring was limited. Seasons and bag limits were either by too conservative or too liberal. As more jurisdictions began to monitor harvests, they began to see population trends and responded with regulations designed to increase or sustain populations. Many states that had allowed either-sex deer seasons, for example, initiated male-only (buck) laws. In Massachusetts, where hunters could take 1 deer of any sex, the reported deer harvest declined until 1967 when a buck law was imposed. Gradually, female (doe) permits were re-issued on a county basis in those areas that could sustain a reduction in growth or had agricultural conflicts. Eventually, during the 1980s, deer management zones were established independent of political boundaries, but representative of deer range differences. This allowed greater control of the deer population through adjusting the doe kill differentially based on habitat and human influences. These examples typify the focus of game regulations in the post-World War II period.

Laws regulating access to species other than game, migratory birds, and furbearers were uncommon until the mid- to late-20th century. Passage of the Bald Eagle Protection Act in 1940 was followed by the Endangered Species Preservation Act of 1966, the Fur Seal Act of 1966, the Endangered Species Conservation Act of 1969, the Marine Mammal Protection Act of 1972, and the 1973 Endangered Species Act. These laws focus on the take of animals, and represent an expansion of the approach taken to stem market hunting toward a broad array of other uses of wildlife. Several state and federal laws protect wetlands, but few laws focus specifically on protection of wildlife habitat. A notable exception is Vermont Act 250, known as the Land Use and Development Act of 1970, which regulates impacts to certain wildlife habitats.

American alligators *(Alligator mississippiensis)* provide a good example of how strictly regulated markets can benefit populations. Because of overharvest of alligators for meat and hides, and resulting population declines, in 1967 (before enactment of the Endangered Species Act) alligators were classified by the U.S. Fish and Wildlife Service as endangered. However, regulations did not accompany this classification and overharvest continued. In 1969, the Lacey Act, which prohibits interstate transport or export of illegally harvested species, was amended to include reptiles, and subsequent enforcement of high profile cases

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helped to curtail the illegal trade. Populations quickly showed signs of recovery. In 1973, when the Endangered Species Act was enacted, alligators were listed as endangered. Between 1970 and 1979, certain states implemented controlled or experimental commercial harvests, and in 1979 the federal government began allowing trade in alligator meat while also downgrading alligators on CITES to allow export of their skins. Controlled harvest, including adults or eggs to supplement captive-rearing facilities, continues by permit or tag in the southern U.S. for the use of alligator meat and hides. As a result of this regulated market, American alligator populations have rebounded, the species has since been delisted, and numerous states now allow harvest.

Current Status, Threats, and Challenges.— Clearly defined laws exist regarding seasons, bag limits, methods of take, and areas in which seasons apply. What is not as clearly defined is the applied enforcement of these laws. Enforcement priorities often depend on available resources and societal desires. Does the out-of-season take of a striped skunk *(Mephitis mephitis)* merit the same level of enforcement as a trophy elk? Although state authority over the take of resident game species is well defined, county, local, or housing development ordinances may effectively supersede state authority. *De facto* decisions regarding hunting opportunity and access are routinely made at a level below that of state government. Further, decisions on land use, even on public lands, indirectly impact allocation of wildlife because of land use changes associated with land development. Competing land uses which effectively destroy or degrade wildlife habitat supersede the notion of allocation of wildlife by law. Examples abound where public lands have been dominated by one or more uses, thereby reducing their wildlife value and allocation to the public.

Amphibians and reptiles, especially turtles, may suffer as taxa whose uses are not broadly considered as utilitarian (e.g., those traded or used commercially as pets). In addition, these species are secretive, often misunderstood, or feared. Perhaps for these reasons, establishment of regulations or enforcement thereof tend to be lower priorities. Lack of specific permits or harvest monitoring have caused some of the members of the user community of these taxa to claim that limits imposed, where they exist, are artificial or not based in science. Further, lack of law-enforcement capacity is another challenge. Herpetofauna are relatively easy to conceal, and several species look similar, thus routine enforcement checks or a lack of identification skills may cause illegally harvested individuals or species to be missed.

Among some members of the commercial pet industry, hobbyist breeders, and photographers of herpetofauna, the current perception is that government is the enemy, harming small businesses or reducing income through regulatory measures. However, just as with game and fur markets, careful and strategic engagement with these stakeholders regarding allocation can provide mutual benefit, particularly when regulated take is based in sound science. Many states use fishing or hunting licenses and permits for the collection or possession of herpetofauna, and specific methods to track herpetofauna, such as a specific license or stamp, combined with reporting requirements, may allow improved monitoring of numbers of animals removed from the wild. Similarly, many states permit or otherwise regulate wildlife rehabilitators. Many species are removed from the wild when perceived to be injured, ill, or orphaned. Some are returned to the wild and some are not. Monitoring or tracking can provide reasonable allocation limits that can be agreeable to stakeholders and can benefit populations.

4. Wildlife Can Be Killed Only for a Legitimate Purpose

Historical Development.— George Hallock, original owner and editor of *Forest and Stream,* wrote that those who killed merely for the fun of killing,

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along with "pot hunters" (those who hunted solely for food), debased sport hunting (Reiger 1975). According to Grinnell, true sportsmen were those who hunted for pleasure (never for profit), who in the field allowed game a sporting chance, and who possessed an aesthetic appreciation of the whole context of sport that included a commitment to its perpetuation (Cutright 1985). Grinnell, in a series of powerful editorials, was to articulate what Reiger (1975) referred to as the code of the sportsman. The single most important element in the code was the requirement of non-commercial use, without waste, of all game killed. When this element was combined with dissatisfaction over dwindling game and habitat, an important catalyst in the conservation movement was born.

The concept of a sportsman can be summarized as one who, when hunting game:

- does so primarily for the pursuit or chase;
- affords game a "sporting" chance (fair chase);
- seeks knowledge of nature and the habits of animals;
- derives no financial profit from game killed;
- will inflict no unnecessary pain or suffering on game; and
- will not waste any game that is killed.

Current Status, Threats, and Challenges.— The current examples of broad-scale prairie dog (*Cynomys* spp.) shooting and crow hunting raise the question of legitimate purpose. Reconciling this practice within the principle of legitimate use does not seem possible, given that no food or protective benefits are derived. Pheasant stocking programs that, in effect, create artificial populations may qualify for evaluation in the context of the Model. The culling of overabundant species (e.g., deer and Canada geese *[Branta canadensis]* in urban settings) is an accepted management practice, but how does it align with the Model? How do longstanding predator removal or control programs fit within this context? How precisely evaluated are the concerns over property protection, and how well justified should such interventions be? Are hunters who secure only the cape, antlers, or horns and discard the meat consistent with our understanding of the Model's history and intent?

Further, do events such as turtle or frog races or rattlesnake roundups have an impact on populations? In some instances, animals are gathered from various parts of a given state, if not adjacent states, and brought to a race or roundup location where they are either translocated (by release, sometimes illegally) to an area nearby, or killed (either intentionally or accidentally) (Adams et al. 1994, Fitzgerald and Painter 2000, Speake and Mount 1973). Particularly in the case of snakes, directed persecution occurs along with many in the public sharing the perception that "the only good snake is a dead snake," thus hampering conservation efforts. A lack of monitoring prevents our ability to determine definitive impact on populations.

5. Wildlife Is Considered an International Resource

One of the greatest milestones in the history of wildlife conservation was the signing of the Migratory Bird Treaty Convention in 1916. This was the first significant treaty that provided for international management of wildlife resources. The impetus was recognition that some wildlife migrate across borders, and one nation's management, or lack thereof, has consequences to its neighbors. Subsequently, international commerce can have significant effects on the status of a species.

Historical Development.— The recognition that conserving waterfowl populations would require coordinated and centralized regulations dates back to the 19th century. Legislation giving the federal

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government regulatory control over waterfowl hunting in the U.S. was introduced initially in 1904, but was not passed until 1914 (Presidential Proclamation: Regulations for the Protection of Migratory Birds). The constitutionality of this law was challenged and a district court ruling in Arkansas (U.S. v. Harvey C. Shauver) deemed the law unconstitutional. Supreme Court Justice Elihu Root suggested the constitutional issue could be addressed with a treaty between the U.S. and Great Britain on behalf of Canada. Such a treaty would invoke the Supremacy Clause of the Constitution, which gives federal treaties supremacy over any law of the land. A small group of U.S. and Canadian conservationists drafted the Migratory Bird Treaty and worked both sides of the border to get it ratified in 1916 (Hawkins et al. 1984).

Expansion of international wildlife conservation efforts beyond migratory birds occurred after WWII with passage of endangered species legislation in the 1960s and 1970s. Today, collaboration on a broad suite of wildlife conservation issues among the North American nations is common. For example, the Northeast Association of Fish and Wildlife Agencies is comprised of 13 northeastern states and 6 eastern Canadian provinces, and technical committees under its jurisdiction share management information and collaborate on policy development for most resident non-migratory species.

Current Status, Threats, and Challenges.— Several international treaties exist that prescribe cooperative relationships and management programs between the U.S. and other countries. However, other opportunities exist for international treaties to address species that cross borders into Canada or Mexico. Exporting components of the Model to other countries or continents, in particular to Africa, has been successful in some instances, yet very difficult and time-consuming to implement. Complex permitting processes, traditional economies and cultures, and travel and firearm restrictions stand as barriers to sharing the successful Model and American system of conservation funding with other nations.

Many collaborative actions are occurring for management and conservation of wildlife bilaterally or trilaterally in North America. The overall results are clearly positive, with plenty of examples with migratory birds, waterfowl, and more specific management efforts for the benefit of bighorn sheep *(Ovis canadensis),* pronghorn *(Antilocapra americana)*, and more recently the translocation of bison into Coahuila from South Dakota. One important challenge is the construction of the wall between the U.S. and Mexico, which is likely to have severe negative implications for wildlife (Flesch et al. 2010, List 2007, López-Hoffman et al. 2009).

6. Science Is the Proper Tool to Discharge Wildlife Policy

In his classic work titled *Game Management,* Leopold (1933:17-18) stated the following:

"The Roosevelt Doctrine of conservation determined the subsequent history of American game management in 3 basic respects.

1. It recognized all these 'outdoor' resources as one integral whole.

2. It recognized their 'conservation through wise use' as a public responsibility, and their private ownership as a public trust.

3. It recognized science as a tool for discharging that responsibility."

Science as a base for informed decision making in wildlife management has become standard in Canada and the U.S. Nevertheless, funding has been largely inadequate to meet the research needs of management agencies, and a trend toward greater political influence in decision making threatens this principle (Wildlife Management Institute 1987, 1997). As Leopold wrote (Meine 1988:359-360):

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"One of the anomalies of modern ecology is the creation of two groups, each of which seems barely aware of the existence of the other. The one studies the human community, almost as if it were a separate entity, and calls its findings sociology, economics and history. The other studies the plant and animal community and comfortably relegates the hodge-podge of politics to the liberal arts. The inevitable fusion of these two lines of thought will, perhaps, constitute the outstanding advance of this century."

The development of human dimensions of wildlife as a discipline has moved us closer to realizing Leopold's ideal. The integration of biological and social sciences is necessary to meet the conservation challenges of the 21st century.

Historical Development.— The history of scientific management of wildlife began when there was little concern for any form of wildlife conservation until fauna (especially large mammals) were on the brink of extinction. The story is known by most wildlife professionals but not as well by the layman. By the late 1800s, North Americans were seeing wildlife disappear before their eyes, much like we see wildlife habitat disappear today. Thus began the wildlife management experiment in North America. At this point in history, market hunting (i.e., unregulated hunting) was rampant and there was little incentive for management of what was perceived as an unlimited resource. Without a drastic change in attitudes and recognition that wildlife was not unlimited, the great American experiment likely would have been over before it began. Conservation grew from this point, and leaders – such as Theodore Roosevelt, Gifford Pinchot, and William T. Hornaday in the U.S. and Sir Wilfrid Laurier, Clifford Sifton, and C. Gordon Hewitt in Canada – worked together to ensure that their nations had similar policies to protect wildlife in those early days of conservation (Geist 1993). Their efforts were instrumental in allowing others to begin to take a conservation approach where wildlife was concerned, and when Theodore Roosevelt was president he demanded that science be part of the conservation process (Lewis 1919).

Before 1900, wildlife interests centered on hunting, control of wildlife problems (e.g., predators), stocking, and some conservation of game with very little interest in science or research. Wildlife was considered a source of subsistence and profit only, so action was needed for the proper conservation and management of wildlife species and the habitats they depended on. In the 1930 American Game Policy, Leopold called for restoration of wildlife and a corps of trained wildlife biologists that made decisions based on facts, professional experience, and an underlying set of principles for the emerging profession. This was the true beginning of science being actively used in management of North America's wildlife resources. Development of wildlife management and all related policies must be based on knowledge, and knowledge is advanced by experience and fact finding (i.e., research and science). Science based on research was required to convert the profession's newly minted "principles" into policies. Today, limitations on use of wildlife are based on science including surveys, population dynamics, behavior and habitat studies, statistics, and contemporary adaptive management and structured decision making.

The scientific mandate has been followed since, reinforced by the writings of Aldo Leopold and embedded within The Wildlife Society's code of ethics in that TWS members "recognize research and scientific management of wildlife and its environments as primary goals ..."

When Leopold emphasized the importance of maintaining habitat for wildlife, the idea was relatively new. In pursuing this notion, the new wildlife management discipline applied the scientific method that is the backbone of the acquisition of knowledge. However, it became evident that

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simply using the scientific method was not going to be enough. Wildlife belonged to the public, and unless the public understood how wildlife was being managed they would be reluctant to support such management. Simply understanding life history characteristics of wildlife and wildlife habitat was inadequate; people influence the system, and human dimensions had to be an integral part of wildlife management within the profession. Brown and Decker (2001) summarized the evolution of human dimensions into the science of wildlife management through 12 steps:

1. State agencies have been collecting information on wildlife from hunters at check stations since the 1930s, a practice called "surrogate biology" as it used people to obtain information about harvests and traits of harvested animals.

2. Most of the earlier human-dimensions studies concentrated on conflicts between farmers and hunters.

3. In 1955, the U.S. Fish and Wildlife Service began the national survey of hunting and fishing, which is conducted every 5 years. The survey provides data on hunting and fishing trends and has been expanded to provide estimates on non-consumptive activities. Since 1980, the survey has provided state-level estimates and national estimates of wildlife recreation.

4. Although Leopold emphasized the importance of human dimensions in wildlife in the 1930s, it was not until 4 to 5 decades later that the social and economic aspects of wildlife were beginning to be seriously addressed.

5. This interest expanded into wildlife management agencies and university research programs. The Missouri Department of Conservation employed human-dimensions specialists, which stimulated other state agencies to follow.

6. The movement expanded, and the Human Dimensions in Wildlife Study Group was formed in the 1980s. Additional activity continued to occur in agencies and universities.

7. In the 1990s, as public pressure increased for more public involvement in wildlife management decisions, agencies increased their incorporation of human dimensions into wildlife management, and universities included classes in the arena for wildlife students.

8. Communication related to human dimensions was greatly enhanced in the 1990s and the journal *Human Dimensions in Wildlife* was created.

9. Interest in this new field blossomed in the 1990s: state and federal agency and university partnerships for human-dimensions research were established and universities hired human-dimensions specialists.

10. Since the 1970s the field of human dimensions has increased the understanding of human perception of wildlife and human interactions with wildlife. Specialists in the field have developed conceptual approaches that assist managers in understanding attitudes and behavior of different stakeholders toward wildlife management issues.

11. The entire field of human dimensions continues to grow and gain involvement in restoration projects, human-wildlife interactions, communication between stakeholders and agencies, and in policy and decision making.

12. Wildlife management agencies rely heavily on human-dimensions experts, and the field plays an important role in success of agency policies and practices.

Human dimensions has truly taken its spot as the third leg of the wildlife management triad: wildlife, habitat, and people (Giles 1978). As society struggles with increasing human population and diminishing wildlife habitat, new and different challenges have arisen and will continue to arise, and science

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(biological, ecological, and social) will continue to contribute to the basis of effective management so informed solutions can be obtained. Those decisions will be much easier when science and human dimensions are included in the mix.

Current Status, Threats, and Challenges.— Although the U.S. and Canada have led the way in advancing the wildlife profession, wildlife management itself appears to be increasingly politicized. A rapid turnover rate of state agency directors, the makeup of boards and commissions, the organizational structure of some agencies, and examples of politics meddling in science have challenged the science foundation. Examples of the lack of rigor in surveys and analyses, advocacy, and misuse of science have prompted The Wildlife Society to publish a position statement of the use of science in wildlife management (2010). The multitude of environmental and conservation organizations include some organizations that appear to be more focused on developing membership than on proper use of science to advance wildlife policy.

7. Democracy of Hunting Is Standard

Theodore Roosevelt believed that access for all to have the opportunity to hunt would result in many societal benefits (Roosevelt et al. 1902:18-20). Leopold termed this "democracy of sport" (Meine 1988:169), and it sets Canada and the U.S. apart from many other nations where the opportunity to hunt is restricted to those who have special status, such as land ownership, wealth, or other privileges. The greatest historical standing of the public trust is that certain interests are so intrinsically important to people that their free availability marks the society as one of citizens rather than serfs (Sax 1970). The opportunity for citizens in good standing to hunt in Canada and the U.S. is a hallmark of our democracy.

Current Status, Threats, and Challenges.— Roosevelt and Leopold envisioned a nation where all citizens had an opportunity to engage in conservation and hunting (Roosevelt et al. 1902, Meine 1988). Animal-rights organizations work tirelessly to shift the political debate to exclude hunters and hunting at national, state, and local levels (Francione 1996). Without the political, social, and financial support of hunters and anglers, agencies will be severely challenged to be able to deliver effective conservation programs for all wildlife into the future. Ballot initiatives that often do not include adequate opportunities for public information and debate are offered each election cycle. Our profession has taken a dim view of this form of policy development (Williamson 1998). Are these ballot initiatives undemocratic (Sabato et al. 2001) or do they lack the deliberative process necessary for sound, long-term conservation policy?

Finally, access to firearms and gun control restrictions directly impact the public's ability to hunt. This was recognized in the early 1900s, when new immigrants in eastern industrial states heavily hunted songbirds. Some states, including Massachusetts and Pennsylvania, passed laws forbidding immigrants from owning firearms or hunting (Trefethen 1975). If such laws were commonplace across the U.S., development of the Model and the funding mechanism for conservation itself might have been altered. These laws were later repealed, but their direct purpose was related to availability of firearms for inhabitants of a state. More recently, federal gun control regulations in Canada have posed challenges for hunters there and led to widely expressed concerns, coming at a time where other impediments to hunting are increasing in that country.

Clearly most North Americans do not hunt in the traditional sense of the word. We believe that our current pluralistic democracy is necessary for the Model's survival. Without secure gun rights, the average person's ability to hunt would likely be compromised, along with indispensable sources of funding for implementation of the Model.

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Sustaining and Building upon the Model

Our profession embarked into the 21st century using a conservation model that matured during the 19th and 20th centuries. The Model faces challenges described above and perhaps many more. We believe that a robust discussion must take place among wildlife management policy makers and practitioners.

As these discussions continue, we offer a few recommendations. First, wildlife professionals must engage in a campaign to inform and educate leading academic and political entities in Canada, the U.S., and Mexico about a history that has enabled abundant and diverse wildlife on this continent. Aspiring wildlife professionals at universities across the continent must be made to understand and appreciate the ramifications associated with the Model's principles and how these principles currently drive the policy and practice of wildlife management. The Conservation Leaders for Tomorrow program (McCabe 2010) is one such mechanism for informing students and professionals alike about the Model's origins and applications. The public needs to be made aware that fish and wildlife conservation is not an accidental process, but the exercising of a method with established protocols and proven results.

Second, application of the Model must include all fish and wildlife species and their habitats. Conservation has been approached largely by separating wildlife into sport fish, wildlife that is hunted or trapped, and nongame species. The Model should be examined in a comprehensive context of all taxa being part of fish and wildlife management. Greater dialogue is needed among all stakeholders.

Third, as scientists, resource managers, and agents of the trustees of wildlife, wildlife professionals rarely engage in advocacy, and are not particularly adept when doing so. A few key issues warrant advocacy. Legislation should be developed, where necessary, to improve definitions of public trust responsibilities, authorities, and jurisdictions over free-ranging and captive wildlife and their habitats, clarifying any confusion, strategic or otherwise, between such animals and domestic livestock. Similar legislation should be developed to articulate state and provincial authority to set seasons, bag limits, and locales in coordination with local authorities. Firearms and ammunition should not be regulated in a manner that discourages individuals from hunting or diminishes the financial support that commerce in sporting firearms and ammunition provides to conservation programs. The financial support and use of science in policy decision making should be advocated. Insistence from wildlife professionals that policies emerge from scientific investigation and debate – not from a need or desire to enhance membership and dollars – is warranted.

Finally, a mechanism must be found to encourage the non-hunting public to contribute financially to conserve the fish and wildlife resources they enjoy and have an equal responsibility to protect. Adequate permanent funding to conserve all fish and wildlife species must be attained, recognizing the responsibility our profession has for biodiversity in the most inclusive sense. Because hunters and anglers remain the primary source of conservation funding at the state level, recruitment and retention programs have been implemented by many agencies and organizations. These efforts should have clearly

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defined objectives and be monitored and evaluated to assess whether these objectives are being met and are contributing to broader conservation outcomes. Other types of wildlife uses and users should be engaged and cultivated.

Funding

Application of the Model to all wildlife for the benefit of all people will require broad-based, substantial funding. Primary funding from hunters, anglers, and trappers at the state level is inadequate to meet current and anticipated wildlife conservation challenges. Jacobson et al. (2010) outlined a vision for broad societal funding in the U.S. independent of special interests or user groups. User-based funding would still be applied to those programs generating the revenues, while broader-based funds would be used to ensure application of conservation equitably. Canada should consider dedicated user-based funding to enhance its conservation programs at the provincial level, while maintaining and increasing general revenue funding.

Wildlife Markets

Elimination of legal markets for game was unquestionably a turning point in North American conservation. Leopold (1919) and Geist (1988, 1993) made compelling arguments against opening markets for wildlife. Many exceptions do exist, and when a conservation purpose underlies the exception (e.g., harvest and marketing of furbearer pelts), it is consistent with the Model. Organ et al. (2010) raised the notion that under limited exceptional circumstances, a highly regulated market for meat and potentially other products from overabundant wildlife could yield conservation benefits. Conceptually, where overabundant game species such as white-tailed deer and Canada geese result in human-wildlife conflicts, and where the opportunities afforded sport hunters have proven inadequate to meet population goals, a cadre of specially certified licensed sport hunters would be provided access as a means of implementing population control and mitigating conflicts. In return, they could take the meat to a regulated processing facility and get paid. The meat would enter the local market. Benefits of this approach beyond mitigation of conflicts could be a fostering of appreciation of the food value of a species or populations of wildlife perceived as liabilities. Risks in such an approach include the potential for illegally harvested game to enter legal markets. Vercauteren et al. (2011) have taken a different approach and proposed establishment of a commercial deer harvester's license to provide incentive to control overabundant deer.

Any consideration of establishing regulated markets for game must include the strengthening of legal institutions to ensure that the unlawful taking of wildlife is strongly enforced through law enforcement and judicial systems. For example, fines associated with the unlawful taking of wildlife should be commensurate with the seriousness of the offense. In many cases, fines are not adequate to deter violations of law.

The principle that markets for wildlife are eliminated should remain intact, but exceptions do and will occur. These should remain exceptions, and be warranted only where there is a conservation benefit that cannot otherwise be achieved.

Consideration also needs to be given to restricting or eliminating markets for certain taxa, such as reptiles. As unregulated markets for North American game species led to imperilment, other taxa face the same vulnerabilities.

Firearms Rights and Privileges

The ability of private citizens in the U.S. and Canada to own firearms has in no small way shaped the course of conservation and application of the Model. In the United States, the 2nd Amendment

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of the U.S. Constitution clearly establishes the lawful basis for firearms ownership and use, including hunting. Suppression of firearms ownership would functionally eliminate hunting as a management concern and as a management tool, and hunters as the primary advocates and funding source for conservation. Reiger (1975) outlined the preeminent role hunters had in shaping the conservation movement. Restrictive firearms laws at the federal level in Canada and in some states (e.g., Massachusetts) may inhibit recruitment and retention of hunters. Legal access to sporting firearms for all citizens in good standing is essential to maintaining a core base of wildlife conservation advocates and a critical funding source.

Habitat Considerations

The U.S. and Canada have an impressive network of public lands, including a significant component managed primarily for wildlife (e.g., national wildlife refuges, state wildlife management areas). Private lands with permanent protection from development also contribute significantly to supporting wildlife populations. The American Game Policy of 1930 (Leopold 1930) and the Pittman-Robertson Wildlife Restoration Act of 1937 both emphasized the need for habitat restoration. This network of protected habitats was critical to restoration of game and conservation of other species.

In articulating the 7 principles of the Model, Geist et al. (2001) did not provide explicit treatment of the importance of habitat conservation to wildlife management in North America nor its foundational influence in conservation history. Organ and Mahoney (2007) reflected on the legal standing of habitat values in terms of the Public Trust Doctrine, and Regan and Prukop (2008) offered examples of the stateside application of the Public Trust Doctrine to contemporary habitat conservation issues. Habitat conservation (i.e., protection, restoration, and management) is a necessary pillar of any successful management paradigm and merits consideration as a precept in future treatments of the Model.

Consensus is lacking within the wildlife conservation and management profession as to whether the concept of habitat conservation and the role of the private landowner rise to the level of a principle, or are considered purely means to achieve the Model's principles. Indeed, consensus is lacking on how to define habitat in other than the most general of terms. Habitat is a relative concept and varies among species. Most programs of habitat conservation are in fact land protection efforts that provide habitat by default. Simple land protection does not equal habitat conservation in a strict sense, but that recognition in no way devalues or demeans those programs and the lands they protect.

Historical Development.— It is self-evident that, for sustainability, wildlife populations require adequate habitat (i.e., food, water, shelter, and security). In Man and Nature, Marsh (1864) recounted the impacts to natural landscapes and waterways from the advance of civilization. Subsequently, 19th-century conservationists were eager to reserve large landscapes for wildlife (e.g., Adirondack Park, Yellowstone National Park). President Theodore Roosevelt, with the support of Grinnell, Pinchot, and others, made bison, migratory bird, and big game habitat protection hallmarks of his conservation advocacy (Brinkley 2009). The Boone and Crockett Club (Roosevelt and Grinnell 1893) advocated for a network of public protected game reserves. In other words, habitat protection became synonymous with wildlife stewardship for future generations.

Aldo Leopold (1933) squarely placed the conservation of habitat into an applied management framework – similar to that used for forestry and agriculture. He offered prescriptions or guidance for making parcels of land more productive for wildlife through active manipulation of vegetation structure. The Dust Bowl, extensive loss of prairies and wetlands, and overharvest of northeastern and Great Lakes forests would validate the need for active management of habitat. The American Game Policy (Leopold 1930) advocated for subsidizing private landowners for conservation initiated on their lands for the benefit

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of wildlife and hunters. Habitat conservation became a mainstream concept in America, following on the heels of Leopold, when, in 1933, President Franklin Roosevelt initiated the Civilian Conservation Corps, whose outputs all supported improvement and perpetuation of our land and water resources.

With advent of science-based habitat metrics and funding from excise taxes and license fees, government agencies were poised to explore wildlife-habitat relationships, to develop population-habitat models, to pioneer best habitat management practices, and to transfer such information to landowners and land managers. Over time, more attention would focus on human disturbance, fragmentation, development, and other influences on habitat quality and use.

Although the initial focus may have been on independent-parcel management planning, wildlife science embraced emerging ecological principles concerning habitat connectivity, gene flow, and regional or ecoregional planning constructs to meet wildlife needs. The North American Waterfowl Management Plan, signed by the U.S. and Canada in 1986 and by Mexico in 1994, provided a continental-scale approach to habitat conservation and regional delivery of conservation projects via joint ventures. Fisheries managers have embraced a similar approach for aquatic systems.

Current Status, Trends and Challenges.— Habitat is key to wildlife population viability, genetic integrity of species, and a sustainable abundance of animals for hunting, trapping, and wildlife-dependent recreation. The future holds manifold challenges on the habitat front, including fragmentation, suburban sprawl, energy development, transportation infrastructure, and climate change. State Wildlife Action Plans are replete with strategies to address habitat threats, and the Northeast Association of Fish and Wildlife Agencies has pooled resources to examine habitat conditions on a regional scale based on State Wildlife Action Plan information.

Ownership of the landscape (forests in particular) and, by extension, ownership of wildlife habitat, varies across the continent. In the U.S., fully two-thirds of westernmost forests and three-quarters of those in the Rocky Mountain states are owned publicly, primarily by the U.S. Forest Service and the Bureau of Land Management (Law 2007). Both agencies have conservation and perpetuation of lands for wildlife habitat as central tenets in their enabling legislation (USFS; P.L. 86-517, BLM; P.L. 94-579 ss103(c)). Private forest lands, however, have no such direction or guarantee. It is of little surprise then that landscape-level planning to protect renewable resources and wildlife habitat, particularly throughout the western U.S., are underway by both the U.S. Fish and Wildlife Service (through its Landscape Conservation Cooperatives) and the Bureau of Land Management (via Rapid Ecosystem Assessments). Thus the primary governmental land management agencies in the U.S. have recognized and acted upon the value of habitat conservation as a primary function of their public trust responsibilities.

Approximately 60 percent of U.S. land area is privately owned, compared to 11 percent of Canada's land area. Successful stewardship of public wildlife resources is fostered via private and public partnerships. State fish and wildlife agencies often provide management assistance to forest and farm landowners, especially for critical habitat designations. Conservation titles of the Farm Bill (P.L. 110-246, Food, Conservation, and Energy Act of 2008) provide due financial and technical assistance to both landowner communities. Non-governmental organizations, governmental and private landowner partnerships have successfully conserved habitats and provided public access through easements.

As noted above, Organ and Mahoney (2007) have raised concerns about the ability of habitat features to withstand legal challenges to the Public Trust Doctrine, suggesting that government agencies need to advance protection through case law, legislation, and practice.

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Instructor Bob Byrne, left, gives an enthusiastic thumbs up for two CLfT participants who each bagged a pheasant during a mentored hunt at the Max McGraw Wildlife Foundation in Illinois. Held in January 2010, this was the first CLfT workshop offered exclusively to non-hunters from state and federal natural resource management agencies. Courtesy of CLfT.

Taxa Inclusivity

The Model is intended to apply to all wildlife taxa, except for those principles specific to game species. Yet application of the Model historically has been much narrower due primarily to restricted funding sources and the primary stakeholder and advocacy base.

Application of the Model in recent decades has broadened as management agencies have expanded programs and new funding sources have emerged. Broader-based funding will ensure greater and more equitable application of the Model to all taxa.

Governance

The Model is implemented continentally by a multitude of federal, state, and provincial agencies that have some common governance attributes, but also vary considerably. Jacobson and Decker (2008) articulated how many current governance models do not reflect contemporary societal needs. Jacobson et al. (2010) offered a vision for a unifying theme of governance, whereby trustees representing broad societal interests would comprise the decision-making body. Agencies at the federal, state, and provincial level function as agents of the trustees providing the best available biological and social science to the decision makers. Broad, stable, and equitable funding would enable greater focus on biodiversity conservation and landscape approaches. Traditional uses and users would remain an important funding source.

Governance models that are not in concert with contemporary societal needs or address only limited special interests risk having the wildlife management enterprise lose relevance to society. Too much is at stake in terms of biodiversity and human health to warrant this risk. The institution of wildlife management needs to take bold steps to ensure that governance fosters relevance.

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The Future of the Model

Application of the Model's principles to landscape conservation will enhance its future relevance. Credit: John F. Organ.

The Model's future rests to a high degree on the adaptability and application of its principles to contemporary wildlife conservation needs. To remain viable in the future, it must remain relevant. To that extent, the Model must be viewed as a dynamic set of principles that can grow and evolve. The underlying principles – established to address particular concerns, some no longer an issue – can serve as bedrock and be applied more broadly, or modified to facilitate expansion to emerging societal needs. Dialogue and collaboration among administrators and key stakeholders within the North American wildlife management institution should be encouraged and be constructive. In particular, the Association of Fish and Wildlife Agencies, The Wildlife Society, and the Wildlife Management Institute, among others, should collectively foster discussions about contemporary issues potentially affecting interpretation or application of the Model.

Key to ensuring relevancy of the Model will be its application to conservation of landscapes. The Model's principles were developed in large part during an era when the direct taking of wildlife was the preeminent concern in conservation. Increasingly, the maintenance and fostering of landscapes that can sustain viable populations of all wildlife to ensure conservation of biodiversity and human use and enjoyment are of paramount concern. The Model's context must be viewed in the broad sense of its application to this and other emerging needs, rather than in a historic context. This may require evolution and expansion of principles while ensuring that the original principles are not abandoned.

Additionally, the wildlife management institution must not rest purely on successes of the past. DeStefano et al. (2005) discussed demographic shifts in U.S. society, where increasing proportions of the public live in urban vs. rural areas. This shift towards urban demography can have significant wildlife policy implications, as can shifts from traditional based values towards wildlife to broader multi-cultural ones. Ballot initiatives within the last 30 years that have successfully restricted or eliminated traditional wildlife uses have been in states where greater than 70 percent of the public live in urban areas (S. DeStefano and J. Organ, unpublished data, presented at the 2010 Annual Conference of The Wildlife Society). Decker et al. (1996, 2000) outlined the implications of shifts in human dimensions to the wildlife management enterprise and offered approaches for governing effectively in a changing social dynamic. This was addressed further by Jacobson et al. (2010). In short, the Model was formed during a time when wildlife management was implemented under an expert authority approach (Gill 1996). The Model's future will rest on its effectiveness within an institution fostering greater participatory decision making. Riley et al. (2002) offered a vision for how this may be facilitated.

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Summary and Recommendations

1. Manage all wildlife under the principles of the Model. The Model is not exclusive to game species. Game species have received greater management attention because of public interest and desires, funding mechanisms, and the management intensity necessary for species that are harvested. Status of game species in North America is generally quite robust. Biodiversity conservation in North America will be enhanced if the Model's principles are applied to all wildlife. Transformative processes will be necessary to enable the wildlife management institution to implement application of the Model to all species as needed (Jacobson et al. 2010).

2. Initiate and expand efforts to inform North Americans about the Model and the importance of citizen engagement in sustaining the future of biodiversity. Current efforts, such as those initiated by Arizona Game and Fish Department (www.azgfd.gov/h_f/documents/NAM%20Brochure.pdf, accessed on 4 May 2011), need to be broadened and expanded continentally. Significant misconceptions exist regarding the Model. It is often considered synonymous with the user-pay, user-benefit funding model, which is purely a mechanism for funding the implementation of the Model's principles. Such misconceptions lead to the notion that the Model is narrow in scope and exclusive of all but game species.

3. Convene key administrators and stakeholders in wildlife conservation and management in the U.S., Canada, and Mexico every 10 years to revisit the key challenges facing wildlife conservation in North America, assess the Model's principles and their application and adequacy, and develop joint strategies for consistent continental conservation delivery. As part of this process, discussion should address the following:

a. Should limited markets for meat harvested by licensed sport hunters be established to address management of overabundant wildlife? Would this increase public appreciation for wildlife values and foster the image of hunting as a management tool with a civic purpose?

b. Will our programs of private and public habitat conservation meet the needs of the future and lead to conservation outcomes consistent with those achieved historically through application of the Model? With expanding human populations and increased demand for resources, habitat protection and landscape-level conservation will increase as factors limiting biodiversity conservation.

4. Governance models that are not in concert with contemporary societal needs or address only limited special interests risk having the wildlife management lose relevance to society. The Model's future will rest on its effectiveness within an institutional framework fostering greater participatory decision making. The wildlife management institution needs to take bold steps to ensure that governance fosters relevance.

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Appendix: Status of Wildlife Management in Mexico

Mexico contains approximately 10 percent of the world's plant and animal species, making it the third most important country in relation to biodiversity (Toledo and Ordonez 1993). Wildlife management and conservation practices in Mexico are currently dynamic and evolving; managers are engaged in maintaining viable populations and habitat for an array of wildlife. These actions are critical for management of megadiversity and the important habitats that Mexico has for migrating North American wildlife. In addition, the number of wildlife professionals, professors of wildlife, university programs in wildlife, and graduate students studying wildlife are increasing in Mexico. Just as valuable, other professionals are recognizing the importance of these additions to the academic and practical scene. These advances are relatively recent and are found primarily in northern Mexico. Wildlife has been largely ignored in southern Mexico and only recently is wildlife management being incorporated into agriculture, rangeland, and forestry programs throughout Mexico (Valdez and Ortega-S *in press*). Why has there been such a lag in active management between Mexico and the rest of North America? It is important to understand these differences so wildlife conservation in Mexico can be placed in proper context relative to the U.S. and Canada.

There are numerous differences between Mexico and the rest of North America that influence management and conservation of wildlife and began centuries prior to any active forms of management. Even before the Spanish conquest in 1521, Mexico's wildlife had been influenced by land use, socio-economic factors, and politics (Valdez et al. 2006). Europeans arrived in the U.S. and Canada to escape suppression in their homelands, but they arrived in Mexico much earlier as the suppressors. Land ownership in Mexico (e.g., federal, private, Indian communal landholdings, and ejidos [land distributed to peasants but ownership resides with the community and not the individual]) is dominated by communal land holdings. Because of minimal ownership and a lack of incentives for conservation practices, wildlife was not considered an economically viable resource. Thus, no efforts were made toward management (Guzman-Aranda 1995).

Subsequently, wildlife in Mexico was of little interest. The first comprehensive book on wildlife in Mexico was published in 1959 (Leopold 1959), whereas numerous texts had been written about wildlife in the rest of North America years before that time. In addition, while there were many reports in the popular press about declining wildlife populations in the U.S. and Canada, authors were silent about a similar plight in Mexico. Although the scientific backbone of wildlife management was developing in the U.S. and Canada with universities, societies, state agencies, and non-governmental organizations, the social, economic, and political support necessary for a robust wildlife program in Mexico did not develop because of socio-economic factors and governmental natural resource policies (Valdez and Ortega-S *in press*). Natural history was not incorporated into the educational system, and the government did not recognize the value of wildlife in its policies or planning. In addition, there were restrictions on gun ownership, no public hunting areas, and no wildlife law enforcement to address the unmanaged and depleted wildlife populations, all

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resulting in a middle class that was not involved in sport hunting. This hindered development of pro-hunting advocacy groups in Mexico, and the political support for widespread conservation programs lagged behind efforts in the U.S. and Canada (Valdez and Ortega-S *in press*). Without widespread citizen appeal, government support, and recognition of the economic importance of wildlife, large-scale conservation programs in Mexico did not emerge until recently.

Although management of wildlife in Mexico is still in a pioneering stage, the profession is rapidly advancing on all fronts. The number of Mexican wildlife ecologists and managers dedicated to enhancing natural resource conservation is growing, as is the job market in all segments of society. In addition, Mexican universities are teaching wildlife classes to prepare biologists for the job market (Valdez and Ortega-S *in press*). Mexico has now passed through the crossroad and is actively involved in the conservation of North American wildlife. It is meeting the challenge of developing sustainable and economically viable wildlife enterprises in the rural sector to alleviate poverty and curtail the further degradation and loss of habitats in Mexico (Valdez and Ortega-S. *in press*).

The initial steps towards wildlife conservation were not taken until the first quarter of the 20th century. Miguel Angel de Quevedo, a forestry engineer widely credited with establishing many protected areas, the Mexican forest service, and other conservation initiatives, promoted creation of the Bureau of Forestry, Game and Fisheries. The 1917 Mexican constitution already contained elements to protect wildlife and secure its benefits to the nation. But implementation of this law was imperfect and enforcement rare. In the process, species such as pronghorn, jaguar *(Panthera onca),* and bighorn sheep were declining. At the same time the federal government established the Program for Predator Control, which led to the extirpation of Mexican wolf *(Canis lupus baileyi)* and the grizzly bear *(Ursus arctos horribilis)* later in the century.

The first hunting law was not created until 1940, and a modified, improved version was promulgated in 1952. This law remained in effect for nearly half a century. Those 50 years were the most crucial for Mexico's wildlife, because much deforestation and population extirpation occurred in the second half of the 20th century. It was not until 2000 that the Zedillo administration came up with a replacement law, updating and integrating 50 years of improvements into the General Law of Wildlife. This new law is a significant improvement, but it still requires modifications and, importantly, improvement in its application across the country. The document in itself is inclusive and combines many types of wildlife harvesting, from orchid (Orchidacinae) collecting and parrot (Psittacinae) nestling extraction (banned in 2008) to hunting bighorn sheep. But its implementation is still far from adequate.

In 1996, a new program based on the landowners' commitment to conservation through habitat and wildlife management on their lands went into effect under auspices of Units for Conservation, Management, and Sustainable Harvest of Wildlife (UMAs). The UMA program opened innovative alternatives for wildlife conservation and promoted productive diversification and poverty alleviation. The UMA is still in effect and covers more than 15 percent of Mexico's territory, although it does continue to require important improvements to ensure its proper application.

The modern age of wildlife management in Mexico can be considered to have started in 1995 with the creation of the Ministry of the Environment and 1996 with the creation of the Dirección General de Vida Silvestre, which increased its stature to an executive level in the Mexican federal government. A new wildlife program was created to promote landowner interest and direct participation through benefit sharing. This meant that a greater budget and a larger number of human resources were allocated. The obsolete 1952 federal law on hunting was superseded by the General Law of Wildlife in 2000. This new law makes significant improvements

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and enhances conservation through sustainable use. But the old problems remain: the budget increase is not enough; the level of training of wildlife managers, biologists, government officials is still not sufficient; and the old, ubiquitous debate between preservation and sustainable use is strongly polarized and radicalized in Mexico to such an extent that it is paralyzing many conservation efforts. For example, the UMA system, conceived to benefit local landowners through sustainable use of their wildlife (SEMARNAP 1997), had enticed the interest of landowners to conserve parrots and their nesting and feeding areas. The landowners had prepared management plans with the aid of scientists and non-governmental organizations, and were ready to begin a legal, sustainable extraction of parrot chicks, when a sudden movement in 2005 froze all efforts by pressing the Senate to change the General Law of Wildlife and ban all parrot harvest and trade soon thereafter. Today many of those former parrot conservation areas have been deforested and are now producing meager corn crops or sustaining low-productivity, erosion-prone cattle ranches.

An important threat that is affecting the future of all wildlife management and conservation efforts in Mexico is that, although in principle the UMA system is clearly opening new hope for this task, it is not yet properly applied, administered, supervised, evaluated, or improved. Additional registration of UMAs should probably cease and a careful program of UMA evaluation, management plan verification, and certification should be initiated to ensure appropriate practices and guarantee benefits to wildlife and landowners. In Mexico – which has the 13th largest economy in the world – making biological diversity a source of sustainable development should be paramount. However, over 47 percent of the population is below poverty line. So people will only see the benefits of wildlife conservation if it has a positive impact on the economy of the nation.

Governance

The structure of the Wildlife Department in Mexico, under the current name of Dirección General de Vida Silvestre (DGVS, or the Federal Wildlife Bureau), has changed continuously since the middle of the last century. It has been variously part of the ministries of Urban Development, Agriculture, and more recently, Environment and Natural Resources (Secretaria de Medio Ambiente y Recursos Naturales, or SEMARNAT). In the Mexican federal government, the lowest executive decision-making position is that of a director general, usually 2 levels below the minister or secretario. Historically, the Wildlife Department never had been at an executive decision level until 1995 when the DGVS was created. Previously, it had been named Dirección de Fauna Silvestre, Dirección de Aprovechamiento de los Recursos Naturales, and Dirección de Caza. The current structure is as follows:

- Secretaría de Medio Ambiente y Recursos Naturales (Ministry of Environment and Natural Resources)

- Subsecretaría de Gestión para la Protección Ambiental (Management Undersecretary for Enironmental Protection)

- Dirección General de Vida Silvestre (General Manager of Wildlife)

The DGVS has 3 main direcciones or bureaus under it. Dirección de Conservación de la Vida Silvestre (Bureau of Wildlife Conservation), Dirección de Aprovechamiento de la Vida Silvestre (Bureau of Wildlife Harvesting), and Dirección de Manejo Integral de la Vida Silvestre (Bureau of Integrated Wildlife Management). Although responsibility for wildlife rests with the federal government, some authority has been decentralized to specific states. The first steps for decentralization were taken in 2006 to the states of Baja California, Sonora, Chihuahua, Coahuila, Nuevo León, and Tamaulipas, representing the northern states bordering the

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U.S. The main responsibility of DGVS is to allocate, assign, organize, and systematize information and wildlife management practices across the country.

Since 1995, any wildlife harvest in Mexico – from pet birds, reptiles, or invertebrates to ornamental plants, deer, or any other hunting or taking – can be conducted only under the auspices of a UMA. A few similar concepts exist in other countries, such as the CAMPFIRE program in Zimbabwe implemented in the 1990s (Kock 1996). Compared with the protected-areas system, which today encompasses about 11 percent of Mexico after 33 years of history, the UMA system is a significant addition to biodiversity conservation through wildlife management. Unfortunately, its implementation has severe limitations, such as the scarcity of properly trained wildlife managers who could prepare management plans for the UMAs. The harvest rate protocols determined by DGVS are still in need of improvement, verification, evaluation, and follow-up. Also, certification of how these management plans are being implemented is deficient primarily because of a lack of inspection personnel. As a result, some wildlife populations continue to decline in several regions, notably in the south (Weber et al. 2006), although the program clearly is providing important incentives for conservation, and habitat is improving in many areas. In addition, many UMAs are now subjected to additional incentives, such as payments for ecosystem services by the National Forestry Commission (CONAFOR). Overall, the program has had positive impacts for conservation and also for poverty alleviation in certain areas. It is one of many areas where a well-designed, conceived, and implemented collaborative international program would make a major difference.

The DGVS has regulatory responsibilities but not law-enforcement attributes. The latter fall under the sphere of Procuraduría Federal de Protección al Ambiente, or PROFEPA for its Spanish acronym (Federal Attorney General for the Protection of the Environment, similar to the U.S. Environmental Protection Agency). Currently, its responsibilities include determining harvest rates for species subjected to management of any kind – from cacti to orchids to pet birds and reptiles to hunted species – and granting research permits and, more recently, determining critical habitat for endangered species. It also has responsibility to compile the list of species threatened and endangered in Mexico (NOM-059).

Funding

The DGVS is part of SEMARNAT. This Ministry is weak within the Mexican federal government, and DGVS itself has suffered downsizing in recent years. Most funds are federal and allocated by Congress through each year's budgetary exercise. However, additional resources can be brought in through agreements with the Mexican Commission on Biodiversity (CONABIO), CONAFOR, or other sections of the federal government. Clearly, funding is one of the most severe limitations that prevent full and adequate implementation of a policy that seems promising for the future of Mexican wildlife.

Recognition of wildlife as a source of wealth and an instrument for poverty mitigation is a concept still extraneous in Mexico. The notion has been permeating steadily but slowly, and the Ministry of the Environment is still not robust enough to advocate for it. Funding is growing, but insufficient. More institutions, notably CONACYT (the Mexican equivalent of the National Science Foundation) CONABIO (the National Commission for the Knowledge and Use of Biodiversity), the Forestry Department, and others are investing more and more in the UMA system to promote conservation on private lands. However, funding for related matters such as law enforcement and technical development and training is even more meager and inadequate.

Scope

Wildlife management in Mexico is focused on the UMA system, regardless of whether it is for pet animals (e.g., amphibians, reptiles, birds,

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mammals, and even butterflies), ornamental plants, hunting, bird watching, or ecotourism. Most management is for sustainable use, such as hunting or pet markets, but some is also for ecotourism. Management is conducted through UMA management plans prepared by wildlife technicians for the specific purpose established in the UMA registration document. Because of this UMA focus, the management focus is not on the population, but on the individuals living in a particular UMA, most often a subsection of a population. Efforts have been initiated to promote population-focused management by working in cooperation with neighboring UMAs (a few UMAs harbor strong viable populations, but this is far from the norm). In all instances, wildlife management for purposes of issues related to terrestrial wildlife and those species protected under Mexico's Federal List of Endangered Species or NOM-059-2001 (a new list is forthcoming) are handled by DGVS. It is the agency responsible for granting hunting and scientific collecting permits, determining harvest quotas, and organizing and administering the UMA system entirely. Exceptions to these responsibilities are those under the decentralization program to the northern border states. The protocols to determine take quotas are revised every few years, but the UMA unit assigned by landowners rarely incorporates a regional scope or wildlife populations, but rather population sections contained in the individual UMA to be assigned a quota. Fishing permits and other biological diversity-related responsibilities are managed by other agencies. The Program of Priority Species was removed from DGVS and transferred to the National Commission of Protected Areas (CONANP) in 2005. The Priority Species program includes 25 species and is in the process of revision, but some representative species include sea turtle (Chelonioidea), black bear *(Ursus americanus)*, jaguar, Mexican wolf, pronghorn, red macaw *(Ara macao),* tapir *(Tapirus bairdii),* blue whale *(Balaenoptera musculus),* and golden eagle *(Aquila chrysaetos).* Other endangered or threatened species included in the federal list NOM-059 are also the responsibility of DGVS, although no specific actions are conducted on particular species unless they are initiated by an academic institution, non-governmental organization, or individuals. The General Law of Wildlife simply defines what an endangered species is as part of the species and populations at risk of extinction ("Those defined by the Secretary as probably extinct in the wild, endangered, threatened, or subject to special protection;" General Law of Wildlife, Article 3, Section XIX). Thereafter, the only reference to endangered species is the indication of whether harvesting, collecting, damaging, or otherwise affecting an endangered species without a permit is a felony.

Wildlife as Public Trust Resources in Mexico

The concern for wildlife and other natural resources in Mexico can be traced back to 2 origins. Native Mexican cultures had a concern for biological diversity, although primarily from a feudal point of view, where protection of biodiversity was justified simply to ensure Emperor Montezuma's enjoyment, and not as a public resource. Many pre-Hispanic Mexican peoples used to benefit from wildlife as a source of food, ornaments, and dress, or for the pleasure of listening to songbirds or simple contemplation, and were quite enthralled with wildlife that surrounded them (Hernandez 1959). One of the strongest hypotheses to explain the collapse of the great Maya empire in the 10th century is the depletion of their natural resources, including forests and wildlife (Deevey et al. 1979), in combination with other factors such as drought (Hodell et al. 1995).

Wildlife remains a public resource in Mexico, but public trust status is complicated by lack of clear designation of user rights and a land-tenure system affording particular rights to landowners (Valdez et al. 2006).

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In Mexico (and much of the U.S. that once was Spanish territory), lands were ceded through Spanish and Mexican land grants. There were various types of Spanish and Mexican land grants; 3 of these types are particularly relevant herein (Torrez 1997, Ebright 1997).

1. Community Grants. These were grants of large tracts of land to a substantial number of people. Each individual in the group was given a parcel of land on which to build a home. The remainder of the grant was not allocated to individuals, but reserved for the common use and benefit of all settlers. Each person in the grant had access to lands; hunting was specifically provided for.

2. Private Grants. Private grants were made to individuals for their personal use. The lands became private property. Apparently wildlife was not considered part of the property, although access to wildlife was controlled by the landowner.

3. Quasi-Community Grants. These were large tracts of land granted to one or a few individuals with the requirement that the land be settled. After settlement, the land would be operated like a community grant.

The fundamental principles that date back to Roman law regarding things that could be owned by no one appear to have applied to wildlife under Spanish land grants. Further research is warranted to confirm this. Whereas the English explicitly gave the king trustee status, and the Romans were mute on this issue, in the Spanish territories the Governor appears to have been the trustee.

Markets for Wildlife

The markets of ancient Mexico were abundantly stocked with fresh meat from a variety of animals, from axolotl *(Ambystoma mexicanum)* and iguanas (Iguanidae) to curassows (Cracidae), turkey *(Meleaegris gallopavo),* deer, and collared peccary *(Tayassu tajacu),* and many edible invertebrates from snails (Gastropoda) and spiders (Arachnida) to grubs (Scarabaeidae, grasshoppers (Caelifera), and ants (Formicidae). These prodigious markets also offered hides and feathers of valued animals such as jaguars, ocelots *(Leopardus pardalis),* otters (*Lontra* spp.), quetzals (*Pharomachrus* spp.), macaws (*Ara* spp.), and more (Díaz del Castillo 1943). Obviously, with no cattle previous to the Spanish conquest, native Mexicans would have to use local animal species for protein ingestion, so hunting vertebrates and gathering invertebrates was an important economic activity (Díaz del Castillo 1943). Currently, native cultures in Mexico use wildlife extensively (Valdez et al. 2006), and markets for some products exist.

The Spanish conquistadors, by contrast, had witnessed mass destruction of natural resources in their homeland, where forests were subjected to a very heavy exploitation for 3 main reasons: to continue building numerous huge ships as part of the Spanish empire expansion policy under Fernando and Isabella, to expand the agricultural and cattle frontier, and to drive the Moors out of the Iberian peninsula. Huge tracts of forest were burned and cleared then and in subsequent centuries, many of which remain deforested today (Fernandez 1990).

Allocation of Wildlife by Law

During the colonial period, wildlife was used by many under no specific organizational plan, but often the government placed restrictions for the wildlife to be used only by rulers. In 1540, a great hunt was organized to honor the first viceroy of the New Spain, Antonio de Mendoza (Leopold 1959). The hunt for pronghorn and deer was organized just northeast of Mexico City. To find the pronghorn nearest to this area now, one would have to travel north about 1,000 km. Hunting remained an activity exclusive to the upper classes in Mexico for centuries. The first law protecting Mexican wildlife and establishing the first attempts to regulate hunting was promulgated in 1894, although little was done to enforce and apply this law (Leopold 1959).

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Not until the early 20th century did a major legal instrument contemplate conservation of natural resources in Mexico. Article 17 of the Mexican Constitution (promulgated in 1917) defines wildlife as "all natural elements," including water, land, forest, and other natural resources, and determines that these natural resources are owned by the nation for the benefit of all Mexican citizens. By 1922, the decline of several species was so severe and evident that President Alvaro Obregon decreed a total ban on hunting bighorn sheep for 10 years and a permanent ban on pronghorn hunts. In 1933, President Emilio Portes Gil extended the bighorn ban for 10 more years, and in 1944 President Manual Avila Camacho made it permanent, given that the species continued to decline. Unfortunately, virtually the only effort to protect the species was the ban itself; no enforcement of any kind, nor any increase in budget or enforcement personnel was granted. Bighorn sheep continued to decline, together with other species, including pronghorn.

Some progress was made, however, in the Mexican conservation movement in the first half of the 20th century. One individual, Miguel Angel de Quevedo, nicknamed "the tree apostle," carried out extraordinary efforts to promote conservation and environmental sustainability. He created the first forestry schools in Mexico and the Mexican Forestry Society, increased the green surface in many Mexican cities, and directed the Mexican Committee for the Protection of Wild Birds. Under the auspices of President Lázaro Cárdenas (1934-1940; recognized for the nationalization of oil), de Quevedo also created the Mexican National Park System, having declared "green belt" parks surrounding every major city reaching up to more than 20 percent of the Mexican territory as protected areas, compared to about 11 percent today. Unfortunately, many of his parks were not protected after Cardenas left office and were later urbanized (Simonian 1995).

Hunting of big game and birds is allocated through a licensing and permit system. Protective laws for vulnerable species exist, but resources for enforcement are greatly lacking, and illicit trade is problematic (Valdez et al. 2006).

The Mexican agency for environmental law enforcement, PROFEPA, is grossly surpassed by the needs of the country, not only in the context of wildlife issues such as poaching, management plan implementation, and protected area invasions, but also in environmental impact assessment violations, implementation of mitigation measures, and many more. A crucial step to secure the future of wildlife in Mexico would be to substantially strengthen PROFEPA in all lines within its responsibilities.

Wildlife Can be Killed Only for a Legitimate Purpose

At the beginning of the 20th century, predator control in Mexico became an important activity within the wildlife sector of the government as a result of the concern of cattle ranchers primarily in the north and likely as a reaction to the U.S.'s predator control program itself. At that time many wolves, mountain lions *(Puma concolor)*, and grizzlies were killed in the context of the predator control program. Not until the 1960s, after the grizzly had become extirpated and the Mexican wolf virtually so, did the government ban predator control and consider these species at risk of extinction.

Other wildlife, particularly game species such as deer, pronghorn, bighorn sheep, waterfowl, and doves, had been taken for many centuries by the common Mexican (back to the pre-conquest times) primarily for food but also for other purposes. Some organization was necessary, and that led to the creation of 3 versions of wildlife laws. The legitimate purpose for killing wildlife then became the benefit of the nation. Article 5 of the General Law of Wildlife states: "The objective of the national policy in matters related to wildlife and its habitat is its conservation through the protection and the optimal sustainable harvest so that its diversity and integrity are maintained and promoted, simultaneously with

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promoting the well-being of all Mexican citizens." There are still, of course, conflicts with this statement. For example, recently, scientists and non-governmental organizations have been pointing at the unsustainable, illegal killing of jaguars across Latin America as the single most important factor in continued declines and extirpation of this species (Manzanos 2009, Alatorre 2009). The reasons to kill jaguars are diverse – from revenge of the cattle rancher who has had losses, to simply a desire for a jaguar pelt or its canines, or to kill the largest cat of the Americas – despite the fact that killing a jaguar, at least in Mexico, is a federal offense punishable with jail time (Manzanos 2009, Cárdenas 2009).

Wildlife Is Considered an International Resource

Mexico's international wildlife policy dates back to about the middle of the 20th century, although some specific agreements had occurred before. The oldest international agreement for wildlife between Mexico and the U.S. was signed in 1936. The Convention for the Protection of Migratory Birds and Game Mammals was a first attempt to join forces on behalf of wildlife conservation. In 1971, another international treaty was signed between Mexico and the U.S., related to protecting wetlands as habitat of migratory waterfowl. Several other treaties came into effect in the second half of the 20th century. The primary objective of these treaties was to cooperate for the conservation of shared and migratory populations of wildlife moving between Mexico and the U.S. Besides bilateral or trilateral agreements in North America, probably the most relevant international treaty was CITES. Mexico did not become a signatory of this treaty until 1991. It restricts international trade of species considered threatened by trade itself (Appendix I) or those species that, although not threatened, may become threatened if the trade is not controlled. Clearly, populations shared between any 2 countries should be managed jointly between both countries for the benefit of both.

Science Is the Proper Tool to Discharge Wildlife Policy

Wildlife science as a discipline has a very short history in Mexico. Forestry began around the turn of the 20th century with Miguel Angel de Quevedo's formidable influence (Simonian 1995). Biology began with Alfonso L. Herrera in the second half of the 19th century, and ecology with the triad of José Sarukhán, Arturo Gómez-Pompa, and Gonzalo Halffter. Wildlife ecology was not established as a discipline until late in the second half of the 20th century. Even now, few Mexican universities carry a conservation biology program or courses (Méndez et al. 2007), and much fewer carry any wildlife management related curricula. Use of science as a tool to determine wildlife management practices, primarily those related to harvest rates of game species, is still a very nascent discipline in Mexico. Endangered species determination and recovery programs, on the other hand, are widespread, diverse, and successful, and have placed Mexico at the leading edge in many ways. The Mexican protocol for determination of endangered species (MER) was a science-initiated, science-driven process that was later turned into federal law. The NOM-059 – the official list of endangered and threatened species – is based on the MER protocol (Sánchez et al. 2007). Furthermore, this protocol is currently being adapted and tested in other Latin American countries and beyond.

Wildlife harvest rates are established by the government, primarily by DGVS but also by the state governments to which this responsibility has been decentralized, (e.g., the northern border states). However, these protocols are still far from being fully science-based. Information on population trends, effects of management, habitat models, genetic viability, and more are still necessary to strengthen these harvest rate calculation protocols.

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Currently, a severe shortage of wildlife professionals exists in Mexico in the government and academic sectors. Similarly, NGOs have a shortage of wildlife professionals. Ecology and evolutionary biology are the primary disciplines of most biologists in Mexico, and many people working on wildlife issues come from these disciplines and, therefore, must adapt their knowledge to be able to address Mexican wildlife management needs. Wildlife science is beginning to gain traction in Mexico. Historically, few publications or books on wildlife ecology were produced, but in the last 2 decades many books and papers, some of them with a high impact factor in Mexico and abroad, have been published. The Mexican community of wildlife biologists is still growing, and it needs much more attention, support, and collaboration within Mexico and outside to become truly established and to have a strong presence in the arena of wildlife management and conservation.

Democracy of Hunting Is Standard

In Mexico, all hunting is required to be conducted through a hunting outfitter, or Organizador Cinegético. This adds another step to the process and promotes monopolies for a few well-established, well-connected individuals. This greatly affects benefits coming from hunting, because outfitters act as middlemen, often renting UMAs for a fixed price and depleting game in those areas. The law has been clear about the need for outfitters, who are registered with the Secretary of Defense and Secretary of the Environment. Still, not enough outfitters are registered, so the process is dominated by a few.

Historically, wildlife in Mexico was a common resource, without any sort of governing authority, although some Aztec rulers issued regulations to protect certain species in certain areas for the benefit of the rulers themselves. But in 20th century Mexico, wildlife was acknowledged as a public good, owned by the nation. The first hunting law, dating from 1940, defined it as such. The 1952 updated hunting law and the current General Law of Wildlife (2000) also contemplate wildlife as a public good owned by the nation. This definition of wildlife broadly includes "all organisms living subjected to the processes of natural evolution and existing freely in their habitat," which obviously encompasses all animals and plants. All Mexicans are entitled by law to enjoy wildlife, but profiting from wildlife through hunting, wildlife watching, harvesting, or collecting for commercial purposes can be done only under the UMA.

Current law in Mexico defines wildlife as all plants and animals subjected to management by landowners through the UMA system. Once the landowner has proven that he or she has invested in habitat protection and improvement for the benefit of wildlife, the government (DGVS) assigns the landowner a harvest quota, in effect establishing a partnership with the nation. But if each of these steps is not carefully monitored, (e.g., if a landowner's investment in habitat protection is not correctly conducted and actually supervised) and if the harvest quota is not accurately calculated on real data or appropriately administered, a risk of depleting wildlife develops. In many situations, however, simply declaring a piece of land as a UMA determines that the habitat is not likely to be converted to agriculture or cattle production, which, at the very least, buys time for wildlife protection. Much monitoring, evaluation, and certification of UMAs are necessary before the program can be deemed successful for wildlife management.

Gun ownership in Mexico is regulated through the Ministry of Defense, which has jurisdiction over guns and ammunition. Only a handful of shops, strictly regulated by the Defense Ministry, provide ammunition that can be purchased. Importing a gun into Mexico requires Defense Ministry permits, coupled with a hunting license obtained through an outfitter. Despite this apparent control (which is rather strict in many instances, especially for large-caliber guns), .22-caliber rifles, .410 shotguns,

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handguns, revolvers, and automatic firearms of smaller calibers are common in rural areas of Mexico. Local people commonly carry their guns while working the fields, so much hunting happens on the fringes of regulation.

Mexican Habitat Considerations

As a megadiversity country, Mexico contains significant habitat diversity on a global scale. Some habitat models have been prepared for game species and many more for threatened and endangered species, but they have been prepared primarily for northern species. Although most habitat types have been severely depleted (notably the tropical dry and tropical rainforests and the cloud forest), some others (notably the Sonoran and Chihuahuan deserts) are less impacted. However, exotic invasive species are entering these deserts. Buffelgrass *(Pennisetum ciliare)* is pervasive in the Sonoran Desert with only limited pockets outside of it. The most severe threats to many species are habitat fragmentation and deforestation. With the advent of UMAs, the habitat in many regions is improving and remaining conserved, although wildlife has yet to recover fully. This effect, known as the "empty forest" (Redford 1992), threatens entire ecosystems if a solution is not implemented in the near future to secure habitat processes, such as forest regeneration, grazing, browsing, and seed dispersal.

Because of the definition of wildlife in the Mexican constitution, all taxa of plants and animals are included in all legislation and regulations pertaining to wildlife. In practice and in the context of the federal government, wildlife is generally referred to as vertebrates (primarily terrestrial), cacti, orchids, cycads, palms, and other similarly ecologically or economically important groups. Wildlife management of mammals per se is focused primarily on game species, although much research, management, recovery, and conservation actions are conducted on rodents, bats, primates, carnivores, and other groups. Management models exist for many species in many groups.

Public education about wildlife is very active in Mexico for specific taxa and particular objectives. Primarily in terms of sustainable development and preservation of ecosystem services, public education is mostly in the hands of the government, the academic sector, and, notably, NGOs. A few years ago, reintroduction of the Mexican wolf was thwarted because many landowners had no desire or awareness of the importance to have the wolf back in their lands (Norandi 2008). Local campaigns raise awareness and participation on the conservation of black bears, pronghorn, jaguars, bats, birds of many species, reptiles, and plants. However, public awareness related to game species, notably deer and collared peccary, is not common or strong. Some basic information on large mammals and birds is included in the free textbooks distributed in all elementary schools in Mexico by the office of the Secretary of Public Education.

Recommendations

1. Enhance the profile, the vision, and the potential that wildlife represents as a source of wealth for all Mexicans, both for contemplative, non-consumptive uses, and for consumptive uses such as hunting.

2. Strengthen the academic programs related to wildlife management across Mexico as an educational priority. Given the vast proportion of Mexico under the concept of UMAs, and the needs of these UMAs to have adequately trained wildlife professionals in charge of the management plans, all academic institutions should be preparing cadres of wildlife professionals at all levels. Only with a strong critical contingent of well-trained wildlife professionals as well as the rest of the elements (political commitment, adequate law enforcement, strong public awareness, involvement and support, and substantial improvement in funding) will the UMA system finally succeed and show its full potential.

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3. Continue to intensify and diversify the national, international, and inter-sectorial collaboration for wildlife. Some framework agreements already are in place, but more specific and practical implementation of these collaborative efforts and others can make the difference. International collaboration is a clear win-win situation if properly implemented, and it can open new opportunities to learn and improve conservation and management practices.

4. Increase collaboration, information sharing, and interjurisdictional agreements with Canada and the U.S.

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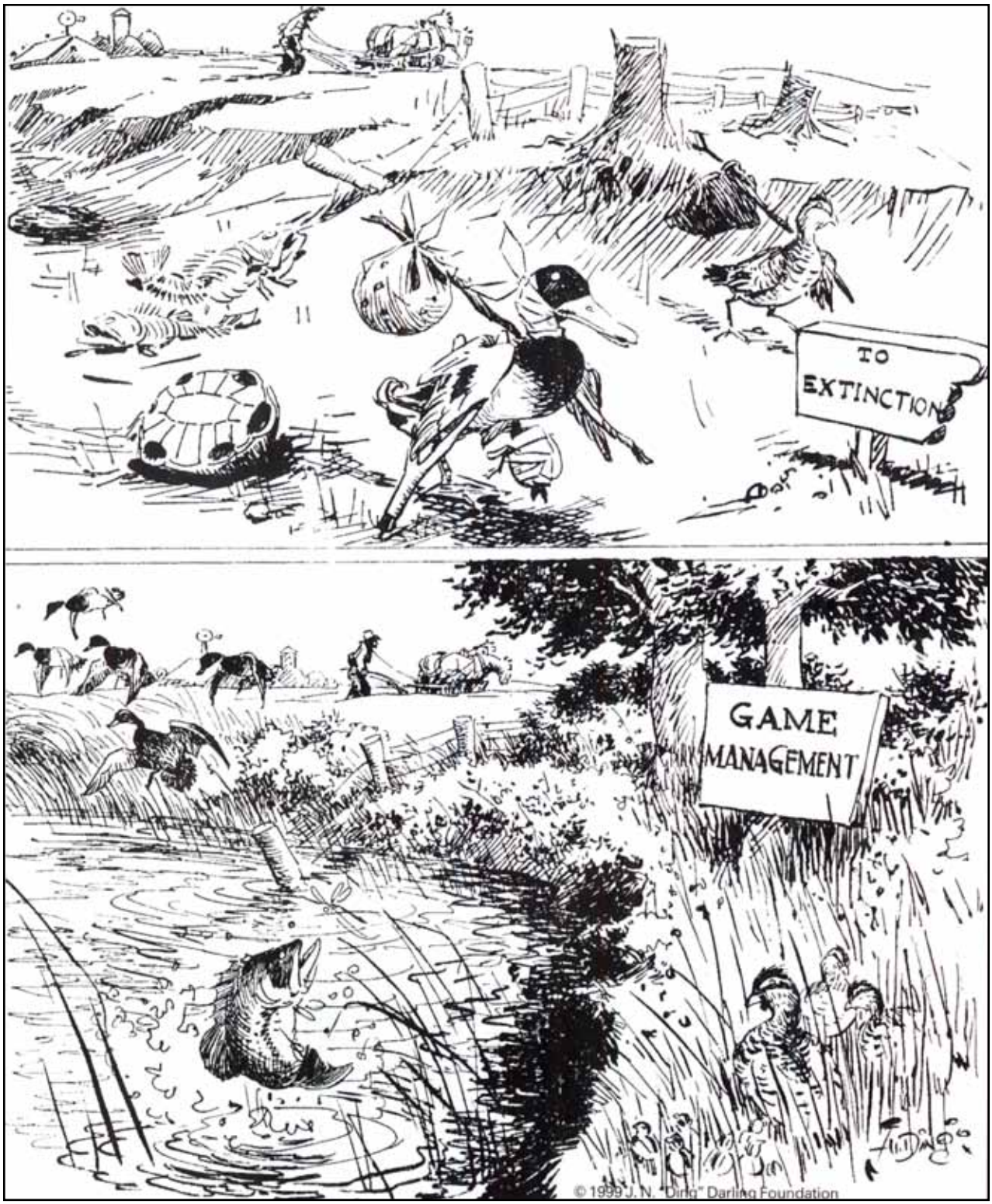

The cartoons of avid hunter and conservationist Jay "Ding" Darling spoke powerfully of the need for active game management to ensure the health of species and habitats. A Pulitzer Prize-winning cartoonist, Darling designed the first Federal Duck Stamp in 1934. Courtesy of the J. N. "Ding" Darling Foundation.

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Enshrining hunting as a foundation for conservation – the North American Model

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The hunter-conservationist movement of Canada and the USA arose in the latter decades of the nineteenth century. Many complex forces influenced its emergence as one of the great North American inventions: citizen activism for nature based principally upon sustainable use and vested interest – the *North American Model of Conservation*. Although unrestrained slaughter by commercial hunters had endangered North America's wildlife legacy, regulated hunting became the origin of the world's longest standing continental movement for wildlife protection, use and enhancement.

Keywords: *North American Model*; Hunting; Conservation; International

European man and wildlife in North America

The first organized European engagement with North American wildlife took place off the coasts of Newfoundland, at some time in the fifteenth century. After the island was discovered, ever greater flotillas gathered in spring to plough the coastal waters, fog enshrouded but virtually clogged with life. Wooden ships and iron men pursued a tradition of slaughter and abuse, leaving in their wake a trail of blood and extinction that altered forever one of the greatest wild abundances the world had ever known. Casting a long shadow, they defined the European view of the new Eden they had miraculously found. Seals, seabirds and cod fish, the flesh and oil of whales all poured into the reeking bellies of ships and ponderously moved eastward in autumn to the hungry nations of Europe, a model of seasonal migration that would exceed in wealth virtually any traffic before or since.

As the great cargoes headed east, the long glance of greed turned westward to the vast breadth of the North American continent and the wild resources of its unknown quarters. The fur trade evolved with all the frenzy of the whale and cod fisheries to seize profit from the lands of diverse races of people who had long relied on the wildlife abundance around them to support their cultures and populations. Europeans took by force or trickery what they desired and used unrestrained violence and virulent disease to ravish those who dared resist. Overcoming the local peoples (the first nations) that had harvested the North

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American landscape for untold generations, the fur trade made the first inroads to the continent's interior, opening it to a melange of speculators and marketers eager for riches.

What followed were breaking waves of citizen-conquerors moving ever west who saw wildlife and all natural resources as theirs by right of might and to which access was limited by two things only: human endurance and ingenuity. Wild resources were there for the taking, and handsome profits were made by supplying the eastern townships, eventually connected by the sinewy steel of the railroad to the ever-expanding frontiers of new abundance. With incredible speed and proficiency, these tidal surges of exploitation laid waste the wildlife capital of North America and brought to their knees the once proud and independent cultures that relied upon it. Unharnessed greed, ignorance and frontier realities made a heady brew and brought staggering costs and opportunities to the interlopers.

The conservation awakening

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While the speed of this debauchery outstripped the survival capacity of numerous wildlife species, its perverse scale was ultimately responsible for the emergence of a more-enlightened view. In particular, the grotesque slaughter of the bison, tied to the fate of the Great Plains Indian tribes, was well publicized in journals and heatedly discussed in public forums. Significant reactions helped ferment the view that perhaps there were limits to North America's wild abundance and that there was room for a collective sense of stewardship towards wild animals and the lands they depended upon. Perched precariously on the fault line of this debate were many of the iconic species we cherish in abundance today. Elk, mule deer, wild turkeys, wood ducks, pronghorn antelope, white-tailed deer – they and many other exploited species were likely to follow the bison. Had anything like an Endangered Species Act existed at that time, all of these animals would have been listed as endangered!

Slowly but surely, however, a primordial conservation philosophy was provoked by the reality of wildlife disappearing on such a massive geographic scale. This emergent sensibility was aroused further by expansive landscapes denuded of timber, favoured streams silted to suffocation, and a host of other environmental abuses. Incredibly, the runs of anadromous fish, once unbelievable in their fullness, were only a memory, and skies no longer darkened with passenger pigeons thundering overhead, tens of millions strong. Eventually, eyes could no longer be averted, minds no longer deluded. The great wild inexhaustibility of North America was disappearing.

The recognition of resource crisis helped amalgamate a revised sense of nationhood, both in the USA and in Canada. The citizen-conqueror was eventually replaced by the citizen-steward, a champion for rational use, even preservation when necessary. Initially, slow to take root, this movement was led by a rising class of hunters committed to democratic access to nature, the sustainable use of wildlife for personal rather than market purposes and a European standard of fair chase in hunting. Together these beliefs can be viewed as the first North American conservation ethic. Hunters had standards for the use of natural resources, even if no one else did. In the USA, hunting slaughter became conservation hunting – an example of American inventiveness. Canada's perceptive partnering on this conceptual journey was testimony not only to that country's vigorous engagement with the same tidal influences, but also a prescient sociopolitical departure from looking eastward to Britain for domestic policies.

The social and political movements for wildlife and sustainable use that were thus set in motion eventually coalesced into a systematic arrangement of conventions, policies and

laws that we recognize today as the *North American Model of Wildlife Conservation*. It took 300 years to come to fruition, but it was born from this clash of initial exploitation and eventual realism. The twin notions that North American wildlife was in endless supply and that citizens had a right to harvest all they could were replaced by a sustainable-use approach. Personal responsibility and natural limits became the cardinal precepts supporting a philosophy of resource use. Hunting for personal use was enshrined as the very basis for wildlife recovery, and the central citizen engagement with wildlife that has ensured social and political activism on its behalf.

Since its emergence in the latter part of the nineteenth century, the [formula] *framework* we now designate as the *North American Model* – first articulated by the conservation visionary Valerius Geist [1,2] – has been remarkably successful. It has not only restored and safeguarded wildlife populations, but has also promoted and safeguarded hunting. In addition, it has helped to develop an infrastructure for conservation that is among the most complex and effective in the world. Its scrutiny by domestic and, more recently, international audiences, is a consequence of both its success and the challenges it faces in the twenty-first century.

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Why the *North American Model* succeeded

Throughout its history, the *North American Model* has proven resilient to an enormous array of social change. In the last 100 years, North America has experienced great transformations, including human population size and distribution, the economy, land tenure and development, energy and other natural resource consumption, family structure, education levels and work force mobility. These have massively altered the rural fabric of virtually every region of the continent, removing a great majority of citizens from close and continuing contact with the natural world. Yet, the principles of North American conservation remain vigorous. These principles, which have collectively guided the *North American Model's* success for more than 100 years, warrant review.

Principles of the North American Model

Given the diversity of North American landscapes and regional cultures, it is inevitable that some variations in wildlife conservation approaches exist. Nevertheless, across the continent, the *Model* is guided by seven pragmatic principles [2], known as the *Seven Sisters for Conservation* [3,4]. Each of these is demonstrated by an array of policies, management prescriptions, legislative instructions and organizational diversity that collectively support open citizen access to wildlife as a common property resource. Although they range over a wide intellectual and sociopolitical arena, the following seven principles of regulated hunting and angling have been at the movement's heart since its inception.

Principle 1: maintain wildlife as a public trust resource

The most fundamental principle in the *North American Model* is the premise that wildlife is owned by no one but held in trust by government for the benefit of all citizens. This notion, applying to other resources in addition to wildlife, is termed the Public Trust Doctrine. Its application to wildlife specifically may be traced in North America to an 1842 US Supreme Court ruling by Chief Justice Roger B. Taney in the celebrated case of *Martin v. Waddell*, which denied a landowner's claim of exclusionary access to oysters on

certain mudflats on the Raritan River in New Jersey. The court held that it was the state, and not individuals, that held sovereignty over navigable water resources, including, in this case, oysters.

In Canada, the legal state ownership and responsibility for wildlife was never as emphatically declared by court decision as in the USA. Instead, Canada's approach emerged more expansively from the English tradition of Crown stewardship, specifically protecting huge tracts of unsettled and unclaimed land inhabited by wildlife and wild creatures as a food supply for its indigenous peoples [5]. While travelling slightly different paths, the USA and Canada were eventually united in their application of public trust stewardship for wildlife and in all remaining principles of the *North American Model*.

The Public Trust Doctrine emerges from case law. There is no single statute; there is no codification. Instead, many laws enacted by states or provinces uphold the premise of public resource ownership. These laws assert the state or province's own property rights towards wildlife. These qualities have far-reaching implications, such as ensuring that all citizens have equal rights towards wildlife resources, that no citizen can have priority of ownership and that no single legislature can repeal court decisions. Furthermore, the ensuing principles (below) of Elimination of Markets in Dead Wildlife, Allocation of Wildlife by Law and the Democracy of Hunting manifestly depend upon the Public Trust Doctrine, making it the philosophical and legal foundation of the North American approach to conservation.

The implications of the *Public Trust Doctrine* are many. Not only does it place great restriction on the privatization of wildlife, it also engenders a system of paid professionals who manage, for the public good and in a coordinated manner, the wildlife resources of Canada and the USA. Under the *North American Model*, ownership of wildlife is not devolved to individuals, landowners or occupiers of land; it is the public's resource. Nevertheless, the principle of public ownership of wildlife is increasingly challenged as private land initiatives often lead to arguments by the landowners themselves to have legal ownership of the wildlife on their property assigned to them.

Principle 2: prohibit deleterious commerce in dead wildlife products

The scale of commercial exploitation throughout the 1800s threatened all North American wildlife of any economic value. Even after game laws were developed, the financial incentives for marketing furs, feathers and other products from dead wildlife remained because the trade was vast and highly lucrative. Thus, the decision to end commercial traffic in dead wildlife was neither easy to conceive nor simple to enforce. This radical assault on the freewheeling slaughter of wildlife came too late for species such as the passenger pigeon, heath hen and Carolina parakeet, but it pulled numerous others back from the brink of extinction.

The era of unrestrained taking of wildlife to supply markets did not end suddenly but was drawn to a close by the collective actions of regional and national legislation that reflected public agitation on behalf of the new conservation ethos. These actions began slowly in the mid-1800s, most prominently over issues within local jurisdictions. Because dead wildlife often supplied distant markets, however, the closure of commercial exploitation required legislation and enforcement at a continental scale. Numerous individuals and organizations played important roles in this developing process, but it was not until the USA passed the Lacey Act of 1900 – which prohibited the transport of illegally taken wildlife across state borders – that North America had federal legislation to curb illicit traffic in wildlife products.

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Interestingly, one of the primary targets of the Lacey Act was the illicit trade in bird plumage for the millinery trade. This feathered emphasis helped to make a partnership between bird protectionists and the new class of American hunters known as 'sportsmen'. These groups combined their conservation efforts to achieve real progress for wildlife protection. With federal legislation achieved, they saw real momentum in their new movement for wildlife conservation and helped solidify one of the greatest original forces in the *North American Model*, that of philosophical inclusivity among disparate groups. Furthermore, this emphasis on avian markets pointed to an issue that would emerge as a core principle of the *Model:* the requirement to treat migratory wildlife as an international resource.

The fur trade is often raised as an obvious contravention of the prohibition on marketing dead wildlife in North America. The practice of taking and selling wild fur was never specifically prohibited, probably because the labour and skill-intensive activity of trapping did not endanger wildlife species to the same extent as the mass killing associated with market hunting [6]. The focus of this principle was to eliminate incentives that elicited *excessive* taking of wildlife, not to eliminate takings per se. Indeed, some other lesser exceptions to the rule also exist (i.e. game meat may be sold for consumption under tightly controlled circumstances). Nevertheless, the end of widespread marketing of dead wildlife remains a dominant principle in the *Model*. The significance of this cannot be exaggerated. In terms of colonial history and long-held frontier attitudes towards wildlife, the suffocation of markets for dead wildlife changed the relationship between people and wildlife in North America. While its origins lay in the exhortations of all concerned citizens, confident now that wildlife indeed belonged to them, hunters and anglers were especially engaged, gaining their voice through publications and hunting club forums [7]. Faced with the disappearance of wildlife through mass killing incentives, hunters and anglers felt they had the most to lose.

Principle 3: allocate wildlife democratically and by law

It bears repeating that despite the drive to eliminate wildlife markets, there was no intention to eliminate wildlife use. Indeed, the intention was just the opposite. This is perhaps the most profound subtlety in the *North American Model*, testifying to the genius of its early proponents. They faced the prospect that hunting would eliminate their quarries. Instead of supporting an end to hunting, however, they *enshrined hunting* as the basis for wildlife recovery, discriminating between hunting for profit and hunting for personal use and recreation. The objective became the pursuit of the animal and a profound engagement with nature, not the pursuit of profit. This conceptualization emerged from the haunting silence of landscapes that had once thundered and thrashed with wildlife abundance, graveyards now that extended by the late 1880s to the vast grasslands of the continental west.

This approach to wildlife recovery inspired *calibration* and led away from preservationist approaches, but it clearly raised the question of *how* to allocate wildlife and ensure its reasonable use. The answer was legislation that would safeguard against the rise of elites and excesses (commercial or otherwise), and give every citizen – hunters and non-hunters alike – equal say and access to wildlife resources. Reflecting the *Public Trust Doctrine*, laws to support sustainable use also safeguarded citizens' rights, assisted wildlife directly and were crucial to developing an ethic for the conservation of wildlife in North America.

Having their interests secured by law, North Americans developed an extraordinary array of non-governmental foundations, societies, clubs, and conservancies to advocate for

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wildlife, conserve habitat and safeguard wildlife experiences, including hunting and angling. Collectively, these organizations have raised billions of dollars in support of wildlife and sustainable use programmes. Some have been the primary mechanisms for wildlife reintroductions on a continental basis. At the individual level, the legal framework for wildlife use and access has inspired broad-based financial and political support that has no equal. The equitability of North American wildlife allocation is the mortar that binds the entire *North American Model*. The citizens truly understand that wildlife is theirs, de facto and de jure. Neither land ownership, nor wealth, nor class position plays a role in the public's proprietorship, as the law decides otherwise.

It is amazing to consider that slaughter could so effectively lead to protection, lawlessness to legal safeguards and excess to moderation. We must view the rise of a conservation ethos as symbolic of civilization and progress, and its legal prescription as a hallmark of nationhood. The nations of Canada and the USA became conjoined in the world's one true continental framework for wildlife conservation, a priceless gift of citizenship. The *Public Trust Doctrine* articulates their sense of rightful inheritance; the laws their sense of freedom and justice.

Still, all is not secure. Many threats to the public trust doctrine have emerged. These include the following: the growing industry associated with game ranching and the sale of wildlife by private landowners; unequal access to wildlife because of private property rights; and escalating costs for many hunting opportunities.

Principle 4: ensure that wildlife use is for legitimate purpose

Although laws could govern who might access wildlife, there also had to be guidelines on its appropriate use. The incredible economic value of wild animals was widely appreciated, as was the dependence on it of many rural and native peoples. Furthermore, the origins of the *Model* made devising specific guidelines for how and when wildlife might be taken an absolute necessity. Sentiment alone could not succeed; hard rationality was also required both to safeguard wildlife populations and to ensure their sustainable use. The challenge was to maximize citizen access and opportunity, while at the same time securing the wealth that wildlife embodied.

Both passion and reason appeared abundantly in the Canadian [5] and American [8] literature on such issues, and there was political action at the highest level. The Canadian Prime Minister Sir Wilfred Laurier and the USA President Theodore Roosevelt were directly and influentially involved. The Canadian Commission for the Conservation of Natural Resources, founded in 1909, and the American National Conservation Commission of 1908 were vibrant testimony to the political priority that conservation had attained. The North American Conservation Conference convened by President Roosevelt at the White House in 1909 and attended by Canadian and American colleagues powerfully illustrated the continental dimensions of the debate. No gathering on wildlife conservation of such stature has been held since.

While these endeavours helped formulate a wide array of legal and policy directives, the issue of wildlife use was very much at the centre of things and had been since the rise of market hunting. Eventually, the legitimate taking of animals in North America came to mean killing for food and fur, self-defence and property protection. Notably, all these specifications help tackle the issue of wastage of animals, something that has been central to North American hunting policy and law. The image of thousands of bison carcasses rotting in the sun has cast a long shadow over the conscience of North Americans. Today, perhaps

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no breach of ethics in hunting is more despised than the wanton killing of an animal and the wastage of its meat.

This principle of the *North American Model* has also eliminated other frivolous or wasteful practices, such as the killing of shore and wading birds for their feathers (to supply the fashion industry), and elk for their canine teeth (ivory for the jewellery market). It has led to the emphasis on harvesting wild animals as a source of high-quality meat that is a signature motivation of hunting in North America.

Principle 5: preserve hunting opportunity for all

In addition to the general application of law to wildlife use and disposition, the *North American Model* emphasizes the issue of hunting. This is natural as hunters and anglers were the leading advocates for conservation reform. While the North American hunting movement borrowed from European experience in matters of 'fair chase' and 'sport' terminology, its support for every person's access to and responsibility for wildlife was distinctly New World and revolutionary. Hunting and the ruling class were no longer exclusively conjoined. Everyone had a right and a responsibility for wildlife.

This democratic principle has resulted in the participation by hunters from all walks of life in issues that not only affect their cherished activities, but the sustainability of wildlife for its own sake. The result is that hunters and anglers have great political influence in North America, and especially in the USA. The *North American Model* has ensured that hunters are a force to be reckoned with, despite representing only about 6 per cent of the North American population (13.7 million hunters in US in 2011). Hunting enjoys widespread support from the general public in North America. A recent survey in the USA, for example, shows that 77.6 per cent of citizens support legal hunting [9], an increase in four percentage points from 1995.

While this principle of the *Model* might seem preferential by emphasizing a minority of the citizenry, there has never been an attempt to restrict the general public's access to and enjoyment of wildlife. On the contrary, that was encouraged. Thus, while hunting is clearly a critical component of the *North American Model's* history and success, it is but one of many activities concerning wildlife that are encouraged, regulated and protected. All citizens interact with wildlife within a framework prescribed by a network of policies and laws, yet no other activity in nature is as closely monitored, regulated and scrutinized as hunting.

Principle 6: recognize and manage wildlife as an international resource

The special status of migratory wildlife was recognized early in North America, but once again, it was hard reality that awakened the conservation imperative [7]. The drastic decline in fur seal populations on the Pribilof Islands as a result of pelagic and land based sealing, and the relatively late decline in waterfowl as Canadian and American railroads invaded the great prairie nurseries and brought spring duck shooters in droves, led to collaborations in conservation never before witnessed. The 1911 Fur Seal Treaty and the Migratory Bird Protection Act of 1916 provided the legal frameworks to ensure consistency in Canadian and American approaches to the conservation of these species. Russia and Japan were also signatories to the Fur Seal Treaty.

These treaties enshrined in law the notion that wildlife knows no borders, but that its significance as an international resource is such that the highest of legal protocols are

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warranted in its management and protection. The inclusion of wildlife in treaty law was a significant development showing that North American conservation had matured well beyond ensuring equal access to wildlife and the prescription of hunting privileges and practices. The conservation of wild animals had become the core ethic of the movement, and this responsibility was of national significance, a matter of national pride.

The principle of trans-boundary responsibility and coordinated management of wildlife is ingrained in the *North American Model* and is responsible for a dizzying array of ancillary policies, committees, colloquiums, strategic approaches and publications in both Canada and the USA. This active networking helps ensure that governments at all levels remain cognizant of their treaty responsibilities.

The cooperation achieved through these agreements also indicates the sinewy strength of the *Model*. In recent years, under the North American Waterfowl Management Plan, millions of dollars derived from hunting activity in the USA are diverted to conservation programmes for waterfowl enhancement in Canada! Thus, provincial and state waterfowl managers not only share their expertise and talents and coordinate their policies, but funds are actually transferred between the *Model's* founding nations to where the money is needed, regardless of where it is generated. Such arrangements are only possible where mutual trust and commitment exist. The long success of the *North American Model* has made such conditions secure. Next to its powerful inclusivity, perhaps the second most important characteristic of the *Model* is the trust in which it is held.

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Principle 7: ensure that science is the basis for conservation policy

During the nineteenth century, public interest in natural history and science flourished in North America, as it did in many European nations. The great explorations to the Arctic and Pacific opened a wondrous window, revealing unknown landscapes and creatures that fascinated the new North Americans. In the early- to mid-1800s, the writings of James Fenimore Cooper, John James Audubon, and other notable hunter-naturalists became increasingly popular in both Canada and the USA, where the image of frontiersman as knowledgeable naturalist seeped into the collective psyche. Mid-century movements – such as the Hudson River School of visual art and American Transcendentalism, inspiring the writings of Emerson and Thoreau – strengthened this enthusiasm. Knowledge of the natural world became a currency of broad exchange.

Thus, it was not surprising that early in the *North American Model*'s evolution, science was identified as crucial to safeguarding wildlife and ensuring the sustainable use of it. Indeed, this became apparent in natural resource matters generally, including agriculture, forestry and fishery issues. President Theodore Roosevelt, an icon of North American conservation and a keen observer of wildlife throughout his life, helped this process immeasurably. Roosevelt's emphasis on empirical knowledge gained through direct field experience, and his admiration for those who pursued such efforts, has reverberated to the present day. While hardly alone in this appreciation, Roosevelt as USA President was in a position to do something about it. He was also deeply committed personally to the idea of science-based conservation. Indeed, the premise that science should form the basis of wildlife conservation and management is known as the *Roosevelt Doctrine*.

Still, the conservation movement of late-nineteenth and early-twentieth century North America remained largely ignorant of the ecological processes that affected wildlife abundance. Passion and knowledge were, therefore, often available in unequal supply and marched sometimes to disastrous results, albeit with good intentions. The famed case of

'population engineering' to 'protect' mule deer on Arizona's Kaibab Plateau provides a powerful example [7]. President Roosevelt in 1906 banned deer hunting in the region because he was concerned that the mule deer population was in decline. The following year, the Forest Service began killing thousands of coyotes, wolves, bobcats and other natural predators. These simple 'solutions' of eliminating hunting and natural predators had what are now predictable results. The mule deer population exploded and severely overgrazed its range. Animals began to starve, sicken and die by the tens of thousands, their emaciated carcasses a grim testimony to simplicity's wager in a world of evolving odds.

Thus, although Roosevelt and others articulated the vision of science-based wildlife management in the late 1800s, it was not until the 1930s and the writings of Aldo Leopold that this principle of the *Model* was effectively exercised for wildlife in a coordinated way [10]. Quickly thereafter, wildlife science became essential to the *North American Model*, not only in concept but in practice as well. The profession of wildlife scientist and the specific discipline of wildlife management were thus born. This coordinated application of science to North American wildlife programmes is an enduring legacy of the *Model*. It is a safeguard against the politicization of wildlife policy and has generated an incredible knowledge base upon which to evaluate best practices in conservation.

The diverse academics and officials who secure this knowledge require massive financial commitment to wildlife research. Such funding is another success of the *Model*, but its appropriation requires constant attention and encouragement. Furthermore, the communication of scientific knowledge remains a challenge. Nevertheless, wildlife science remains an integral and enduring principle of the *North American Model*.

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Achievements of the North American approach

Collectively, the seven principles of the *North American Model* have created one of the great achievements in Canadian and American societies. They have not only helped recover and restore a wild abundance to the continent, but developed a stable, well-funded and well-supported conservation programme that has been effectively managing wildlife for over a century. Along the way they helped create an astounding economy that delivers significant employment and capital while still protecting the resource. Even further, these principles called into being a new profession responsible for the science and management of wildlife populations and their habitats and gave rise to institutions of learning and programmes of knowledge previously unknown. For instance, a recent Wildlife Society survey of wildlife education in North America found that university and college wildlife programmes exist in virtually every state and province, with specialized degree programmes in wildlife biology and management at no fewer than 500 schools [11].

The *North American Model* has also spawned international treaties, systems of land protection, incentives to landowners to safeguard wildlife and many non-profit entities that focus on every aspect of conservation and exercise great energy and acumen in the complex world of conservation politics. Efforts on behalf of wildlife conservation have included significant fundraising in both the public and private sectors, and a proliferation of monetary strategies that include taxation and philanthropic donations of immense scale and variety. All of this is devoted to protecting an incredible range of biological diversity, from songbirds to grizzly bears, pelicans to panthers. So much of this achievement may be

traced to the efforts of a continental movement by hunters (and anglers) to safeguard the wild species they cherish and pursue.

North American Model principles and international conservation efforts

Given these conservation achievements, it is not surprising that certain aspects of the *North American Model* have appeared in other parts of the world. From national parks and wilderness areas to professional civil service branches responsible for wildlife conservation, there are replicates of individual components of the *Model* now in many countries in Africa and Asia. These efforts, of course, reflect political, economic and cultural contexts that differ widely from North America and from one another. Obviously, no entire duplication of the *Model* has occurred. For conservation, the emphasis must be to borrow the best of human experimentation for wildlife's benefit. One size does not fit all, even if motivations are identical.

While today the challenges to the *North American Model* are often the focus of conservation discussions [4], it is important to recognize that both within North America and around the world the *Model* is acknowledged as having brought to fruition a programme of incentive-based conservation that relies on recreational hunting to achieve it goals. For the future of hunting, this is an incredibly important realization. It reflects what hunters, including those like Theodore Roosevelt and Aldo Leopold, had long maintained – that lawful hunters and their personal engagements with wildlife could be a significant force for conservation. In accepting this, a growing number of international entities have adopted hunting within a 'sustainable use' concept that the founders of North American conservation conceived over a century ago, under the term 'wise use'.

Conceptually, the international sustainable use movement has strongly endorsed democratic, incentive-based engagement as essential to conservation success, a notion at great odds with many colonialist approaches to wildlife use in arenas such as Africa and Asia – and, indeed, North America! Conspicuously, this modern idea of democratic engagement was the foundation of the North American approach. Eventually, however, international social and political efforts have coalesced into some recognizable pattern of conservation application and, often with recreational hunting within its ranks. The birth of the *North American Model* was itself such a process of eventual emergence, with hunting the very force that led to its improbable rise.

Some North American contributions to international efforts

In North America, the energy for conservation was supported in part by the growth in domestic hunter numbers, particularly big game hunters, which followed the continental recovery of elk, deer, pronghorn and other game species. These hunter numbers increased hugely after the 1950s, as wealth and leisure time increased and more hunters and anglers could travel out-of-state and out of the country to engage in their traditional activities. This growth in hunter numbers spilled over into Africa, Asia and around the world, where tourism hunting expenditures helped provide needed revenue for management infrastructure and incentives for wildlife conservation in developing regions and countries.

In addition, the international acceptance of a user-pay (purchase of licenses, tags, and permits and the payment of excise taxes on equipment), incentive-based conservation

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system was often fostered by professionals educated in wildlife management at American and Canadian universities, programmes of study that directly descended from the *Model's early* search for scientific foundations. The experience of foreign students with North American wildlife abundance and conservation principles often contrasted with situations in their own countries, where they sought to improve wildlife programmes and local economies while building on local knowledge and traditions. Meanwhile, the US Fish and Wildlife Extension Service began sharing its expertise overseas, and American NGOs began putting hunting tourism dollars to work on practical conservation efforts in various African countries. By the 1980s, the United States Agency for International Development had began funding programmes such as the Communal Areas Management Programme for Indigenous Resources in Zimbabwe, the Living in a Finite Environment Project in Namibia, and the Administrative Management Design programme in Zambia, all of which use hunting tourism as a means of assisting indigenous communities and local economies.

In the early 1990s, the concept of 'sustainable use' gained widespread acceptance. Soon international hunting and successful predecessor systems such as that in North America were seen as proven examples of a user-pay approach that both conserved the wildlife resource and was self-sustaining. Nearly, a century strong, the *Model* itself had witnessed massive human population increases and social change, yet continued to conserve wildlife and foster gargantuan economies directly dependant on the resource. Such achievement and longevity were obviously relevant to a world in search of conservation solutions.

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Conclusions

While appearing paradoxical to some, and unacceptable to others, the integration of hunting within conservation practices has been recognized internationally as a successful approach under specific circumstances, offering realistic long-term solutions to wildlife depletion and landscape impoverishment.

In North America, hunting for personal engagement with and use of wildlife emerged over a century ago as an alternative to widespread depletions caused by market hunting and corporate interests. Over this long period of time, encompassing great social and ecological change, the North American hunting community has been a primary supporter of a lawfully based and sustainable approach to wildlife use and conservation known as the *North American Model*. This approach has seen the return of many hunted species from the brink of extinction.

While not necessarily transferable to other jurisdictions, this continental approach to conservation through sustainable use remains an important example to both the citizens of North American and the world at large. Conservation can be effective and hunting can play an important role in wildlife recovery and protection.

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NORTH AMERICAN WILDLIFE POLICY AND LAW

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BOONE AND CROCKETT CLUB
Missoula, Montana

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90

North American Wildlife Policy and Law

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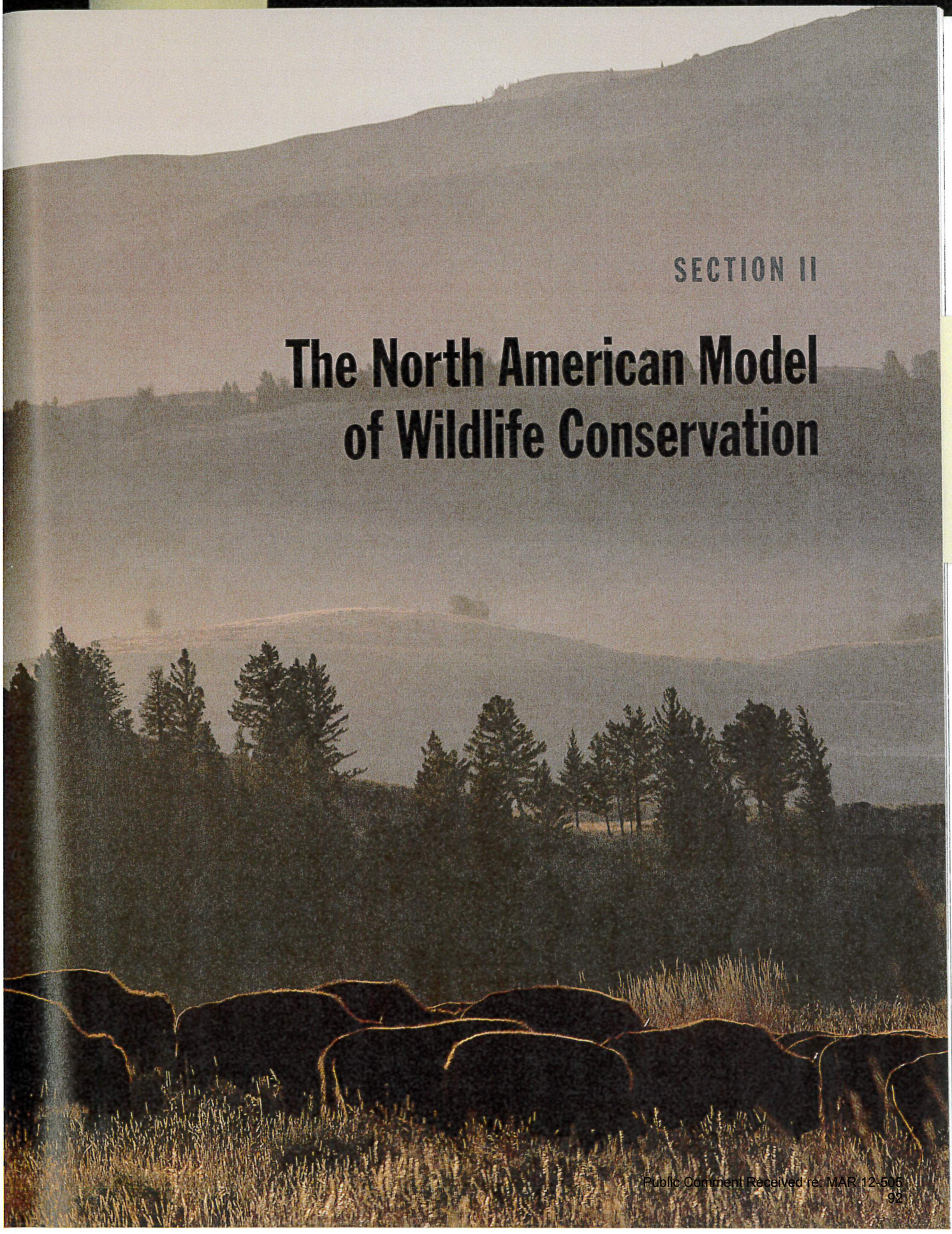

SECTION II

The North American Model of Wildlife Conservation

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CHAPTER 13

The North American Model of Wildlife Conservation and the Public Trust Doctrine

John F. Organ

The North American Model of Wildlife Conservation (Model) is a set of principles that in their collective application distinguish wildlife conservation in the United States and Canada from other forms worldwide (Organ et al. 2012). The term "Model" is used here as an example or representation and not in the sense of a predictor or formula.

The Model is founded on the Public Trust Doctrine (PTD), a common law derived from an 1842 United States Supreme Court ruling in *Martin v. Waddell* (Bean 1983). The PTD ascribes ownership of wildlife to states to hold in trust for the benefit of current and future generations, except when certain taxa, species, or populations come under the jurisdiction of the federal government by virtue of rights reserved by the United States Constitution (Bean 1983). The PTD is the keystone principle of the Model (Geist and Organ 2004).

The Model is based on seven principles (Organ et al. 2012), as follows: 1) wildlife resources are a public trust; 2) markets for game are eliminated; 3) allocation of wildlife is by law; 4) wildlife can only be killed for a legitimate purpose; 5) wildlife is considered an international resource; 6) science is the proper tool to discharge wildlife policy; 7) democracy of hunting is standard.

This chapter describes how the Model concept arose, details the seven principles, discusses challenges to the Model, and provides perspectives on why wildlife biologists should understand it and how it should be interpreted. The PTD receives emphasis as the wellspring for the other six principles.

Origin of the North American Model Concept

The Model concept was created by Valerius Geist during his tenure as chair of the Faculty of Environmental Design at the University of Calgary (Organ et al. 2012). Geist's extensive global experience as a wildlife scientist, combined with his Russian, German, and Canadian upbringing and citizenship, gave him firsthand knowledge of various continental and national conservation programs and policies. The Model concept evolved in Geist's thinking and writing over many years. An early iteration of the concept described public ownership of wildlife and three additional policies as the basis for what Geist referred to as the "North American system of wildlife management." Geist stated: "The North American system of wildlife management is unique in that, with few exceptions, it makes the public both *de jure* and *de facto* owner of the wildlife resources. . . . North America's wildlife conservation is based on three primary policies that support the superstructure of laws, regulations, beliefs, and attitudes pertaining to conservation. These policies are 1) the *absence* of a market in the meat, parts, and products of game animals, shorebirds and song birds; 2) the allocation of the material benefits of wildlife by law rather than by the marketplace, birthright, land ownership, or social position; and 3) the prohibition on frivolous killing of wildlife" (Geist 1988:16). To public ownership and these three principles Geist (1995) later added a fifth principle under the title "North American policies of wildlife conservation"—wildlife is an international resource to be managed cooperatively by sovereign states. A sixth principle—"science is a proper tool for discharging management responsibilities"—was added by Geist (2000*a*:21) in a subsequent paper on conservation successes. Geist (1995) named science and an integrated approach (foreshadowing ecosystem management) as important foundations for natural resource polices, but he thought those conditions were only partially realized at that time. The first

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paper to formally refer to these principles as the North American model of wildlife conservation (Geist et al. 2001:179) added as the seventh principle the "democracy of hunting." Further development of the Model concept and seven principles is found in the writings of Geist (2006), Organ et al. (2012, 2013), Mahoney (2013), and Weir and Mahoney (2015).

The Model's Seven Principles

The Model's seven foundational principles collectively support the superstructure of laws, regulations, beliefs, and attitudes in a manner that distinguishes conservation in the United States and Canada from other forms worldwide (Geist et al. 2001, Organ et al. 2012). Readers should note that these principles, shared by the United States and Canada, do not represent the full spectrum of conservation policies and beliefs that have evolved in North America since the mid-nineteenth century. They do represent the legal and philosophical foundation for the unique American and Canadian programs and accomplishments realized since the inception of the conservation movement (Geist 1995, 2006; Trefethen 1975). Critics may question why certain aspects of conservation, such as funding and habitat conservation measures, are not explicitly included. Geist (1995, 2006) characterized these as successes emanating from the core principles as opposed to being principles on their own. Conservation funding in the United States is based on a user-pay mechanism whereby hunters fund conservation programs through license fees and excise taxes (Chapter 16). Canada has a different funding approach. Geist (1995) argued that funding should be seen as an achievement resulting from the application of the seven principles, which give people access to abundant wildlife and encourage them to develop a vested interest in wildlife's future.

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As with funding, there is no universal legal foundation for land conservation in either the United States or Canada. Government programs and mechanisms in the United States include limited funding through the Land and Water Conservation Fund; federal systems such as national parks, national forests, and national wildlife refuges; and similar programs at the state level. Canada's conservation framework includes national wildlife areas, national parks, migratory bird sanctuaries as well as similar provincial programs. Private lands conservation in both countries has accelerated in recent years, and its contributions are significant (Mahoney et al. 2015). Yet land conservation, unlike public ownership of wildlife, is neither common law nor enshrined in international treaties as are protections for migratory wildlife and endangered species. Between 1982 and 1997 more than 10 million ha (24.7 million ac) of open land were developed in the United States (Brown et al. 2005). This loss rate shows that Aldo Leopold's admonition, "We shall achieve conservation when and only when the destructive use of land becomes unethical—punishable by social ostracism," has not been realized (Leopold 1943:1). In Geist's (2006) view, the conservation networks of public and private habitat that exist across North America are a success of the Model. In other words, land conservation is implicit within the Model but has not received societal elevation to the stature of a principle.

Principle 1: Wildlife resources are a public trust

Public ownership of wildlife provides legal grounding for federal, provincial, and state wildlife agencies. Public ownership of wildlife in Canada became established in case law stemming from public access disputes (Blumm and Guthrie 2012). The common-law basis in the United States, the PTD, resulted from a Supreme Court decision in 1842 that declared certain resources could not be taken into private ownership (*Martin v. Waddell* [1842], Batcheller et al. 2010). In this Supreme Court case a landowner, William C.H. Waddell, claimed exclusive rights to oysters on certain mudflats in New Jersey (Bean 1983, Organ and Batcheller 2009). Chief Justice Roger Taney reviewed Waddell's claim that his exclusive rights over the land and water derived from grants to his ancestor, the Duke of York, in 1664 and 1674 from the duke's brother, King Charles II of England. This review led Justice Taney to pose the question, what right did the king have to grant ownership of resources for private use? Taney began his research with the Magna Carta, determining that English policy since that charter has been to carefully preserve the "common right of piscary" (*Martin v. Waddell*). The Magna Carta, granted by King John in 1215, was drawn from Roman law first written as the Institutes of Justinian in AD 529 (Adams 1993); these in turn were based upon the

second-century Institutes and Journal of Gaius, who codified the natural law of Greek philosophers (Slade et al.1977).

The complex roots of the PTD in Roman law were analyzed by Joseph Sax, preeminent scholar of the PTD (Sax 1970, 1999). Roman civil law was adopted in substance by the English after the Magna Carta (Slade et al. 1977). English common law, like Roman law, recognized special kinds of property. But whereas Roman law recognized ownerless things (*res nullius*), English common law disliked ownerless things and placed the public resources, including wildlife, in the king's ownership (Horner 2000) but not for his private use. The king was a trustee, owning certain properties as representative of the nation and in trust (Sax 1999).

English law applied in the American colonies; yet after independence and the formation of the United States, there was no king to be the trustee. Trustee status was eventually ascribed to the states in *Martin v. Waddell.*

Sax (1999) described key aspects of the public trust, including his characterization of the PTD as common law that has developed over time through case judgments. Each state and province has its own unique version as it relates to property law. But in all the state and provincial variations, wildlife is property owned by the government and the public trust is a public right. Government holds wildlife in trust for the benefit of the public, which needs no special status to be a beneficiary.

The original applications of the PTD were for navigation, fishing, and commerce. In 1896 wildlife became firmly established in law as a public trust resource of the states in *Geer v. Connecticut* (Horner 2000). In its statement, the court made the idea of wildlife as public trust resources a distinctly American concept:

> Whilst the fundamental principles upon which the common property in game rests have undergone no change, the development of free institutions has lead [*sic*] to the recognition of the fact that the power or control lodged in the State, resulting from the common ownership, is to be exercised, like all other powers of government, as a trust for the benefit of all people, and not as a prerogative for the advantage of the government, as distinct from the people, or for the benefit of private individuals as distinguished from the public. (161 U.S. 519)

In the United States, trustee status of the states is transferred to the federal government when wildlife falls under jurisdiction of the United States Constitution. Key constitutional authorities in this regard are the supremacy clause (granting federal treaty-making power), the commerce clause, and the property clause. These federal authorities over wildlife were acknowledged by Chief Justice Taney in *Martin v. Waddell* in 1842 when he wrote that the powers assumed by the states were "subject only to the rights since surrendered by the Constitution to the general government" (41 U.S. 367).

Batcheller et al. (2010) evaluated the status of the PTD in the United States and Canada. The PTD in the United States is strongly based in statutory and case law, especially as applied to navigable waterways, but more recently it has been applied to natural resources more broadly, including wildlife. Case law recognizing wildlife as a public trust resource is lacking at the state level. Many states use either explicit or implicit statutory language rather than case law to confer public trust status to wildlife resources. Batcheller et al. (2010:22) concluded that "bringing wildlife into the Public Trust Doctrine through statutory measures appears to be the best way to accomplish the goal of extending the Public Trust Doctrine in this area." In Canada about half the provinces and territories have language on the public ownership of wildlife in their statutes (Batcheller et al. 2010). Blumm and Guthrie (2012) provided an overview of the development of the PTD in Canada.

PRINCIPLE 1
Wildlife resources are a public trust

PRINCIPLE 2
Markets for game are eliminated

PRINCIPLE 3
Allocation of wildlife is by law

PRINCIPLE 4
Wildlife can only be killed for a legitimate purpose

PRINCIPLE 5
Wildlife is considered an international resource

PRINCIPLE 6
Science is the proper tool to discharge wildlife policy

PRINCIPLE 7
Democracy of hunting is standard

Organ and Batcheller (2009) identified threats to public ownership of wildlife, and Batcheller et al. (2010) provided model statutory language that would give an unequivocal legal underpinning to strengthen the PTD for wildlife.

Geist (1995) framed efforts to secure private ownership of wildlife to the legal concept of allodial rights. Allodial rights are the absolute ownership of

real property by the people, as opposed to a sovereign or higher authority (Roberts 2010). Allodial rights have origins in the Old Testament and Germanic common law and were applied by Thomas Jefferson as a legal precedent to allow settlement of western unoccupied lands by citizens, who would otherwise be prevented from doing so by virtue of lands being owned by the sovereign (Geist 1995). This has become a legal basis for laws pertaining to real property such as land (Roberts 2010), but wildlife, under the PTD is considered trust property (Organ and Batcheller 2009).

The Public Trust Doctrine ascribes ownership of wildlife to states to hold in trust for the benefit of current and future generations...

Smith (2011:1) described the appropriate role of state wildlife agency personnel as trust managers who monitor and manage the corpus of the trust to attain goals established by the trustees (legislators, commissioners, governors) and beneficiaries (the public). Organ et al. (2014) identified six public trust principles that wildlife trustees should adhere to: prudence, risk aversion, loyalty to beneficiaries, corpus protection, applied expertise, and adaptability.

Principle 2: Markets for game are eliminated

Geist (1988) provided an extensive review of the philosophical and practical basis for this principle. Organ et al. (2012) provided a detailed overview of its historical development and current status. In short, unregulated market hunting caused the loss and near extinction of many species; these included ungulates harvested for meat and hide, furbearers taken for pelts, and migratory birds killed for food and the millinery trade (Trefethen 1975). Concerns over the level of impact led to federal and state laws curtailing and eliminating market hunting and poaching. Examples of these protective laws include the Yellowstone National Park Protection Act (1894), the Lacey Act (1900), the Migratory Bird Treaty Act (1918), and the Adirondack Deer Law (1897) (Sanger 1897, Reiger 1975, Trefethen 1975, Organ et al. 1998).

These changes were driven by the essential notion that markets based on live free-ranging wildlife (i.e., activities such as fair chase hunting and wildlife viewing) tend to drive production of live wildlife, whereas markets for meat and other products drive production of dead wildlife (Geist et al. 2001). Prohibiting wildlife trafficking took value away from dead wildlife. At the same time, it allowed hunting of living wildlife through inefficient means (e.g., fair chase hunting), and this stimulated population increases and expansion, with management funded by the users (Geist 1988).

Furbearers are the exception in that legal markets have been sanctioned. This exception is based on the premise that the continental fur market is highly regulated and serves conservation purposes (Organ et al. 2012), such as advocacy by the trapping community for conservation and sustainability of furbearers and their habitats (Prescott-Allen and Prescott-Allen 1996, White et al. 2015) and management of conflicts between humans and some furbearer species (Boggess et al. 1990). Sociocultural studies of trappers suggest that economics are not a primary motive; most engage in trapping for the challenge of capturing wary animals and the associated lifestyle (Daigle et al. 1998). However, the income provided by selling furs to the market does defray expenses and provides additional incentive for trapping. The ability to market pelts of trapped animals is consistent with the Model and legitimizes uses beyond those furnished by meat and glands (Organ et al. 2015).

Establishing regulated markets for overabundant game species has recently been proposed as a possible means to achieve population management objectives (VerCauteren et al. 2011) and to serve other conservation purposes (Organ et al. 2013). Organ et al. (2012) cautioned that markets should remain an exception and be warranted only where there is a compelling conservation benefit that cannot otherwise be achieved.

Principle 3: Allocation of wildlife is by law

Access to wildlife is central to North American heritage (Organ et al. 2012); this contrasts with nations where access historically was reserved for the elite (Manning 1993). Here, for more than a century, wildlife has been allocated for consumption by law (Geist 1995) rather than by birthright, land ownership, markets, or other special privileges—except for rights granted to Aboriginal people. Public processes are used by federal, provincial, and state trustees to allocate wildlife resources through such means as seasons, bag limits, methods, and protections. The public (i.e., shareholders) can participate and provide input into the allocation process.

The public process can be messy and result in conflict (Geist 1995). Existing processes have been criticized for catering to the interests of those who provide the most funding—the hunters (Pfeffer and

A purported 40,000 bison hides in Dodge City, Kansas, during the peak of unregulated marketing hunting.
National Archives

Salancik 2003, Jacobson and Decker 2008). Geist (1995) described how public enlightenment, political powers of special-interest groups, and vested interests of bureaucracies all interact to affect the quality of wildlife decisions; in his view, such complications are inescapable byproducts of a democratic system of government. Decker et al. (2015:175) questioned whether trustees should keep wildlife stakeholders at arm's length to avoid undue influence in decision-making. They concluded that trust administrators and beneficiaries should engage in the decision-making process and strive to avoid potential problems through transparency, inclusiveness, and fairness in considering stakeholder input. (Decker et al. 2016) proposed wildlife governance principles that integrate concepts of good governance with principles of public trust as a means for ensuring sound legal allocation of wildlife trust resources.

Principle 4: Wildlife can only be killed for a legitimate purpose

Numerous laws and regulations in the United States and Canada prescribe the circumstances under which wildlife can be killed (Bean 1983; Geist 1995). Framed another way, wildlife is protected from wanton killing, and take is allowed only under conditions acceptable by law. Reiger (1975) and Cutright (1985) described the evolution of the "code of the sportsman" (Organ et al. 2012:19) and how legitimate use without waste became the standard for acceptance. Organ et al. (2012) also questioned the legitimacy of certain current practices.

Principle 5: Wildlife is considered an international resource

Early in the conservation movement, Canada and the United States recognized the need for collaborative international management of waterfowl and other migratory bird populations, including coordinated and centralized regulations (Hewitt 1921). These early collaborations culminated in the signing of the Migratory Bird Treaty in 1916 (Bean 1983). The years following World War II revealed growing evidence that international commerce could negatively affect species conservation. In response, 80 nations signed the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) in 1973, and as of 2017, 183 nations are parties to CITES (Bean 1983, Young 2003, Rivalan et al. 2007, CITES 2017). The pioneering efforts of Canada and the United States in international wildlife conservation attest to the early maturity of their respective conservation programs,

their relationship as neighboring countries, and the shared origins and joint development of their wildlife policies. As well, Boone and Crockett Club members from both sides of the border participated as key architects in the development of the Migratory Bird Treaty (Geist 2000*b*).

Principle 6: Science is the proper tool to discharge wildlife policy

Wildlife managers and policymakers face the challenge of making decisions that affect wildlife populations and habitats as well as public stakeholders, despite uncertainty about the outcome of their actions (Williams and Brown 2012). Leopold (1930) noted that answers to questions informing management decisions in the years before professional wildlife managers came wholly from opinion unsupported by facts. Wildlife managers and policymakers need to understand how biological systems work and how to monitor and evaluate impacts of management actions; they must also be objective and transparent in the use of facts that form the basis for decisions (Watson 2005). By the 1930s, decision-making processes of federal, state, and provincial wildlife management agencies throughout North America were science-based (Trefethen 1975), and investment in science by agencies increased significantly throughout the twentieth century (Wildlife Management Institute 1997).

Organ et al. (2012) traced the development in Canada and the United States of science as a base for informed decision-making in wildlife management as well as the current challenges to the application of this principle. Leopold (1933:17–18) credited the Roosevelt Doctrine (a term he coined) for setting wildlife management on a course informed by science, stating that "it recognized science as a tool for discharging that responsibility." Earlier, Leopold (1930) had cited the need for a new profession (wildlife management) in which trained professionals would make decisions based on science. Gill (1996) described how this new profession adopted the expert authority model characteristic of the Prussian forestry system, whereby trained scientific elites determined what was in the best interests of the public. Gill (1996) also described how application of this authoritarian model to wildlife management in North America has given rise to public disaffection. Williamson (1998) showed how negative public reaction has manifested in direct democracy ballot initiatives that remove decision-making from the control of wildlife managers. Brown and Decker (2001) chronicled the evolution of human dimensions in wildlife management, including the application of social science to inform wildlife management decisions. Riley et al. (2002) described how the integration of social and ecological science in wildlife management can lead to durable decision-making.

The tensions between science-based management and social values continue to shape wildlife management. Recently Hellgren et al. (in press) surveyed concerns that the gap between scientific institutions and wildlife management agencies may be widening; these authors suggest how closer coordination and integration might be achieved. Williams et al. (2009) provided a detailed guide for integrating science and management in wildlife conservation.

Concerns over the role of science in decision-making are not unique to wildlife conservation. Pielke (2007) surveyed these concerns in a broader context, offering guidance for scientists and decision-makers as to the appropriate role of science in politics and policy decisions. Such concerns should not diminish the significant and continuing contributions of science to wildlife conservation in North America. Scientific journals focused on wildlife science have proliferated, as indicated by the list on the Ecology Journals Portal website (http://ekolojinet.com/journals.html), and attendance at professional scientific meetings in North America, such as the annual conference of The Wildlife Society, are robust.

Principle 7: Democracy of hunting is standard

This principle, first articulated as a component of the Model in Geist et al. (2001:179) as "democracy of hunting," was based on writings of Theodore Roosevelt (Roosevelt et al. 1902:18–20) and Aldo Leopold (Meine 1988). According to Roosevelt, providing all Americans with the opportunity to hunt would benefit society through the development of self-reliance, which he believed important to the national character (Organ et al. 1998). Leopold, citing Roosevelt, believed this "democracy of sport" (Meine 1988:169) was essential in distinguishing North American wildlife conservation from approaches on other continents. For example, in central Europe prior to revolutions in the nineteenth century, feudal lords held hunting rights in common forests that excluded peasants from hunting (Ciriacy-Wantrup and Bishop 1975, Judson 2016, Rapport 2010). Similarly, during the Tudor and Stuart periods in England, hunting rights in forests were reserved only for the lords (Manning 1993). Hunting systems vary worldwide, and one of the oldest developed systems is in Germany, where hunting is not managed on a democratic basis but rather on an economic and landholding basis (Gottschalk 1972). In sub-Saharan

Elk location data collected from collars will help wildlife managers map elk movement and habitat use, design hunting seasons to meet objectives, monitor the effects of wolves on elk density, and evaluate the effects of elk density on potential disease transmission.
Lori Iverson, USFWS

Africa, hunting rights for many species considered as trophy animals is reserved for tourist hunters (Severre 1993, Blench 2009). Hunting in Canada and the United States is available to all citizens regardless of economic or other privileges so long as they purchase a license (Organ et al. 2012).

Criticisms of the Model

Hunters and hunting have played a central role in the formation and development of wildlife conservation in North America (Reiger 1975, Trefethen 1975). For example, most all of the Model's principles arose from policy needs forced by issues concerning hunting and, for the most part, were promoted by leaders who were hunters. According to the United States Department of the Interior (2011), hunters compose about 7% of the population of the United States, and nearly 40% of the population participates in some form of wildlife-related recreation. Because most Americans do not actively participate in hunting, we might reasonably assume that hunting's role in conservation is not well understood and that many people may not identify with a concept that evolved in part from hunting. In contrast, it seems plausible that many hunters, while in the minority, would relate to the concept as a positive affirmation of hunting and seek to promote it.

The Model's association with hunting has drawn critiques and challenges aimed, for the most part, against state wildlife agencies and the hunting culture (e.g., Nelson et al. [2011], Jordan [2012], Wildlife Conservation Pass Project [2014], Peterson and Nelson [2016], Wagner [2016]). Constructive criticism should be welcomed. Organ et al. (2012) recommended periodic scrutiny of the Model. However, much criticism of the Model has been based on inaccurate representations, perpetuated by hunters and Model advocates as well as by those critical of hunting. Typical misconceptions are as follows:

- The Model only pertains to game species. While fundamentally untrue, this perception is understandable in that application of the principles to nongame taxa has been uneven or inadequate (Organ et al. 2012).
- The Model is based on funding by hunters and anglers and is therefore narrow and noninclusive. As explained above, funding

is not a part of the Model (Organ et al. 2012); however, the unique funding mechanism of the United States is an outgrowth of the Model and provides a means to implement the Model's principles and derivative policies (Geist 1995, 2006).

- The Model is not a full and accurate portrayal of conservation history. The seminal works on the Model (Geist 1995; Geist et al. 2001; Geist 2006; Organ et al. 2012) were never presented as complete histories of conservation; rather, they focused on historical developments central to the Model's principles.
- The Model is prescriptive and intended to rigidly guide conservation in the future. In fact, the Model is a representation of the seminal policies from which wildlife conservation in North America developed. It is neither a prescription nor a formula for going forward.

Applying the Model

The remarkable story of wildlife restoration in North America (Trefethen 1975) was not accidental. Many factors led to these achievements. There also have been many failures, including the extinction of species (Trefethen 1975) and the relatively low stature of conservation on North America's political agenda (Williams 2016*a*, *b*). The Model is useful for helping wildlife professionals and others understand the roots of success and the reasons for failure as we contemplate policy initiatives to address current and future conservation challenges. The Model is not perfect; Geist (1995) and Organ et al. (2012) identified policy gaps that could have consequences for wildlife's future.

> Because most Americans do not actively participate in hunting, we might reasonably assume that hunting's role in conservation is not well understood and that many people may not identify with a concept that evolved in part from hunting.

Wildlife professionals and policymakers need to understand such fundamentals as the PTD and the critical role that eliminating wildlife markets served in the restoration of North American wildlife. Why? Because professionals and policymakers will be confronted (and they already are) with initiatives to alter these policies. Most importantly, comparing the challenges of the past with those now emerging helps envision what bold new initiatives may be needed to ensure a continent rich in diversity of wild animals and wild places.

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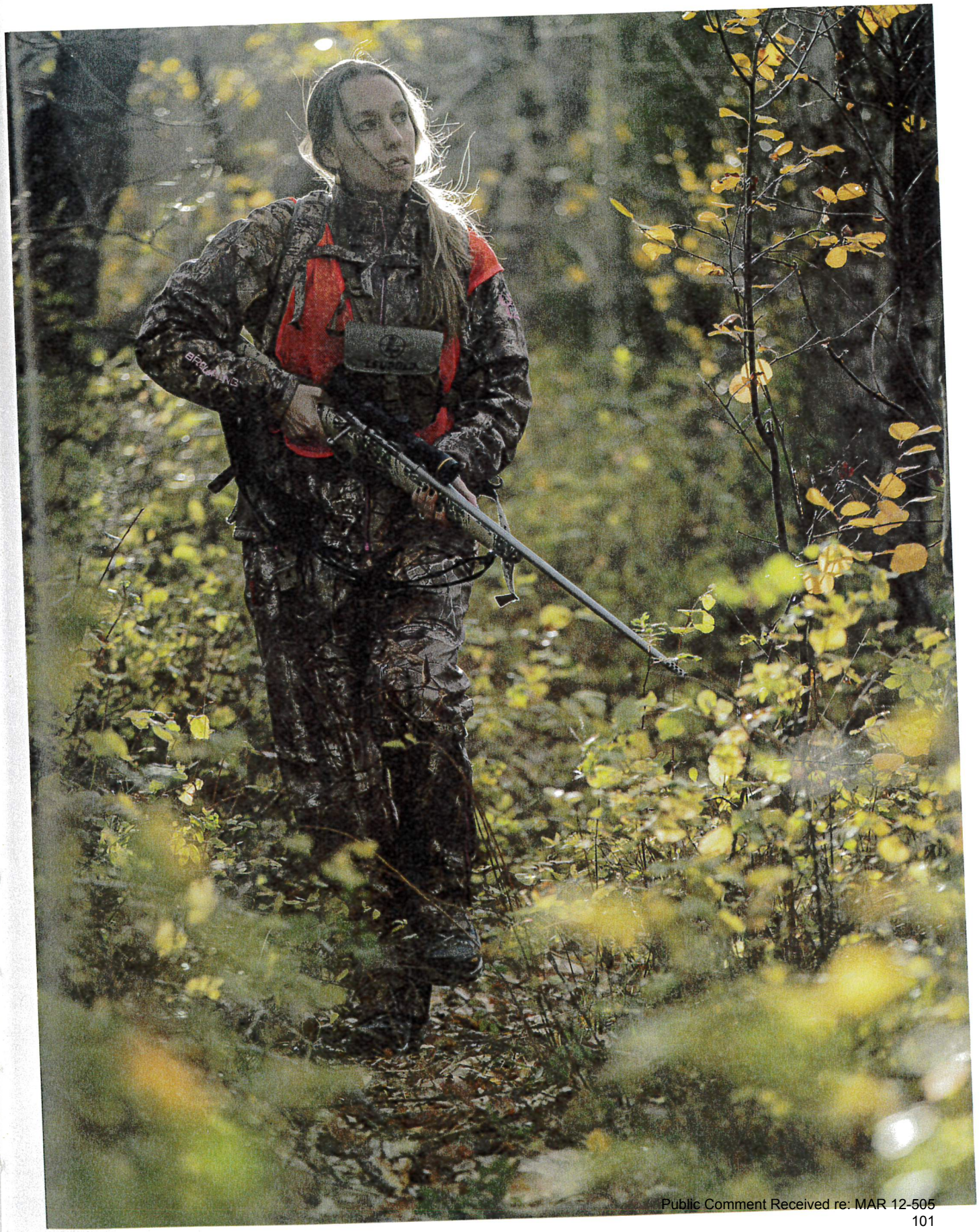

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MWGA
montana wool growers association

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September 5, 2018

Montana FWP
Grizzly Bear ARM
Wildlife Division
PO Box 200701
Helena, MT 59620-0701

RE: Proposed Grizzly Bear Demographic Objection for the NCDE

To Whom It May Concern:

The following comments are submitted on behalf of the membership of the Montana Wool Growers Association (MWGA). As part of MWGA's mission, MWGA reviews and comments upon wildlife management proposals, such as this one, that will have a substantial impact on agriculture production in Montana.

MWGA's membership strongly supports the delisting of the Northern Continental Divide grizzly bear population. The NCDE grizzly population recovery effort has been successful, and should be recognized as such. The NCDE bear population has met their Endangered Species Act recovery criteria; and, as such it is time for management of the bear to be returned to the State of Montana and to the Department.

To this end, Montana FWP (the Department) has proposed a minimum population objective of 800 for the NCDE demographic monitoring area (DMA). This numerical amount is supportable as it represents a number that would appear near or close to the carrying capacity for grizzlies within the DMA. As a result, the 800 minimum bear population objective is a number that would appear to be a reasonable regulatory mechanism to ensure the population will not be relisted under the ESA once delisting occurs. Consequently, MWGA's membership supports adoption of the new rule.

This being said, MWGA's members are not as concerned about NCDE grizzly bear population numbers as they are about having a lawful means of protecting their livestock and other property from grizzly bear damage. Should the NCDE grizzly bear population be delisted, MWGA recommends that the Department consider implementing a livestock protection measure that authorizes livestock producers to lethally remove grizzly bears that are caught in the act of killing livestock and/or for defense of humans. This rule would be similar in scope and substance as that enacted by the Department for the gray wolf population. Adoption of this type of rule/authority would go far in increasing tolerance for an expanded grizzly bear population among Montana's livestock producers.

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Again, MWGA's membership strongly supports removal of the NCDE area grizzly bear population from the ESA list. The time has come to turn management of the grizzly bear, wherever located, back over to the citizens of Montana. And, with the adoption of rules, such as the one at issue herein, the State will have in place adequate regulatory mechanisms to ensure the continued health and viability of the species throughout the State.

Thank you for this opportunity to comment. And thank you for your time and consideration of the comments

Sincerely,

James E. Brown
Director of Public Affairs
Montana Wool Growers Association

Cc: MWGA Board of Directors

Public Comment Received re: MAR 12-505
105

From: mariasriverlivestock@gmail.com
To: FWP GRIZZLY BEAR ARM,
Subject: Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date: Tuesday, October 23, 2018 1:45:14 PM

As an organization, Marias River Livestock Association serves Toole, Liberty, Glacier and Pondera Counties, which means we serve every livestock producer from the PCA to the proposed "Zone 3."
We are encouraged by this proposed rule, specifically because it will not base population numbers on just one year, but a six year average. We are also happy to see that the population and mortalities will only be monitored in the PCA and Zone 1. Since our population of grizzlies is already much higher, (estimated at 1,000 bears in 2017 by FWP) we have no concerns about numbers dropping any lower than 800. Considering the number of grizzlies that have been sighted, confronted, and removed from our four county area, we are confident that the grizzly population is thriving and will continue to do so.
We are still extremely concerned with the lack of manpower that is available to properly manage these grizzlies. We would like to see more funding allocated for additional "boots on the ground" to increase conflict prevention efforts and enable FWP to respond to conflicts swiftly and efficiently when they arise. We would also like to see human safety a top priority for FWP, which also includes more manpower to prevent conflicts between humans and grizzlies, and more effort put into keeping bears out of towns and settlements.
Transparency in the agency is also of great concern for our association. Our producers live and work with these bears daily, and we are positive that the relationship between FWP and ranchers would greatly improve if there were more communication between the two. Our hope is that going into the future, this will improve for all regions in Montana.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	haydenvalley55@hotmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Sunday, October 21, 2018 7:41:24 PM

I have read the document and am in favor of it.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	gandkgreen@blackfoot.net
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Friday, October 26, 2018 5:25:24 PM

We support Montana Fish, Wildlife and Parks management of grizzly bear populations in the Northern Continental Divide Ecosystem. We live in the lower Clark Fork area south of the Cabinet Yak wilderness. We have had grizzly bear movement or crossing the river reservoirs both north and south. We would prefer state management in case of grizzly related problems.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From: jsjvash@montanasky.us
To: FWP GRIZZLY BEAR ARM,
Subject: Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date: Monday, October 15, 2018 4:17:09 PM

Flathead Wildlife, Inc. Comments on adoption of Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem (NCDE) and ARM 12.9.103

Flathead Wildlife, Inc. (FWI) has been representing sportsmen and women in northwest Montana for 62 years. FWI?s mission is to preserve our hunting, fishing and trapping heritage, maintain and enhance wildlife habitat and public access and to involve youth in outdoor activities. FWI supports the proposed NCDE grizzly bear demographic objectives and their subsequent adoption and transfer into ARM 12.9.103.

Recovery of grizzly bears in the NCDE is a success story. Estimated at about 350 grizzlies when listed as Threatened under the Endangered Species Act in 1975, the population now exceeds 1,000 bears, exhibits a wide distribution and is stable and slowly growing. Extensive research has revealed the limiting factors driving grizzly abundance and distribution and concentrated efforts by wildlife and land managers along with support from landowners, hunters and conservationists has reversed declining numbers. The core recovery zone now appears to be fully occupied as evidenced by grizzlies showing up in adjacent areas in the Designated Monitoring Area (DMA) with increasing frequency. The biology and habitat requirements of grizzlies are such that they will remain at relatively low densities even under optimal conditions. Fortunately, Glacier National Park and the Bob Marshall Wilderness Complex make up a large part of the Primary Conservation Area to maintain the basic populations in relatively stable and undeveloped habitat. There is also connectivity to grizzlies to the north in Canada for genetic health. As grizzlies continue to expand into Zones 1, 2 and 3 they will come into increasing conflict with human populations. This fall there have been a number of sightings of grizzly bears close to Kalispell and grizzlies are increasingly common well east of the foothills of the Rocky Mountain Front. Delisting grizzly bears into state management will provide more flexibility for management of conflicts. That will ensure continuing support for the presence of grizzly bears in Montana.

At the same time, management must ensure that bear numbers do not regress after delisting. Flathead Wildlife, Inc. believes the proposed demographic criteria will maintain grizzly abundance and distribution, particularly by focusing on survival and distribution of females and young bears. Proposed criteria are aimed at maintaining at least 800 grizzlies in the NCDE with a probability of 90%. It appears that overall objective will support the sub-criteria.

A success of delisting would be to manage grizzly bears like any other wildlife species in the NCDE, including hunting. While controversial, a carefully managed hunt would maintain support for grizzlies, perhaps deal with aggressive problem bears and improve juvenile bear mortality while staying within overall mortality limits. Unfortunately, delisting will place more management costs on Montana and sales of hunting licenses will do little to cover costs. Since many groups have signaled support for grizzly bears, Fish, Wildlife and Parks has to determine how to get non-hunting groups to share in management funding.

Another factor in meeting the referenced demographic criteria will be to manage different parts of mortality. That will include programs such as bear conflict specialists, road density management, habitat management, livestock carcass removal, and responding to problem bears. FWP bear managers have done a very good job of responding to complaints, moving or removing bears as needed and educating the public on removing bear attractants. One growing problem in the Flathead is depredation on chickens. Many rural landowners keep a small flock of chickens but those are attractive and vulnerable to bears, often resulting in bears becoming

food conditioned and requiring lethal removal. Trading chickens for bears is a poor bargain. There needs to be increasing education on preventing conflicts over chickens, including statutory requirements or incentives to safeguard chickens and their feed through techniques such as electric fencing. This is one area where non-hunting conservation groups can be part of the solution.

Grizzly bears are Montana?s State Animal, a symbol of our natural heritage unique from most other states. Montanans support the continued presence of grizzlies. At the same time, growing numbers of grizzlies and humans have increased conflicts and required changes in how we manage other natural resources. Montana has a commendable record in managing wildlife, bringing many species to abundance while balancing the needs of humans. Delisting grizzly bears in the NCDE and returning management to the State of Montana would be a step forward and Flathead Wildlife, Inc. supports adopting the demographic objectives proposed by FWP for transfer to ARM 12.9.103 to ensure meeting that challenge.

Jim Vashro, President
Flathead Wildlife, Inc.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	jpwallace50@gmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Saturday, October 13, 2018 10:17:41 AM

Management of the number of grizzly bears in the Northern Continental Divide Ecosystem as outlined in the proposed rule is essential to the long-term survival of the population of bears. Proactively managing the grizzly bear population as recommended should insure that the number of bears will not exceed the reasonable carrying capacity of the available habitat. I support the adoption of the proposed rule.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	crazycate7fo@yahoo.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Tuesday, October 02, 2018 7:57:24 AM

It's sad to come to this point where we would have to eliminate some of the grizzly's, but we have to face facts. With so many grizzly encounters there is definitely a problem. Putting together a program to maintain a population that is safe and healthy for the grizzly and the people is a very smart move.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	scott.redboot@gmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Friday, September 28, 2018 10:16:13 PM

I'm a landowner/resident of the Salish Mountain portion of Zone 1 as depicted on the Recovery Area map. Our property is about 8 miles due West of Kalispell. Grizzlies have passed through our property during each of the last three summers.
I support the proposed change to the ARM and the demographic objectives proposed for both male and female Grizzlies as defined therein.
Frank S. Johnson
40 Spring Mountain Dr.
Kalispell, MT 59901-8160

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	trinajobradley@yahoo.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Thursday, September 20, 2018 9:28:22 AM

As a rancher in Zone 1, I am accustomed to seeing grizzlies on a regular basis. Our ranch is situated on Birch Creek, about 20 miles east of Swift Dam, which provides acres of perfect habitat for bears and other wildlife.
I am encouraged by this proposed rule, specifically because it will not base population numbers on just one year, but a six year average. I am also happy to see that the population and mortalities will only be monitored in the PCA and Zone 1. Since our population of grizzlies is already much higher, (estimated at 1,000 bears in 2017 by FWP) I have no concerns about our numbers dropping any lower than 800. Considering the number of females with three and four cubs that have been sighted on the Rocky Mountain Front, I am confident that the grizzly population is thriving and will continue to do so.
I appreciate your transparency, and you traveling to Conrad to meet with the people actually affected by grizzlies, and more importantly, your decisions. I trust you will keep us all informed of important decisions coming in the future as well.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	Thepinesjv19@msn.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Saturday, September 08, 2018 7:24:05 PM

I believe that your proposed rules are adequate to address the bear recovery. Congratulations and good luck,

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This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	w.shanks04@gmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Thursday, September 06, 2018 11:20:01 PM

I agree with the management plan of the Grizzlies of the northern continental divide. I would like to see management in the wilderness as well. I understand that they have a high population in the wilderness areas. Also it's hard to tell by the map but the north fork of the flathead drainage and the south fork look to be within the conservation areas. They too have a high density of grizzly bears. Along with the eastern side of the swan highway to the divide, or wilderness boundaries. Like I said though it's hard to pinpoint by your map. I've been born an raised in the flathead valley. Hunting here for 28years and following my dad and grandfather around since I was 3. I've seen a couple things here in the woods and worked my life in the woods. Oh yes im the 3rd generation from the flathead valley too if that means anything anymore.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From: Mgtmorgan5@gmail.com
To: FWP GRIZZLY BEAR ARM,
Subject: Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date: Saturday, September 01, 2018 9:48:20 AM

Yes! Please pass the rule. We need population control for grizzlies. Their numbers are getting out of control. They are threatening livestock more and more AND humans. This is not right and has gone too far.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

October 4, 2018

Grizzly Bear ARM
Wildlife Division
Department of Fish Wildlife and Parks
P. O. Box 200701
Helena, Montana 59620-0701

Re: Comments pertaining to NEW RULE 1 GRIZZLY BEAR DEMOGRAPHIC OBJECTIVES FOR THE NORTHERN CONTINENTAL DIVIDE ECOSYSTEM (NCDE).

The comments below are submitted on behalf of Montana Sportsmen for Fish and Wildlife (MTSFW) and its membership who will be directly affected by the proposed NEW RULE 1.

While MTSFW generally agrees with the NEW RULE 1, we propose making changes that are essential to ensure the Department, Fish and Wildlife Commission (commission), and citizens of Montana achieve management activities that state grizzly bear management plans have always intended.

The NEW RULE 1 needs to specifically reference and should include language about regulated public hunting for grizzly bears due to the interrelationship between the (NCDE Conservation Strategy) and any rules pertaining to grizzly bears that are adopted by the commission.

The old rule ARM 12.9.103 included specific language about hunting, and this management action should be reinforced within the NEW RULE 1.

Hunting still remains the most desirable method of balancing grizzly bear numbers within any of the grizzly bear ecosystems for minimizing livestock depredations against private property and grizzly bear attacks on humans. The Department and Fish and Wildlife Commission have already indicated a preference for establishing a grizzly bear hunting season by signing a Memorandum of Agreement for the GYE.

Nothing has changed regarding justification for including hunting as a management tool in the NEW RULE 1. and we have seen evidence of an increase in conflicts as grizzly bear distribution expands. The recent human fatality by grizzly bears in Wyoming demonstrates a need for conditioning bears to avoid humans by hunting instead of attracted to them.

Now is the appropriate and critical time to fortify the New Rule 1 with additional language about hunting since upon delisting state laws and administrative rules become the primary regulatory and legal mechanisms guiding grizzly bear management.

Additionally, the NEW RULE 1. should be consistent with the Constitution of the State of Montana **Article II Section 3. Inalienable rights**. that establishes the rights of the people of Montana to protect property, and, **Article IX Section 7. Preservation of harvest heritage.** that preserves the right of the people to harvest wildlife.

MTSFW requests the following amendments be incorporated into the NEW ARM 12.9.1401 GRIZZLY BEAR POLICY. All of the proposed new matter is underlined, and justifications are provided after each of the proposed amendments.

In Section (1) insert the words: <u>including a provision for a regulated public hunting season</u> after the words memorandum of understanding (MOU) referenced in the second sentence.

STATEMENT OF REASONABLE NECESSITY: The Department and commission inferred there would be regulated public hunting season when they signed a similar document titled Memorandum of Agreement (MOA) for the Greater Yellowstone Ecosystem (GYE).

Therefore, adding the underlined language to Section 1. will provide additional clarity and details to the MOU upon delisting of the NCDE. Uniformity is vital in all types of interagency documents such as the MOU's and MOA's to ensure individual state management plan activities for grizzly bears prevail.

In Section (3) Insert the words: <u>including a regulated public hunting season</u> after population management.

STATEMENT OF REASONABLE NECESSITY: The Interagency Grizzly Bear Committee (IGBC) created and endorsed the Grizzly Bear Hunting Position Statement that supports the use of regulated public hunting for grizzly bears and follows the principles of the North American Model of Wildlife Conservation. The Department as a member of the IGBC endorsed this statement.

Adding the underlined language to the NEW RULE 1 preserves the Department and Fish and Wildlife Commission's authority, and capability to implement a regulated public hunting season for grizzly bears.

Montana has been harvesting recovered wolves and game animals for many years using science based regulated hunting seasons specifically crafted not to threaten their populations, recovered grizzly bears should be no different, the proposed amendments helps ensure that can happen.

Furthermore it is prudent to look ahead and fortify language in the NEW ARM RULE 1 with these amendments given the litigious environment surrounding grizzly bear management.

Based on the history of legal challenges in Montana and other states, there is certainty

that groups and individuals will look to challenge grizzly bear hunting if the NEW RULE 1 does not contain the proposed amendment language.

In Section (3) Subsection (b) (i) (ii) (iii) Add a new subsection (iiii) Grizzly bear management actions are not dependent on population modeling.

STATEMENT OF REASONABLE NECESSITY: The amended language clarification would give meaning to the plain language of the NEW RULE 1 and removes any ambiguity or misinterpretation regarding the management of grizzly bears.

In subsection (3) (b) (iii) increase the number of independent males to 20%.

STATEMENT OF REASONABLE NECESSITY: – Utilizing regulated public hunting as a management tool will lessen the lethal control actions by government agencies and provide the public with hunting opportunities.

Independent males are oftentimes offenders of human/livestock conflicts as the population and distribution expands.

Male grizzly bear mortalities by hunting are less likely to affect overall population levels since the hunting season framework and MOA's incorporate adaptive management.

There has already been an adjustment to increase the demographic monitoring area to be above 800 bears. The commission has statutory authority to impose any and all necessary closures, restrictions, or other mechanisms and an adaptive management framework that would pose no threats to grizzly bear population.

Add a subsection (4) - Any amendments to the Endangered Species Act (ESA) that conflict or are contradictory to this rule will require an immediate new rule.

STATEMENT OF REASONABLE NECESSITY: There are many proposed amendments to the ESA currently circulating through the United States Congress that if adopted would require changes to this NEW RULE 1.

Sincerely,

Keith Kubista
Director
Montana Sportsmen for Fish and Wildlife
P.O. Box 2243
Missoula, Montana
kredtailhawl@gmail.com
406-777-1116

From:	Keith Kubista
To:	FWP GRIZZLY BEAR ARM,
Subject:	NEW RULE 1
Date:	Wednesday, October 03, 2018 7:37:45 AM
Attachments:	GRIZZLY BEAR ARM RULE 1 COMMENTS.docx

Attached are the comments from Montana Sportsmen for Fish and Wildlife concerning the proposed Grizzly Bear ARM.
On behalf of our members, thank you for considering our recommendations.

Keith Kubista
Director
MTSFW

From: karli.rjag@gmail.com
To: FWP GRIZZLY BEAR ARM,
Subject: Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date: Friday, October 26, 2018 7:53:20 AM

I am a rancher just west of Choteau. I am encouraged that we are having a conversation about grizzly bear management. I have read the rule. I would suggest expanding zone 3 to the state line so that we have a plan in place should bears move farther east. I would also ask that you explore the possibilities of posting online where collared bears are at. I recognize that living with grizzly bears to going to be a part of my life. I want to be able to see where collared bears are so that I can take additional precautions. I would also like to consider this for the citizen of Choteau. We have many walker that enjoy strolling down our road to the Teton River. For their safety, I would be worth while for them to be aware of the threats in the area. I would also like to share my deep hope that a part of this plan ranchers like me would have the opportunity to defend their lives and property against bears. My family has been living on the front for 6 generations. I know that these situations don't often arise but when they do you shouldn't have to choose be between the law and livelihood. Thank you for your time.

I have included the Marias River Livestock comments. I found them to be thoughtful and accurate for our industry in the area.

"We are encouraged by this proposed rule, specifically because it will not base population numbers on just one year, but a six year average. We are also happy to see that the population and mortalities will only be monitored in the PCA and Zone 1. Since our population of grizzlies is already much higher, (estimated at 1,000 bears in 2017 by FWP) we have no concerns about numbers dropping any lower than 800. Considering the number of grizzlies that have been sighted, confronted, and removed from our four county area, we are confident that the grizzly population is thriving and will continue to do so.

We are still extremely concerned with the lack of manpower that is available to properly manage these grizzlies. We would like to see more funding allocated for additional ?boots on the ground? to increase conflict prevention efforts and enable FWP to respond to conflicts swiftly and efficiently when they arise. We would also like to see human safety a top priority for FWP, which also includes more manpower to prevent conflicts between humans and grizzlies, and more effort put into keeping bears out of towns and settlements.

Transparency in the agency is also of great concern for our association. Our producers live and work with these bears daily, and we are positive that the relationship between FWP and ranchers would greatly improve if there were more communication between the two. Our hope is that going into the future, this will improve for all regions in Montana."

Karli Johnson
Choteau Rancher

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

Sept 14, 2018

To the FWP:

I am writing to let you know I do not support the proposed demographic objectives for the NCDE because of their inadequacies to foster connectivity between ecosystems. That connectivity is critical to maintaining genetic diversity! To accomplish the linkage the habitat has to be of sufficient size. Included in the rules should be habitat criteria such as adequate food sources, ample security and low road densities.

I absolutely do NOT want a grizzly bear hunting season. Maintaining only 800 bears in the NCDE is not enough to foster connectivity between the other ecosystems.

Sincerely,

Marvin Smith
220 Burlington Ave
Missoula, MT
59801

Grizzly Demographic Objectives in the NCDE ARM 12-505
Written Comment

Name: Jake Kreilick
Address: 2630 South Seventh W.; Msla, MT 59804
E-mail: JKreilick@wildrockies.org

I am adamantly opposed to delisting of the grizzly bear from the Endangered Species List. I in particular am outraged at the lack of public participation throughout this process & the very limited scope of tonight's hearing. I don't believe the state of Montana & the U.S. Fish & Wildlife Service's efforts to delist for the Northern Continental Divide Ecosystem is a scientific decision. It's a political decision predicated on economic motives & the desire for state's to manage grizzlies. Hunting seasons are back on the table -- a dangerous precedent and one that is certain to further disrupt grizzly recovery.

The demographic threshold of 800 bears for the NCDE is an arbitrary number and doesn't adequately reflect the entire existing population -- in other words this rule gives Montana that license to kill 250 bears. This is unacceptable and means you will be removing bears that could provide genetic exchange w/ disparate populations in the Cabinet-Yaak, Central Idaho, GYE etc. I don't believe the PCA/Zone 1 is an adequate measure of the core population due to its failure to account for migration.

The emphasis on demographic models & estimates from Montana that begs the question of what habitat the bear is currently occupying. Without existing habitat protections from the ESA it's highly likely the Trump Administration will develop the remaining unprotected wildlands in the Northern Rockies. Secretary of the Interior Ryan Zinke is moving full speed ahead w/ his agenda to remove as many regulatory obstacles from federal public lands so his oil & gas buddies & mining pals can get access to them.

I will not support delisting the grizzly bear -- Montana's symbol of our wild, rugged character until the grizzly numbers several thousand. Its habitat and linkage zones must be protected -- i.e. all remaining roadless areas -- w/out these habitat protections the grizzly will not survive. The delisting is premature and based on the political whims of one political party who believes that grizzly bears are not as important as our species and its economy of exploitation.

All comments must be received by 10/26/18 at 11:59 pm, and can be sent to:
Grizzly Bear ARM Comments – Wildlife Division,
PO Box 200701, Helena, MT 59620-0701
or emailed to FWPGRIZZLYBEARARM@mt.gov
Thank you for your comment.

Swan View Coalition *Nature and Human Nature on the Same Path*

3165 Foothill Road, Kalispell, MT 59901 swanview.org & swanrange.org ph/fax 406-755-1379

Statement of Swan View Coalition presented by Keith Hammer
MDFWP ARM Rule-Making Hearing in Kalispell
September 27, 2018

If like the one in Missoula, these are not the "public hearings" announced by FWP (http://fwp.mt.gov/news/publicNotices/rules/pn_0265.html).
They are a lengthy public lecture followed by a "FWP officer privately [taking] oral comments with a recorder." (https://missoulian.com/lifestyles/recreation/fwp-gathers-opinions-on-proposed-rules-for-grizzlies-in-northwestern/article_3be2ae17-b964-53c8-9cfa-2c20ffc63b48.html). And, if your lecture goes on for 1 hour 45 minutes as it did in Missoula, that's not a public hearing it is public brainwashing. We object in the strongest of terms.

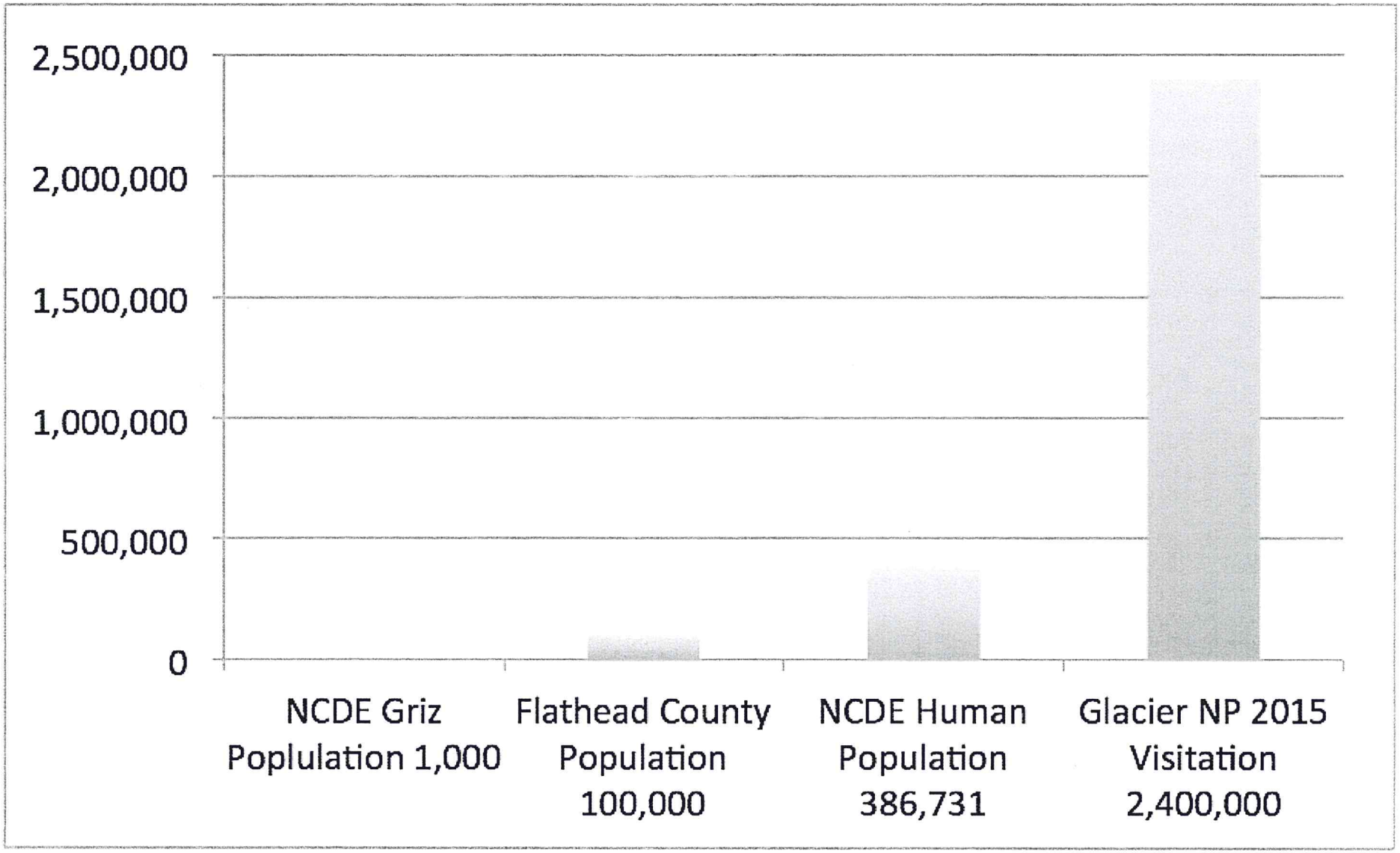
Why are we again being asked to listen to FWP task ~~drone on~~ about the possible number of grizzlies in the NCDE? The courts have ruled repeatedly that agencies must focus on the "whole picture of the listed species, not just a segment of it" and that they must focus on the habitat necessary to sustain those bears.

This rulemaking process errs in focusing on 800 bears in the core of the NCDE. It should be focused on determining how many bears are needed to reconnect the fragmented grizzly bear ecosystems in the Lower 48 States and what amount and types of habitat are necessary to sustain them.

Population viability experts ~~like Allendorf and Ryman (2002)~~ say 5,000 ~9,000 grizzly bears are needed in interconnected populations to maintain genetic diversity over the long term. Bears are no longer making the trip between the NCDE and Yellowstone, or the Bitterroot, Cabinet-Yaak, or Selkirks. Computer models have tried 20,000 times, unsuccessfully, to get a grizzly bear from the NCDE to Yellowstone (Peck et al 2017). We need far more than 800 bears in the NCDE and enough habitat so they can expand their range into the areas between the ecosystem fragments.

These bear populations will never be reconnected if the Yellowstone and NCDE populations are delisted and trophy hunting is reinstated to keep populations in check. FWP pursued trophy hunting of grizzlies in the NCDE until we and the Fund for Animals stopped it with a lawsuit in 1991. The Fall hunt was causing 48% of the known human-caused mortality in the NCDE, yet FWP initiated an additional Spring hunt along the Rocky Mountain Front to help thwart the expansion of grizzly bears.

Grizzly bears aren't even a blip on the chart compared to the people living, working and playing in their habitat!



Prepared 9/20/18 by Keith Hammer.
Data sources: https://www.montana-demographics.com/counties_by_population https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd566349.pdf

October 16, 2018

RECEIVED
OCT 22 2018
FISH, WILDLIFE & PARKS
WILDLIFE DIVISION

Department of Fish Wildlife and Parks
Wildlife Division
PO Box 200701
Helena, Montana 59620-0701

Greetings,

For approximately fifty years, my wife, myself, our three children and their children have backpacked and recreated in Montana's backcountry. In addition to National Forests, we have been in Glacier National Park and Yellowstone National Parks. Some of it on a portion of the Hungry Horse Ranger District, Flathead National Forest. Obviously much of the area is grizzly bear habitat ad park of the National Continental Divide Ecosystem (NCDE).

By the end of 2018, the U.S. Fish and Wildlife Service (USFWS) is presently planning to delist the NCDE grizzly bear population The agency estimates there are approximately 1,000 grizzly bears within the NCDE. The USFWS proposed plans are to keep at least 800 grizzly bears in the NCDE.

We vigorously oppose this proposed action! To insure long term viability (hundreds of years), knowledgeable grizzly bear biologists estimate that 3,000 to 6,000 grizzly bears are needed; that number of grizzly bears must be sustained for many generations.

In addition, it must be assured that secure and protected habitat links the NCDE population with the Yellowstone ecosystem bear population. That is the only conceivable and credible way to insure the long term survival and viability of both grizzly populations in the western states.

It is apparent to you that <u>at the present time,</u> the connectivity is not assured,and does not exist. I have poured over many maps, consulted with other knowledgeable in the field and feel it is possible for both populations of bears to intermingle. We are so fortunate to still have areas

between the two National parks wild enough for that interchange. Much could be done in cooperation with private federal, state and local agencies, to allow the bears to move through places of infrastructure hazards, private lands, and sparsely populated areas. It is possible to find linkages. However, linkage areas must be investigated, evaluated, established and protected far into the foreseeable future.

Sincerely,

John D. Grove
264 Barbara Street
Stevensville, MT 59870

CC:Governor
Congressman

October 26, 2018

To: Dan Vermillion, Chair Fish and Wildlife Commission
Cc: William Schenk, Rule Reviewer
Department of Fish, Wildlife and Parks
P.O. Box 200701, Helena, Montana
59620-0701

Re: Proposed Administrative Rule Making (ARM) NEW RULE I GRIZZLY BEAR DEMOGRAPHIC OBJECTIVES FOR THE NORTHERN CONTINENTAL DIVIDE ECOSYSTEM

Chair Vermillion, Commissioners, Fish Wildlife and Parks staff and Mr. Schenk-

WildEarth Guardians works to protect and restore the wildlife, wild places, wild rivers and health of the American West. Our wildlife program works to ensure imperiled species, including grizzly bears, have the protects they need to survive and recover. Guardians operates offices in eight western states in the historic range of the grizzly bear, including in Missoula, Montana. Guardians has more than 220,000 members and supporters, many of who reside and recreate in grizzly country. Our members, staff and board members have significant aesthetic, recreational, scientific, inspirational, educational, and other interests in the conservation and recovery of grizzly bears across their native landscape. These comments are submitted in furtherance of those interests.

We appreciate the opportunity to comment on the proposed Administrative Rule Making (ARM) for grizzly bears in the Northern Continental Divide Ecosystem (NCDE) population of imperiled grizzly bears and Montana's willingness to engage the public. However, we take issue with the unnecessarily narrow scope of the proposed rule and your insistence that you are not interested in public comment addressing anything but Chapter 2 of the proposed Conservation Strategy. If Montana is truly interested in restoring the grizzly bear and ensuring populations are secure in the long term, the state will take a more comprehensive approach to managing the bear and its habitat. Doing so will require addressing the primary threats to the species including climate change impacts, reductions to natural food sources, lack of connectivity, increased human caused mortality including in preventable hunter-conflicts, habituation based removals and vehicle mortalities.

We ask that Montana refrain from signing the flawed Conservation Strategy until it undergoes the requisite notice and comment rulemaking and addresses the issues outlined in the recent court decision rejecting the U.S. Fish and Wildlife Services' (Service) illegal removal of

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Endangered Species Act (ESA) protections from the Greater Yellowstone Ecosystem's grizzly bears. Many of the legal deficiencies present in the GYE process are also present in the Service's approach to removing protections from NCDE bears. Montana can save itself, along with conservationists, Tribal interests, sister agencies and all interested parties, time and money by refusing to follow the Service's lead when that path is clearly illegal. Nothing requires Montana to sign the Conservation Strategy. Montana can insist that the Conservation Strategy go through required federal notice and comment rulemaking, that the flaws in Chapter 2 be addressed before signing, and that a full analysis of the impacts of removing protections from NCDE bears on the bears outside of the NCDE be undertaken, *before* it signs onto the currently flawed Conservation Strategy. Doing so would make Montana a leader in grizzly conservation, not an impediment.

A. Conservation Strategy Chapter 2 Should Not be Adopted Without Public Comment and Revision.

As an initial matter, the Conservation Strategy has not undergone the requisite public notice and comment rulemaking. The Draft Conservation Strategy was published in the Federal Register on May 3, 2013, more than five years ago. Since then the legal status of grizzly bear populations has changed twice; land management agencies have undergone major changes in their land management policies; new science on grizzlies, their habitat and food sources has been published; human use of grizzly habitat and population density has increased; and unnatural mortality has skyrocketed. The federal agencies are playing a game of hot potato with the Forest Service claiming the Fish and Wildlife Service is responsible for public comment and vice versa. Montana state officials and others have erroneously claimed that the requisite public comment occurred via the Flathead National Forest Plan Revision process. However, while the Flathead Plan Revision references the Conservation Strategy, the public comment period pre-dates the release of the current Conservation Strategy. Indeed, the Flathead Forest Plan's reliance on a document that did not yet exist is a major legal deficiency of the Revision. The National Environmental Policy Act (NEPA), 42 U.S.C. § 4321 *et seq.*, requires more. Were the Intergovernmental Grizzly Bear Committee (IGBC) to move forward with the Conservation Strategy without undertaking notice and comment it would be making the Strategy, and any decisions based on the requirements therein legally vulnerable, an entirely avoidable, yet potentially very costly mistake. Montana can prevent this grievous error by declining to sign the Conservation Strategy until it undergoes the required notice and comment process.

Moreover, it is unreasonable to read and assess the efficacy of the requirements in Chapter 2 in isolation from the other Conservation Strategy chapters. Montana is not providing the public with a clear picture of the conservation landscape. For example, the Conservation Strategy fails to include measureable, reasonable habitat based protections, amongst other flaws. It also fails to provide for reasonable common-sense conflict reduction measures across grizzly bear habitat such as the uniform food storage orders, bear spray requirements for hunters, or reduced speed limits along known and expected dispersal corridors.

B. Conservation Strategy Chapter 2 is Deeply Flawed.

Even setting aside the procedural flaws, the need to address habitat based recovery standards, and the need to read the Conservation Strategy in full to assess its effectiveness, Chapter 2 is too flawed to adopt without revision. Unfortunately, the population based requirements outlined in Chapter 2 are insufficient to ensure grizzly bears are secure across their native range in Montana, let alone the contiguous U.S. First, basing the determination on a total population figure instead

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of an effective population (the bears who are contributing to reproduction) is a flawed approach. At the very least, the total population goal should be tiered to the relationship between that total population and the requisite effective population.

Second, managing the population to a 90% confidence that 800 bears remain could very well lead to a reduction in the current population. The current population is demonstrably not big enough to ensure natural connectivity between the still-isolated and still recovering grizzly populations. Even under 20,000 hypothetical dispersal modeling scenarios conducted by FWP's own Dr. Cecily Costello and other members of the IGBC study team, not a single bear makes it all the way between the NCDE and the GYE. The logical conclusion then, is we need bears to disperse into remaining suitable habitats over generations and eventually connect and reproduce. That requires resident bears in the Bitterroots as well as along the Front. It also requires that females as well as males disperse. Given that the current population of well over 900 bears is not leading to the desired connectivity and genetic exchange, managing that population down is irresponsible at best and outright hostile to bears at worst. If Montana is truly interested in the long-term viability of NCDE and GYE grizzly bears, it must foster natural connectivity and genetic exchange. Allowing a reduction in the NCDE population is anathema to that desired result.

The increasing mortalities experienced in both the NCDE and GYE populations also point to the need to manage for more bears, not fewer. As Montana and the federal agencies are well aware, grizzlies are very slow reproducing animals. Mistakes in management can have impacts for many years. Rather than managing the population downward, Montana should be affirmatively identifying ways to increase the likelihood and success of natural dispersal and connectivity.

Additionally, Dr. Costello admitted during the public hearing on the ARM in Missoula that the current Conservation Strategy Chapter 2 approach does not account for losses to the NCDE population caused by natural dispersal. In other words, the current counting system is not accurate. That must be changed before Montana signs the Conservation Strategy. Dispersing bears must be removed from the population estimates if they are to be trusted.

C. Montana Should Adopt a Statewide Grizzly Management Plan Addressing Habitat Needs and Conflict Reduction.

Montana has a unique opportunity to manage its resident grizzly populations in a way that supports their survival and recovery long into the future. That requires comprehensive and consistent management. Rather than adopt one chapter of one Conservation Strategy for one grizzly population in isolation, Montana should develop and adopt a uniform state-wide approach to grizzly bear management. This approach should include identification and protection of key grizzly dispersal corridors. It should include identification and implementation of wildlife crossings along those key dispersal routes and in areas where grizzlies have died when hit by cars or trains. Nighttime speed limits are another obvious way to reduce vehicular deaths. The plan should require uniform food storage across grizzly country, including requirements addressing attractants including garbage, chickens, compost and grain.

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The plan should also adopt the very common sense requirement that all hunters carry bear spray. FWP recently sent a message indicating the agency's understanding of this key conflict prevention measure:

"With the general big game season opening Oct. 20, hunters should be careful and carry bear spray if they encounter a grizzly. Bear spray has been shown to be more effective than a gun at stopping a charging bear.

Using a firearm requires a person to have pin-point accuracy in a stressful situation. Bear spray can be more effective because it sends out a thick, wide cloud of deterrent.

If a hunter observes a grizzly bear, but the bear doesn't know the hunter is there, the person should quietly leave the area and not alert the bear. If a hunter encounters a grizzly and the bear is aware of the person, then the hunter should talk calmly to the bear and back away slowly to leave the area…

Most grizzly attacks occur when a grizzly becomes surprised," Sarmento said. "So, it is important to avoid surprising a grizzly at short range." FWP email alert sent to public 10/18.18 (Subject: "Grizzly bear relocated on Front").
Clearly, FWP knows what it *should* do. The question is whether you will do take the necessary steps to protect bears and people.

The plan should also adopt hour limits on shooting ungulates when it is too late in the day to process the animal and remove it before dark. The clear analogy is Hoot Owl restrictions on Montana's rivers. Those restrictions safeguard the health of aquatic species. Hour restrictions on hunting during grizzly bear hyperphagia prior to hibernation is an obvious way to reduce conflicts entirely within FWP's purview that will protect hunters and grizzlies alike. Like Hoot Owl restrictions, which protect imperiled fish species during summer heat, reasonable timing restrictions during bear hyperphagia will protect bears and people in shared habitat during a vulnerable period when the risk is high.

FWP can and should be a leader in adopting these common sense, scientifically supported approaches to grizzly bear conservation.

D. FWP Should Honestly Assess the Impact of the Legal Decision Reinstating Protections for GYE Grizzlies.

Montana FWP has stated publicly and to the media that the decision in *Crow Indian Tribe v. U.S. et al*, CV 17-89-M-DLC has no impact on management of NCDE bears. This contention is demonstrably false and dishonest. The decision in that case affirmatively discussess the NCDE bears and holds that de-listing populations by balkanization (without considering the impacts on the remaining populations) is illegal. Conservationists have warned FPW and the other relevant agencies of this legal deficiency at every IGBC meeting for the last three years. Yet FWP continues to pursue an illegal approach to removal of ESA protections and provide inaccurate updates to the media and to the state government.

Citing Circuit Court caselaw, the Court in the GYE case explained:
"As the D.C. Circuit recently noted in Humane Society, '[t]he Service's power is to designate genuinely discrete population segments; it is not to delist an already-protected species by balkanization.' 865 F.3d at 603. The Service's approach-evidenced first by this delisting and by

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its proposal to delist the other significant population, the Northern Continental Divide population--does not square with the ESA as a matter of statutory interpretation or policy. Here, the Service is engaged in a process of real-time "balkanization" criticized by the D.C. Circuit in Humane Society:

> when a species is already listed, the Service cannot review a single segment with blinders on, ignoring the continuing status of the species' remnant. The statute requires a comprehensive review of the entire listed species and its continuing status. Having started the process, the Service cannot call it quits upon finding a single distinct population segment.

Id. at 601. Moreover, it is illogical for the Service to determine that, because the populations have not interbred for many generations-making them biologically distinct from one another-it is appropriate, without further analysis, to reduce the chance that they will interbreed in the future. The ESA does not permit the Service to use the distinct population segment designation to circumvent analysis of a species' overall well-being." Opinion at 14-15. The Court further explained:

"…In fact, the Service has initiated the delisting process in the Northern Continental Divide Ecosystem, home to the only other substantial grizzly population in the lower-48. *See* Department of the Interior, Notice, Endangered and Threatened Wildlife and Plants; Draft Conservation Strategy for the Northern Continental Divide Ecosystem Grizzly Bear, 78 Fed. Reg. 26,064 (May 3, 2013). If the Northern Continental Divide and Greater Yellowstone populations are both successfully delisted, the lower-48 grizzly listing will cover only two areas with fewer than 100 grizzlies, one area where grizzlies have not been affirmatively located in over twenty years, and a fourth area where grizzlies have not been seen since at least 1975. Final Rule, 82 Fed. Reg. at 30,508--09. As the Service itself admits, 'it would be difficult to justify a distinct population segment in an area where bears ... have not been located for generations.' (Doc. 203 at 35.) Given the context surrounding the Greater Yellowstone segment delisting, the Service's argument-that the Court should, as it did, look no further than to note the continued listing of the lower-48 grizzly post-delisting of the Greater Yellowstone grizzly-is simplistic at best and disingenuous at worst. Again, the Service cannot abuse its power to 'delist an already-protected species by balkanization.' Humane Soc y, 865 F.3d at 603." Opinion at 24-25.

Clearly, the decision bears on the NCDE process and FWP and its lawyers should be honest about that and follow the law. Removing protections from NCDE bears without considering the impact of doing so on the remaining grizzly populations, including the currently vacant Bitterroot, and struggling Selkirk and Cabinet-Yaak populations would be illegal.

E. FWP Should Not Consider Grizzly Trophy Hunting

As part of the development of the necessary statewide grizzly bear management plan, FWP should designate grizzlies as a non-game species. Grizzly recovery is far too tenuous, establishing connectivity and genetic exchange is far too essential, and the majority of the still-isolated populations are still too imperiled to undermine that recovery by allowing even limited trophy hunting. Trophy hunting is inherently additive. Trophy hunting is not a substitute for management removals nor will it target "problem" bears. Simply put, grizzly bears are so much more valuable to Montana alive than dead. The state's ecosystems benefit from the presence of this keystone native species. And, from an economic perspective, Montana makes orders of

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magnitude more money in tourism related income than it could ever generate from a trophy hunt. The future is in wildlife viewing and photography, not killing of animals that do not provide food.

F. Conclusion.

Montana's decision to only accept comment on a single isolated chapter, and only on a single still-isolated population of grizzlies undermines the effectiveness and potential of the ARM. We urge you not only to address the flaws in Chapter 2, but also to develop and provide a public comment opportunity on a broader state grizzly bear management plan, including efforts the state can and should undertake to ensure connectivity between the still isolated populations within Montana. Again, please do not sign the Conservation Strategy until it is revised to address the impacts of the GYE decision and goes through adequate notice and comment as required by NEPA. Rather than managing for a bare minimum of bears, Montana can embrace this icon of the West, adopt common sense management practices, ensure a vibrant grizzly population well into the future and be a leader.

Sincerely,

Bethany Cotton, J.D.
Wildlife Program Director
WildEarth Guardians
P.O. Box 7516
Missoula, MT
59802

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Submitted Electronically to: FWPGRIZZLYBEARARM@mt.gov

October 26, 2018

Ms. Martha Williams, Director
Montana Department of Fish, Wildlife and Parks
Grizzly Bear ARM – Wildlife Division
P.O. Box 200701
Helena, MT 59620-0701

Re: Administrative Rulemaking – Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem and Transfer of ARM 12.9.103

Dear Director Williams:

On behalf of more than 2,900 Sierra Club members in Montana and 3.5 million members and supporters nationwide, we submit the following comments on Montana Fish, Wildlife and Parks' (FWP) proposed "New Rule 1 pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem and the transfer of ARM 12.9.103." We appreciate that the state of Montana has initiated a public comment period in the face of the U.S. Fish and Wildlife Service's (USFWS) refusal to allow public comment on the revised NCDE Grizzly Bear Conservation Strategy. However, as outlined further below, we believe that this process is premature, and that the scope of this public comment opportunity in regard to grizzly bear management in Montana is inadequate and should be expanded at the appropriate time in the future.

As demonstrated over many years in both the Northern Continental Divide Ecosystem (NCDE) and the Greater Yellowstone Ecosystem (GYE), there is a strong public interest in Montana and nationally in the fate of the two largest grizzly bear populations in the lower 48 states. Because four of the six grizzly bear recovery areas in the USFWS' 1982 grizzly bear recovery plan are wholly or partially in Montana, the state has an absolutely critical role to play in full recovery of grizzlies throughout the Northern Rockies and Greater Yellowstone regions. We hope that Montana recognizes this pivotal role and will act accordingly with state, federal, Tribal, non-governmental and other partners to achieve the goal of full grizzly bear recovery.

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The NCDE Population is Critical to Full Grizzly Bear Recovery in the Lower 48

The importance of the NCDE as a source population for broader recovery of grizzly bears in the lower 48, including the critically-imperiled Cabinet-Yaak Ecosystem (CYE) populations and restoration of grizzlies to the Bitterroot ecosystem, cannot be overstated. Maintaining strong protections and limiting mortality are critical to establishing genetic and demographic connectivity between the NCDE and these recovery areas as well as Yellowstone. Delisting of the NCDE population, particularly if a trophy hunting season is subsequently allowed in Montana in districts on the western edge of the NCDE, would seriously jeopardize potential connectivity between the NCDE and CYE populations and recovery of the extremely vulnerable CYE population. The NCDE population's key role in recovery of other imperiled or (currently) non-existent populations is recognized in the Final NCDE Grizzly Bear Conservation Strategy.

Numerous studies[1] have shown that a minimum viable population to ensure long-term sustainability and recovery of grizzly bears/large mammals is several thousand animals and that demographic connectivity is critical for long-term persistence. Accordingly, Sierra Club's vision for true recovery of grizzly bears is a thriving, connected, well-distributed population of several thousand bears in the lower 48. Currently, estimates are approximately 1,800 bears in largely isolated populations occupying just 2-3% of their former historic range in the conterminous United States. Given this, Sierra Club does not believe grizzly bears are recovered. We understand that this comment period is not about delisting the NCDE population per se and we recognize that delisting is in the purview of the USFWS; however, this state rulemaking process is a step toward that end and integral to potential adoption of the NCDE Grizzly Bear Conservation Strategy and delisting process in the future.

FWP's Process is Premature in Light of the Recent Yellowstone Ruling

As FWP knows, the U.S. District Court for Montana ruled in September that the USFWS "failed to consider an important aspect of the problem" when it designated the Yellowstone grizzly population as a Distinct Population Segment (DPS) and delisted it in 2017, without considering the impacts of delisting the Yellowstone DPS on the remainder of the species listed under the ESA in 1975. This was a primary reason that the District Court invalidated the delisting rule and reinstated ESA protections for the Yellowstone grizzly population. As noted by the court:

> "[A]s the D.C. Circuit wrote in Humane Society, considering the statutory design of ESA § 4, 16 U.S.C. § 1533, "[t]he Endangered Species Act's text requires the

[1] *See, for example:* Lande, R. (1995). Mutation and conservation. Conservation biology, 9(4), 782-791.; Frankham, R., Bradshaw, C. J., & Brook, B. W. (2014). Genetics in conservation management: revised recommendations for the 50/500 rules, Red List criteria and population viability analyses. Biological Conservation, 170, 56-63.; Traill, L. W., Bradshaw, C. J., & Brook, B. W. (2007). Minimum viable population size: a metaanalysis of 30 years of published estimates. Biological Conservation, 139(1), 159-166.; Proctor et al. (2012). Population Fragmentation and Inter-Ecosystem Movements of Grizzly Bears in Western Canada and the Northern United States. Wildlife Monographs 180:1–46; 2012; DOI: 10.1002/wmon.6

> Service, when reviewing and redetermining the status of a species, to look at the whole picture of the listed species, not just a segment of it." 865 F.3d at 601."[2]

and:

> "[A]s the D.C. Circuit recently noted in Humane Society, "[t]he Service's power is to designate genuinely discrete population segments; it is not to delist an already-protected species by balkanization." 865 F.3d at 603. The Service's approach-evidenced first by this delisting and by its proposal to delist the other significant population, the Northern Continental Divide population--does not square with the ESA as a matter of statutory interpretation or policy. Here, the Service is engaged in a process of real-time "balkanization" criticized by the D.C. Circuit in Humane Society:
>
>> when a species is already listed, the Service cannot review a single segment with blinders on, ignoring the continuing status of the species' remnant. The statute requires a comprehensive review of the entire listed species and its continuing status. Having started the process, the Service cannot call it quits upon finding a single distinct population segment. Id. at 601 . Moreover, it is illogical for the Service to determine that, because the populations have not interbred for many generations-making them biologically distinct from one another-it is appropriate, without further analysis, to reduce the chance that they will interbreed in the future. The ESA does not permit the Service to use the distinct population segment designation to circumvent analysis of a species' overall well-being."[3]

In light of the District Court ruling on the Yellowstone delisting, the USFWS should put its delisting process for the NCDE grizzly population on hold. FWP's process regarding Chapter 2 of the Conservation Strategy, and this rulemaking, is premature.

FWP's Regulatory Framework Must Commit to Allowing the NCDE Grizzly Bear Population to Grow and Expand Its Range

In a Montana Public Radio interview on September 17 regarding this proposed rulemaking, FWP spokesman Dillon Tabish stated that the Department wanted to hear from the public on the question of *"Are we comfortable with a minimum of 800 grizzly bears on the landscape? Is that too many? Is that not enough?"*

Sierra Club is very concerned with – and will strongly oppose – any rulemaking or management plan that could allow the NCDE grizzly bear population to decrease, particularly by hundreds of bears. FWP's 2018 estimate is 1,047 grizzly bears in the NCDE. A minimum of 800 bears obviously means the population could be managed for decline, as the Greater Yellowstone delisting rule allowed before it was vacated by the

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[2] Crow Indian Tribe v. United States, No. CV 17-117-M-DLC, 2018 WL 4568418 (D. Mont. Sept. 24, 2018) p. 28
[3] Ibid. p. 14-15

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U.S. District Court. Given the current estimate of over 1,000 bears in the NCDE that has been repeatedly reported in the media, any proposal by FWP to allow a minimum of 800 bears will almost certainly be overwhelmingly rejected by the public.

We recognize that language in the proposed rule and in the Final NCDE Grizzly Bear Conservation Strategy (Chapter 2 on demographics) was added in order to attempt to address this issue. FWP has stated that the additional language translates into maintaining a population of about 1,000 bears. However, we have fundamental concerns with this approach.

First, it is patently unclear to the public how managing "mortalities from all sources to support an estimated probability of at least 90% that the grizzly bear population within the demographic monitoring area remains above 800 bears" – as stated in the proposed rule – actually maintains a population of about 1,000 bears in the demographic monitoring area (DMA) as FWP avers. No explanation whatsoever was provided in the proposed rule in any portion of Section 3 in regard to independent female survival and mortality thresholds that employ the 90% probability language.

We did find language in the Final Conservation Strategy that gives some explanation:

> *"[P]opulation modeling, based on vital rates from Costello et al. (2016), indicates that the estimated probability that the population was above 800 grizzly bears increased from only 21% in 2004 to 90% in 2010, and has been ≥99% since 2012 (Figure 4). Median population estimates for those years when Objective 2 was met ranged from 885 bears in 2010 to 1,047 bears in 2018. Thus, given our current rates and levels of uncertainty, managing for a population with a ≥90% estimated probability of being above 800 bears necessitates maintaining an estimated population size of approximately 950–1,000 grizzly bears. Additionally, larger estimated population sizes would be needed if the level of uncertainty increases." (Final Conservation Strategy pp. 52-53)*

However, this methodology still allows the population to decrease by approximately 100 bears (from the 2018 estimate of 1,047 bears to 950 bears). This information should be made clear to the public and the comment period extended to allow for consideration of it; without such information, members of the public cannot make informed comment on this proposed rulemaking. Additionally, we urge FWP to use a higher probability figure of 95% rather than 90%.

Secondly, we are concerned with the extremely general "based on population modeling" language in Section 3(b)(i), (ii) and (iii) in regard to independent female survival and female and male mortality thresholds; for example

> "[u]sing a 6-year running average, limit annual estimated number of total reported and unreported mortalities of independent females within the demographic monitoring area to a number that is no more than 10% of the number of independent females estimated within the demographic monitoring area based on

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> population modeling and a number that is at or below the maximum level consistent with a projected probability of at least 90% that the population within the demographic monitoring area will remain above 800 bears based on population modeling[;]"

Nowhere in the proposed rule does FWP specify what modeling methodology is being used, or will be used in the future and how population estimates would be recalibrated if a new methodology is used. As FWP knows, this was a significant issue in the debate over delisting of the Yellowstone grizzly population in regard to potential changes in methodology used to estimate the population (from Chao2 to an undetermined methodology in the future), and it was one of the reasons the delisting rule was vacated by the court. This matters because just months after Yellowstone bears were delisted, the Interagency Grizzly Bear Study Team and bear management agencies were already talking about switching to a new estimation methodology, despite assurances to the public that Chao2 would be used "for the foreseeable future."

Finally, we note that many sources including the USFWS, the Interagency Grizzly Bear Study Team, FWP and others have detailed how difficult it is to estimate grizzly bear populations and that there is much uncertainty in the estimates. Compounding this, different methodologies are used in different grizzly bear recovery areas to estimate populations; there is no consistent approach.

Given this uncertainty, the extremely slow reproductive rate and corresponding vulnerability of grizzly bear populations to rapid decline in the event of escalating mortality, FWP's approach should be to employ the precautionary principle and err on the side of caution. Additionally, given the importance of the NCDE population to recovery of the species as a whole, and that several thousand bears are necessary for recovery, as noted above, the NCDE grizzly population should be allowed to increase in number and expand in range.

The Proposed Rule's Determination of Survival Rates/Mortality Limits is Flawed/Unclear

It is unclear why survival rates and mortality limits specified in Section 3 of the proposed rule, based on Chapter 2 of the NCDE Grizzly Bear Final Conservation Strategy, exceed female survival rates and independent female and male mortality thresholds as per FWP's own research. In order to ensure long-term sustainability of the NCDE grizzly bear population, Costello et al. 2016[4] maintained that a survival rate of >=93% was required, with independent female mortality at <=6% and independent male mortality at <=11%. However, the proposed rule mandates female survival rates at only >= 90%, and independent female and independent male mortality at <=10% and <= 15%, respectively.

What is the rationale for the lower independent female survival rate and the higher mortality limits for both females and males in the proposed rule?

[4] Costello, Cecily M. et al. 2016. Grizzly Bear Demographics in the Northern Continental Divide Ecosystem 2004-2014. Montana Department of Fish, Wildlife and Parks.

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Additionally, research by independent scientists is needed to adequately discern appropriate survival rates and mortality thresholds that will ensure the long-term sustainability of the population.

The Scope of Public Comment Opportunity Must Be Expanded

The public raised numerous issues regarding grizzly bear habitat and conflict management – critical factors in achieving full recovery of the NCDE grizzly bear population and connectivity to other grizzly populations – that were not adequately addressed or accounted for in the NCDE Grizzly Bear Final Conservation Strategy and the Response to Comments, such as the adequacy of provisions for Demographic Connectivity Areas, promoting demographic connectivity to the GYE, developed sites, protections on state lands, the rapidly growing population in Flathead and surrounding counties with corresponding increased demands for recreational access, timber sales and opening of roads for logging projects.

For the above reasons, in addition to inviting public comment on the demographic factors enshrined in Chapter 2 of the Final Conservation Strategy, FWP must also invite and consider public comment on Chapters 3 and 4 of the Conservation Strategy regarding grizzly bear habitat and conflict management in Montana.

FWP Should Employ the Precautionary Principle and Maintain a Prudent Approach to Grizzly Bear Management

Sierra Club appreciates FWP's public statements regarding the agency's willingness to let the grizzly bear population grow in Montana and to not persecute bears in NCDE Zones 2 and 3 just because they are present on the landscape. FWP should continue to affirm those goals publicly. We appreciate Montana's more reasonable and prudent approach to grizzly bear management in comparison to Wyoming's public statements and grizzly bear management practices and policies; for example, FWP personnel statements in the press regarding the greater efficacy of bear spray compared to firearms in preventing/reducing conflicts between bears and people.

We also greatly appreciate the state's decision not to propose a grizzly bear trophy hunt in 2017. We do however, have concerns about language in ARM 12.9.103 concerning sport hunting in Section c(ii):

> "[S]port hunting is considered the most desirable method of balancing grizzly bear numbers with their available habitat, minimizing depredations against private property within or adjacent to grizzly bear habitat, and minimizing grizzly bear attacks on humans."

Many non-lethal ways of preventing or minimizing depredations against private property and grizzly bear attacks are effective and should be prioritized, rather than a sport hunt. FWP bear management specialists work hard to minimize conflicts. ARM 12.9.103

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language should be revised to reflect that FWP will prioritize non-lethal methods of prevention and minimizing conflicts between people and bears. Sierra Club is opposed to all trophy hunting of grizzly bears.

As has been noted by federal grizzly bear management agencies, the U.S. Forest Service and others, grizzly bears will always remain a "conservation reliant" species. Grizzly bears in the Northern Rockies are treasured around the world, and given their vulnerability, FWP should always employ a precautionary approach in managing this species, and we urge FWP not to propose a trophy hunt if management authority for NCDE or GYE grizzly bears is turned over to the state in the future.

In summary, Sierra Club believes that this rulemaking process is premature given the recent U.S. District Court ruling invalidating the delisting rule for the Yellowstone grizzly bear population and the implications of that ruling for the NCDE delisting process. If the USFWS delisting and FWP processes continue to move forward, FWP must expand the scope of the comment period to include habitat and conflict management of grizzly bears in Montana and relevant sections of the Conservation Strategy for grizzly bear management. The NCDE grizzly bear population must be allowed to increase in number and range; independent female survival rates and mortality rates for independent females and males must be re-evaluated including through new research and analysis by independent scientists to ensure the long-term health of the population; FWP's grizzly bear management and on-the-ground policies must promote eventual natural demographic and genetic connectivity between the NCDE and the Cabinet-Yaak and GYE grizzly populations; and ARM 12.9.103 language should be revised to prioritize non-lethal measures to prevent human-grizzly bear conflicts. We urge FWP not to sign the Final NCDE Grizzly Bear Conservation Strategy until these issues are fully addressed.

Thank you for your consideration of our comments.

Sincerely,

Bonnie Rice, Senior Representative - Greater Yellowstone and Northern Rockies Regions
Our Wild America Campaign

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CENTER for BIOLOGICAL DIVERSITY Because life is good.

October 25, 2018

Grizzly Bear ARM
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Submitted Online: http://fwp.mt.gov/news/publicNotices/rules/pn_0265.html

Re: Center for Biological Diversity Comments on the NCDE Grizzly Bear Demographic Objectives

To Montana Department of Fish, Wildlife and Parks and FWP Commission:

The Center for Biological Diversity ("Center") submits the following comments on the Montana Department of Fish, Wildlife and Park's ("FWP") Rule I pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem and the transfer of ARM 12.9.103. The Center is a non-profit conservation organization dedicated to the protection of native species and their habitats through science, policy and environmental law. The Center has more than 1.6 million members and supporters dedicated to the protection and restoration of endangered species and wild places. The Center has worked for many years to protect imperiled plants and wildlife, including grizzly bears.

For starters, we note that this comment period appears to be a futile process and a foreordained formality where FWP is asking the public comment on a proposed rule has already been incorporated into the Conservation Strategy for the Grizzly Bear in the Northern Continental Divide Ecosystem. The Conservation Strategy was already finalized by FWP earlier this year, without appropriate opportunities for public comment.[1] Thus, we provide the following comments with the unsettling feeling that public opinion is of little import in this process.

[1] *See* FWP, "Northern Continental Divide Ecosystem Subcommittee Completes Conservation Strategy for Grizzly Bears," found at igbconline.org/northern-continental-divide-ecosystem-subcommittee-completes-conservation-strategy-for-grizzly-bears/ (last visited Oct. 4, 2018); see also NCDE Subcommittee, 2018, Conservation Strategy for the Grizzly Bear in the Northern Continental Divide Ecosystem, at 12 ("The NCDE Grizzly Bear Conservation Strategy is not a decision document that requires public review and input.").

IV. FWP Must Work With State and Federal Agencies to Recover Grizzly Bears in the Lower 48 As a Whole.

FWP makes clear that it is proposing to adopt the demographic objectives of the NCDE Conservation Strategy into administrative rule to facilitate removal of Endangered Act Species protections from NCDE bears. According to FWP:

> To delist a species or distinct population segment of a species from the Endangered Species Act, there must be adequate regulatory mechanisms in place to ensure that it will not once again become threatened or endangered. The commission is proposing to adopt the demographic objectives of the NCDE Conservation Strategy into administrative rule to demonstrate Montana's commitment to maintaining a recovered grizzly bear population in the NCDE, as well as strengthen the regulatory mechanisms associated with population management.

While FWP's intent to maintain a recovered grizzly bear population in the NCDE is desirable, this statement demonstrates that FWP's approach to grizzly bear recovery is insufficient under the Endangered Species Act.

Grizzly bears once ranged throughout most of western North American, form the high Arctic to the Sierra Madre Occidental of Mexico, and from the coast of California across most of the Great Plains.[2] Prior to European settlement, scientists believed that approximately 50,000 grizzly bears occupied the western United States between Canada and Mexico.[3] With European settlement of the American West and a federally funded bounty program aimed at eradication, grizzly bears were shot, trapped, and poisoned, reducing the population to just 2 percent of their historic range.[4] As a result of its precipitous decline, the Service listed the grizzly bear as a threatened species in the lower 48 states under the Endangered Species Act in 1975.[5]

Today scientists estimate there are less than 1,800 grizzly bears left in the lower 48 states, occupying five isolated populations.[6] The vast majority of bears today are confined to the Greater Yellowstone and Northern Continental Divide ecosystems, both of which remain completely isolated from other populations.[7] The other four recovery areas identified in the 1993 recovery plan are home to only approximately 150 bears, including the Selway-Bitterroot recover zone in central Idaho and western Montana in which no bear population exists.[8] These four recovery areas are larger than the Greater Yellowstone and Northern Continental Divide ecosystems combined, and across the northern Rockies have the potential to create an interconnected meta-population that provides greater security for the

[2] Servheen, Christopher, U.S. Fish and Wildlife Service, Grizzly Bear Recovery Plan 9 (Sept. 10, 1993).
[3] 82 Fed. Reg. 30,502, 30,508 (June 30, 2017) (Endangered and Threatened Wildlife and Plants; Removing the Greater Yellowstone Ecosystem Population of Grizzly Bears From the Federal List of Endangered and Threatened Wildlife), vacated by *Crow Indian Tribe v. U.S.*, Case No: 9:17-cv-00089-DLC (D. Mont. Sept. 26, 2018).
[4] *Id.*
[5] 40 Fed. Reg. 31, 734 (July 28, 1975).
[6] *See* 82 Fed. Reg. at 30,508-09.
[7] *Id.* at 30,509.
[8] *Id.*

species as a whole and a buffer against the projected adverse effects of climate change, nonnative species, and genetic depression.[9] Nevertheless, rather than taking a holistic approach to grizzly bear recovery, federal and state agencies continue to take a fragmented approach that will thwart full recovery of the species.

We recognize that Montana, working together with the Fish and Wildlife Service and other state and federal agencies, have made great strides in recovering bears in the Northern Continental Divide Ecosystem ("NCDE"), and since grizzly bears were first listed in 1975 the population has grown to an estimated population of over 900 bears.[10] But this bear population remains isolated, and connecting bears in the NCDE to other grizzly bears in the lower 48 states is crucial for grizzly bear recovery. Indeed, the District Court of Montana recently struck down a fragmented approach such as this as it related to grizzly bears in the Greater Yellowstone Ecosystem ("GYE"). *See Crow Indian Tribe v. U.S.*, Case No. 9:17-cv-00089-DLC, 2018 U.S. Dist. LEXIS 163319, (D. Mont. Sept. 26, 2018). The court stated:

> The Service does not have unbridles discretion to draw boundaries around every potentially healthy population of a listed species without considering how that boundary will affect the members of the species on either side of it. The Service's piecemeal approach, isolating and delisting populations without questioning the effect on the populations, presents an irresolvable conflict with ESA's "policy of institutionalized caution."

Id. At *34 (citing *Ariz. Cattle Growers' Ass'n v. Salazar*, 606 F.3d 1160, 1167 (9th Cir. 2011)). Indeed, reducing the opportunity for grizzly bears in the NCDE to reach other grizzlies in the lower 48 states reduces the chance they will interbreed with bears in the GYE or elsewhere, thus significantly reducing the opportunity for full grizzly bear recovery.

For these reasons, we reject FWP's fragmented approach to grizzly bear recovery.

II. Establishing Demographic Objectives Based On Incomplete Data is Premature.

FWP estimates that over 900 bears likely occupy the NCDE, with one report estimating that in 2014, there was likely between 946 to 1,089 bears, for median estimate of 960 bears.[11] This population estimate is established based upon modeling from a population estimate of 765 bears taken nearly 15 years ago, and thus the accuracy of this population estimate is shaky at best.[12] Moreover, a population estimate from 2014 is outdated and needs to be updated with more current information.

[9] *See id.*
[10] 82 Fed. Reg. at 30,509; Costello, C.M., R.D. Mace, and L. Roberts, Montana Department of Fish, Wildlife and Parks, 2016, "Grizzly bear demographics in the Northern Continental Divide Ecosystem, Montana: research results (2004-2014) and suggested techniques for management of mortality," at 2 (median estimated population size of 960 bears in 2014 based on modeling) (hereinafter, "Costello *et al.*").
[11] Costello *et al.* at 70.
[12] *Id.* ("Assuming an initial population size of 765 in 2004 (Kendall et al. 2009), the median estimated population size was 960 bears in 2014 with a 95th percentile of 946-1,089.")

As FWP acknowledges, "[m]anagers and the public agree that information on both population size and trend is needed," and "[h]aving these estimates will great improve our collective knowledge of grizzly bear ecology, an provide more measurable and precise information with which to judge the status of the grizzly population in the NCDE." Nevertheless, without this critically important information, FWP insists on pushing forward with finalizing a conservation strategy and establishing demographic objectives that will be crucial for ensuring a sustainable grizzly bear population in the future. In the absence of accurate population size and trend data, however, the public cannot informatively comment upon the proposed objectives.

For example, without a more current and accurate population estimate, FWP and the public cannot determine how many bears would be vulnerable under a population objective of 800 bears, as proposed in the demographic objectives put forward by FWP. If there are over 1,000 bears, that could leave up to 200 bears vulnerable to hunting or management removals. What if there are 1,500 bears in the NCDE – would that mean 500 bears, or one-third of the population, would be expendable?

Moreover, how will FWP ensure survival of at least 90% of independent females without a current and accurate estimate of independent females in the NCDE. And if this proposal is based on ensuring the population stays at or above just 800 bears, how many females will be left vulnerable under this proposal? This same issue permeates all of the proposed objectives.

Due to the lack of current and accurate population estimates, demographic estimates, and population trends, we strongly urge FWP to discard these objectives and wait until current data is available to establish proposed objectives for public comment.

III. FWP's Objective to Maintain 800 Bears in the Demographic Monitoring Area Is Inadequate for Recovery.

As noted above, FWP estimates that there may have been up to 1,089 grizzly bears in the NCDE in 2014 (and for reasons stated above, the accuracy of this estimate based on extremely old data is extremely questionable).[13] Given FWP's assessment that the population is growing, even if this population estimate were accurate, by now the population would likely be greater than this 2014 estimate. Thus, setting a minimum population objective of just 800 bears would be far below the current population. There is no scientific basis to set such a low minimum population level.

And yet, even with the current population—whatever that might be—bears in the NCDE still have not expanded far enough to connect with other bears in the lower 48 states. This connectivity is critical for full grizzly bear recovery. Grizzly bears in the NCDE are an important source population that may be used to increase grizzly bears elsewhere in the lower 48 states. Grizzly bears have been translocated to the Cabinet-Yaak ecosystem to augment the small grizzly bear population there, and federal and state agencies are considering translocating bears from the NCDE into the North Cascades in the future to augment that grizzly bear population. However, FWP fails to recognize that curtailing the population would negatively impact opportunities for connectivity and augmentation in other recovery areas

[13] Costello *et al.* at 70.

identified by the Fish and Wildlife Service. Rather, FWP finds it sufficient to simply "monitor demographic and genetic connectivity among populations."

For example, curtailing the expansion of NCDE bears could lead to serious genetic issues for grizzly bears in the GYE, which currently remain completely isolated from any other bear populations. The Fish and Wildlife Service has acknowledged that the lack of interchange between GYE and other bears may be necessary to ensure the long-term persistence of grizzly bears in the GYE.[14] The Federal District Court of Montana recently noted that while the Service admitted genetics may pose an issue without interbreeding in the long-term future, there are currently no mechanisms to resolve that issue:

> Despite [the Fish and Wildlife Service's] recognition that continued isolation poses a threat to the Yellowstone grizzly, there is no regulatory mechanism in place to address the threat, only Montana's commitment to "manage discretionary mortality" between populations in order to "retain the opportunity for natural movement of bears between ecosystems." . . . . Of course, those natural movements have not yet occurred. Thus, it is illogical to conclude that the same opportunities for connectivity will produce different results in the future, particularly if one or both populations are delisted.

Crow Indian Tribe, 2018 U.S. Dist. LEXIS at *58.

By limiting the minimum population of grizzly bears to 800 bears, FWP seriously harms the chances that bears in the NCDE will expand far enough to reach grizzly bears in the GYE or elsewhere in the lower 48 states. FWP's commitment to "monitor" connectivity does nothing to alleviate this issue. Thus, this demographic objective is likely to harm, not further, grizzly bear recovery in the lower 48 states, and therefore should be revisited.

IV. FWP Should Develop Demographic Objectives to Protect NCDE Grizzlies Outside of the Demographic Monitoring Area.

FWP generally limits its demographic objectives to grizzly bears occupying the demographic monitoring area ("DMA") with no protections for grizzly bears living outside the DMA. Without objectives for grizzlies outside the DMA, those grizzlies remain vulnerable to high mortality rates through management removals, future hunting, poaching, and other causes of death with no repercussions on FWP's management objectives. But scientists have recognized that protecting grizzlies outside the DMA is extremely important for purposes of connectivity and for protecting genetic diversity.

In evaluating patterns of genetic diversity of NCDE bears, for example, authors found that grizzlies on the periphery of the ecosystem often descended from a small number of females, largely due to male-

[14] 82 Fed. Reg. at 30,518 ("Occasional movement of bears from other grizzly bear populations into the GYE grizzly bear population would be beneficial to its long-term persistence (citing Boyce et al. 2001, pp. 25, 26)); *id.* ("we recognize that natural connectivity is important to long-term grizzly bear conservation"); id. at 30,536 (1 to 2 effective migrants from other grizzly bear populations every 10 years would "ensure genetic health in the long term (citing numerous scientific studies)); *id.* ("the Service recognizes that the long-term viability of the GYE grizzly bear population will benefit from occasional gene flow from nearby grizzly bear populations like that in the NCDE.").

biased dispersal.[15] Thus, the authors suggested that "[e]dge populations may be particularly important sources of genetic diversity that may enable species persistence particularly in changing environments."[16]

Moreover, if grizzlies outside the NCDE DMA are persecuted at high levels, the likelihood of NCDE bears expanding and connecting with other grizzly bear populations will decrease significantly. This could have far-ranging implications for grizzly bear recovery in the lower 48 states. NCDE bears would be less likely to connect to bears in the GYE, leaving GYE grizzlies isolated and more likely to suffer from long-term loss of genetic diversity. Furthermore, NCDE bears would be less likely to move into the Selway-Bitterroot area, a Fish and Wildlife Service-identified recovery zone necessary for grizzly bear recovery that is currently unoccupied by grizzly bears.

For these reasons, demographic objectives that do not protect bears outside the DMA are insufficient to move grizzly bears towards recovery, as required by the Endangered Species Act.

CONCLUSION

We are disappointed that MFWP is trying to finalize demographic objectives for NCDE grizzlies without appropriate considerations including the lack of an accurate population estimate and grizzly bear recovery in the lower 48 states as a whole. We urge MFWP to reconsider these objectives and hold off on finalizing any such objectives at this time.

Sincerely,

Andrea Santarsiere, Senior Attorney
Center for Biological Diversity
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Victor, ID 83455

[15] Nate, Mikle, Tabitha A. Graves, Ryan Kovach, Katherine C. Kendall, and Amy C. Macleod, "Demographic mechanisms underpinning genetic assimilation of remnant groups of a large carnivore." 2016. Proc. R. Soc. B 283: 20161467, at p.6. http://dx.doi.org/10/1098/rspb2016.1467.
[16] *Id.* at 7.

October 25, 2018

Dear MDFWP,

Thank you for the opportunity to comment on the Departments 2018 Grizzly Bear ARM. Please enter my comments into the official record.

The Proposed Rule contains the following "demographic objectives":

* Maintain females with offspring in at least 21 of 23 Bear Management Units;

* Maintain at least a 90% probability of 800 or more bears, down from the current estimate of 1050;

* Maintain an Independent Female survival rate of at least 90%, down from 95%;

* Maintain an Independent Male survival rate of at least 85%, down from 89%.

Here's your problem with putting all your eggs in those baskets – It rubber stamps the flawed NCDE Conservation Strategy, and it's demonstrably illegal. In 1997, 21 years ago, the federal court told the U.S. Fish and Wildlife Service that it could Not base claims of "recovery" on population numbers, trend, or occupancy of BMU's – Period – Full Stop (*Fund for Animals v. Babbitt and National Audubon Society v. Babbitt 1997)*.

If FWP continues to head off this Population and Occupancy cliff with the Fish & Wildlife Service – the same one FWS just ran off in Yellowstone - it won't lead to recovery; it won't lead to delisting; and it won't lead to Montana regaining State control.

So, what needs to change, and how can FWP get the U.S. Fish and Wildlife Service to make those changes? You have tremendous unused leverage here because without your signature, there is no Final Conservation Strategy. You can use that leverage to ensure that the Conservation Strategy Follows the Science, Obeys the Law, and actually leads to recovery.

(1) Grizzly bear populations cannot be delisted one isolated Distinct Population Segment (DPS) at a time. The impacts to the entire lower 48 population must be considered. Common sense says so, and the District Court in Missoula just said so (*Crow Indian Tribe v. USA, 9/24/18*). Focusing only on the NCDE and on maintaining 800 grizzlies there doesn't recover grizzlies, doesn't solve the Fish & Wildlife Service's problem – and it doesn't solve yours.

(2) Back in that same 1997 court case, the Fish & Wildlife Service was ordered to develop Habitat Based Recovery Criteria (HBRC) before proposing delisting in any ecosystem. These were to detail the actual Quality and Quantity of habitat necessary to achieve and maintain a recovered population. FWS has refused, instead proposing Fake criteria around motorized route density, developed recreation sites, grazing allotments, vegetation management, and oil, gas, and mining activities. These deal with Habitat Security – NOT the actual Quality and Quantity of habitat on the landscape.

FWP biologists are habitat experts and could work with FWS to correct this fatal error in the Conservation Strategy. It's imperative that you push the Fish & Wildlife Service to do this if recovery, delisting, and a return of State management is ever going to happen. The proposed rule under consideration does nothing to develop these critical Habitat Based Recovery Criteria – and until that is done, an FWP commitment to 800 bears – or 1000 – will make Zero difference.

Glacier National Park has already developed and "ground-truthed" a grizzly habitat map for the Park, and will complete the mapping of Park avalanche chutes – a key grizzly bear habitat type – in March 2019. Both of these efforts must be expanded ecosystem-wide as a first step in developing Habitat Based Recovery Criteria, and FWP should be helping – not rubber-stamping the fake 800 bear "recovery" numbers of the U.S. Fish and Wildlife Service's Conservation Strategy.

(3) If the required lower 48 "Metapopulation" of at least 2500-3000 bears is going to happen (Allendorf and Ryman 2002, Bader 2000, Reed et al. 2003, Shaffer 1992, Traill et al. 2010), landscape level Linkages must be established and protected within and between all 6 recovery ecosystems, and be based on documented grizzly bear needs for habitat quality and security. The current Demographic Connectivity Areas are not grounded in bear-

based habitat standards, but rather are based on land manager preferences and political correctness. FWP cannot allow itself to become an FWS accomplice in disregarding sound science.

The only document that addresses the problem of designating bear-based linkages is Amendment 19 to the Flathead Forest Plan dealing with bears, roads, and habitat security, and must be the standard for determining viable linkage zones or demographic connectivity areas.

(4) As you know, grizzlies are one of the slowest reproducing animals in North America – along with musk ox. As such, there is no biological justification or need for the species to be the subject of a sport/trophy hunt. A grizzly bear population explosion is simply a biological impossibility.

And while the decision of the Montana Fish, Wildlife and Parks Commission to forego a hunt in the coming year is welcome, it's clear that this a temporary decision only. In fact, Montana's Grizzly Bear Policy under ARM 12.9.103 states:

(c) Hunting and recreational use. The commission recognizes its responsibility to consider and provide for recreational opportunities as part of a grizzly bear management program. These opportunities shall include sport hunting, recreational experiences, aesthetics of natural ecosystems, and other uses consistent with the overall welfare of the species…

(ii) Sport hunting is considered the most desirable method of balancing grizzly bear numbers with their available habitat, minimizing depredations against private property within or adjacent to grizzly bear habitat, and minimizing grizzly bear attacks on humans" (Emphasis Added).

The entire (ii) section above is demonstrably false, yet it has been enshrined in Montana law and it mandates a sport hunt – the facts be damned. First, slowly reproducing grizzlies do not need to have their numbers balanced with habitat the way rapidly reproducing deer or elk do. Second, no state or federal agency knows where that "balance" point is because none have conducted the court mandated Habitat Based Recovery Criteria to find out. Third, FWP personal do an expert job already of minimizing depredations against private property, while hunters will be inefficient amateurs. Finally, properly conducted grizzly hunts wouldn't teach grizzlies to fear/avoid humans – it will teach them to be dead. And were FWP personnel to lead

hunters to any particularly aggressive bears, the public outrage over the Department conducting canned, "hit job", trophy hunts would be overwhelming.

Grizzlies don't need make believe "recovery" plans that illegally target one ecosystem at a time; they don't need ARM's based on arbitrary 800 bear targets and lowered survival rates; and they don't need trophy hunts that will pick off the grizzlies trying to occupy linkage zones first – setting real recovery back to square one.

What they do need is a commitment to a minimum lower 48 grizzly population of several thousand bears across the six Recovery Ecosystems; scientifically sound Habitat Based Recovery Criteria for every ecosystem; bear-based Linkage Zones/DCA's within and between all ecosystems; and firm mortality control measures – not mandated trophy hunts.

Brian Peck
Independent Wildlife Consultant
96 trap Lane
Columbia Falls, Mt. 59912
glcrbear@centurytel.net

References Cited

Allendorf, Fred, and Nils Ryman. 2002. The Role of Population Viability Analysis. P: 50-85 *in* Population Viability Analysis, S.R. Beissinger and D.R. McCullough (ed.) University if Chicago Press, Chicago, Ill.

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Traill, Lochran W., B.W. Brook, R.R. Frankham, and C.J.A. Bradshaw. 2010. Biological Conservation 143 (2010) 28-34.

Friends of the Wild Swan
P.O. Box 103
Bigfork, MT 59911

October 24, 2018

Grizzly Bear ARM - Wildlife Division
Dept. of Fish Wildlife and Parks
P.O. Box 200701
Helena, MT 59620-0701
Via e-mail to: FWPGRIZZLYBEARARM@mt.gov

Please accept the following comments on the New Rule I pertaining to the Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem and the transfer of ARM 12.9.103 on behalf of Friends of the Wild Swan. The stated purpose of this proposed rule is to strengthen the regulatory mechanisms associated with grizzly bear population management. (*See* NCDE Grizzly Bear ARM Hearings FAQs)

Friends of the Wild Swan does not support the proposed rule for the following reasons:

• It does not address the habitat that grizzly bears need such as security, adequate food sources or the impacts that roads - both forest and highways – have on grizzly bears. These are important parameters that contribute to whether the bear population increases or decreases.

We realize that the state of Montana has no authority over how federal lands are managed in the NCDE; however, the Dept of Natural Resources and Conservation's Habitat Conservation Plan (HCP) is deficient in meeting the habitat needs of grizzly bears -- and those are lands that Montana has jurisdiction on. The HCP only applies to forested lands, many sections of state lands in the NCDE are not included in the HCP. Many sections of state lands that would facilitate connectivity between the NCDE, Yellowstone, Bitterroot and Cabinet-Yaak ecosystems are not included in the HCP. [See attachment #1)

The HCP does not have total road density standards or secure core areas except on parts of the Stillwater and Coal Creek state forests (the secure core was the result of a lawsuit settlement between Friends of the Wild Swan and the US Fish and Wildlife Service). DNRC has not identified or protected key food sources on any state lands.

Food sources are also not identified or protected on federal lands. The amendments to the NCDE Forest Plans are also deficient in terms of road densities, security core, logging, and high speed/high use recreational trails.

• Connectivity between the NCDE, Greater Yellowstone, Cabinet-Yaak and Bitterroot ecosystems is critical to maintaining genetic diversity. To accomplish linking up these ecosystems there has to be habitat of sufficient size, with adequate food sources and security, where bears can set up home ranges and live because it may take years for bears to move between these areas. Maintaining only 800 bears in the NCDE is not enough to foster

connectivity between the other ecosystems. Nor is it enough to maintain the genetic integrity and viability of the NCDE bear population.

This becomes more important as the human population continues to grow in and around the NCDE. This leads to more attractants on private lands in addition to increased recreation, hunting and other activities on public lands.

This year's known bear mortality is already at 38 (as of 10/23/18) and there are still weeks to go during hunting season and hyperphagia until bears den up. A rule that focuses solely on the aspect of counting bears and computer modeling of the population doesn't represent the full extent of what is necessary to recover grizzlies.

• This rule will become part of the Administrative Rules of Montana and would codify the grizzly bear population objectives – making it FWP's official policy that must be adhered to when bears are delisted. It would set in stone how many bears the state of Montana would "allow" in the NCDE and could only be amended or repealed through another rulemaking process.

This rule would transfer, not amend, ARM 12.9.103 which states:

> **12.9.103** GRIZZLY BEAR POLICY
>
> (c) Hunting and recreational use. The commission recognizes its responsibility to consider and provide for recreational opportunities as part of a grizzly bear management program. <u>These opportunities shall include sport hunting</u>, recreational experiences, aesthetics of natural ecosystems, and other uses consistent with the overall welfare of the species.
>
> (ii) <u>Sport hunting is considered the most desirable method of balancing grizzly bear numbers with their available habitat</u>, minimizing depredations against private property within or adjacent to grizzly bear habitat, and minimizing grizzly bear attacks on humans. [Emphasis added]

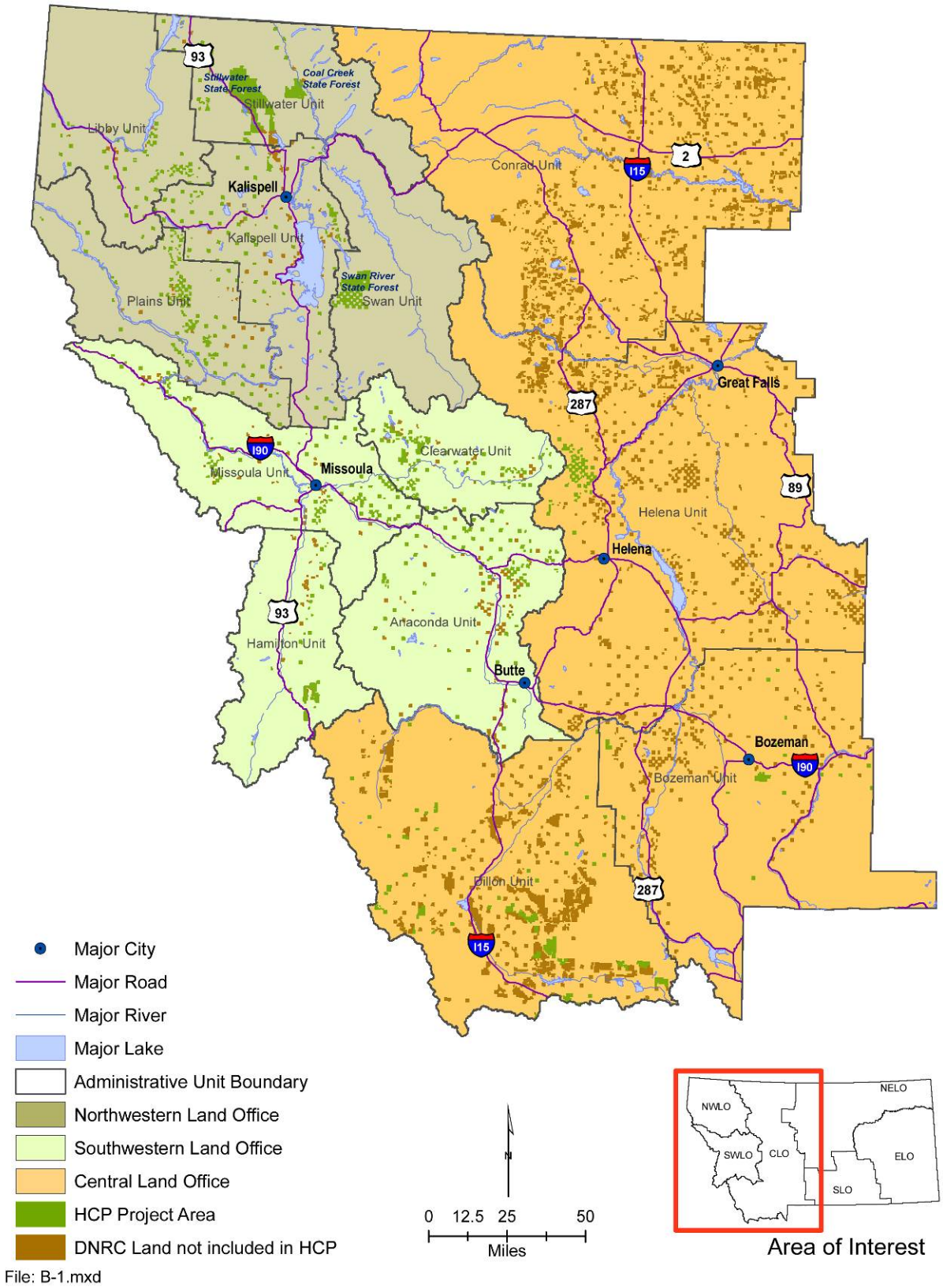
It is reasonably foreseeable that the state will manage for this low population threshold and institute a "sport" hunting season – which we vehemently oppose.

The state and federal agencies that agreed to the Grizzly Bear Conservation Strategy selected an arbitrary point in time to determine that grizzly bears are "recovered" even though they are only found in a few remnant areas of their former range in the United States. It is not based in science, it is not based in law. Now the state of Montana wants to set these low populations objectives into law.

In conclusion, this proposed rule is not an adequate regulatory mechanism that will facilitate or maintain grizzly bear recovery and should not be approved.

Sincerely,
/s/Arlene Montgomery
Program Director

FIGURE C-1. LOCATION MAP OF THE HCP PROJECT AREA IN WESTERN MONTANA



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Swan View Coalition *Nature and Human Nature on the Same Path*

3165 Foothill Road, Kalispell, MT 59901 swanview.org & swanrange.org ph/fax 406-755-1379

October 24, 2018

Grizzly Bear ARM
Wildlife Division of MDFWP
PO Box 200701
Helena, MT 59620-0701

Submitted via FWPGRIZZLYBEARARM@mt.gov

Dear Folks at MDFWP;

Please accept these comments on the proposed Adoption and Transfer of Grizzly Bear ARMs into the public record. We want to make it clear these comments should not be construed to be comments on the draft or final NCDE Grizzly Bear Conservation Strategy.

The proposed Rule references a "draft Conservation Strategy" but provides no link to it. Nor does the Rule mention either of the "final" Conservation Strategy versions we are aware of: 1) the June 2018 version "completed" on the eve of the June 19, 2018 meeting of the IGBC in Polson, MT (see the 6/18/18 IGBC press release) or 2) the July 2018 "updated" version disclosed during the 8/9/18 MT Fish and Wildlife Commission meeting about this proposed Rule (see the handout materials distributed at the Kalispell MDFWP teleconference portal for the Commission meeting). We want to make it clear we are not commenting here on any version of the Conservation Strategy and that it is certainly not clear what draft or version MDFWP is referring to in its proposed Rule.

We also find it disingenuous that MDFWP made public statements in advance of its public hearings on the proposed Rule that it did not want the public commenting on grizzly bear hunting and other matters aside from the proposed demographic monitoring criteria. The proposed Rule, however, would essentially reaffirm MDFWP's commitment to hunt grizzly bears in Montana by moving the existing Grizzly Bear Policy (ARM 12.9.103) into "the same subchapter as New Rule I." ARM 12.9.103 states:

> (c) Hunting and recreational use. The commission recognizes its responsibility to consider and provide for recreational opportunities as part of a grizzly bear management program. <u>These opportunities shall include sport hunting</u>, recreational experiences, aesthetics of natural ecosystems, and other uses consistent with the overall welfare of the species. . .
>
> (ii) <u>Sport hunting is considered the most desirable method of balancing grizzly bear numbers with their available habitat</u>, minimizing depredations against

> private property within or adjacent to grizzly bear habitat, and minimizing grizzly bear attacks on humans.

(Emphasis added). In other words, by law, Montana must institute a sport hunt of grizzly bears and will use hunts to limit bear numbers. We ask that these requirements and provisions for grizzly bear hunts be removed from the ARM.

We feel this rule-making process is entirely on the wrong track in attempting to control and limit grizzly bears when what is needed are better mechanisms to control people, the single largest threat to grizzly bear recovery and persistence.

Where is a proposed ARM that would require all hunters to carry bear spray in order to reduce the current rash of hunters shooting grizzly bears in defense of their life or defense of their wild game carcasses? If current law requires big game hunters to wear 400 square inches of hunter orange clothing, why shouldn't they be required to carry bear spray?

Where is a proposed ARM or proposal to the State Legislature that would require private landowners to properly fence (electric) and otherwise make unavailable to bears known attractants like chickens, fruit orchards, corn, livestock feeds, etc.? We have laws and rules in Montana, for example, which govern how we treat sewage on private property and keep it from contaminating drinking water. These laws are intended to protect the landowner, the landowner's neighbors and public waters.

MDFWPs rule-making in this instance should be focused on placing reasonable restrictions on human behaviors in grizzly bear habitat, including on private lands, that serve to protect human health and safety while simultaneously protecting grizzly bear health and safety. It should not be used to set limits on the grizzly bear population so that MDFWP can rationalize and remove what will quickly be thought of as excess bears through management actions and public hunts.

Why are we again being asked to comment on the number of grizzlies in a portion of the NCDE alone? The courts have ruled repeatedly that agencies must focus on the "whole picture of the listed species, not just a segment of it" and that they must focus on the habitat necessary to sustain those bears. (See the 9/24/18 court ruling in *Crow Indian Tribe et al. v. USA* and the 9/29/95 court ruling in *Fund for Animals v. Babbitt*, 903 F. Supp. 96, Dist. Court of Columbia, 1995).

This rulemaking process errs in focusing on 800 bears in the core of the NCDE. It should be focused on determining how many bears are needed to reconnect the fragmented grizzly bear ecosystems in the Lower 48 States and what amount and types of habitat are necessary to sustain them.

Population viability experts like Allendorf and Ryman (2002) say 5,000 grizzly bears are needed in interconnected populations to maintain genetic diversity over the long term. Others find some 7,000 breeding age adults are necessary over the long term (Reed et al 2003). Bears are no longer making the trip between the NCDE and Yellowstone, or the Bitterroot, Cabinet-Yaak, or Selkirks. Computer models have tried 20,000 times, unsuccessfully, to get a grizzly bear from the NCDE to Yellowstone in a single season

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(Peck et al 2017). We need far more than 800 bears in the NCDE and enough secure habitat so they can expand their range into the areas between the ecosystem fragments.

These bear populations will never be reconnected if the Yellowstone and NCDE populations are delisted and trophy hunting is reinstated to keep populations in check. FWP pursued trophy hunting of grizzlies in the NCDE until we and the Fund for Animals stopped it with a lawsuit in 1991. The Fall hunt was causing 48% of the known human-caused mortality in the NCDE, yet FWP initiated an additional Spring hunt along the Rocky Mountain Front to help thwart the expansion of grizzly bears.

Grizzly bears need a law capping their population in the NCDE like they need a hole in the head. This 800 bear minimum number will turn into a goal as FWP tries to appease hunters and others that would rather have bears killed than share habitat with them.

We've attached a graph showing how the number of grizzly bears in the NCDE isn't even a blip on the chart compared to the people living, working and playing in their habitat. If 1,000 NCDE bears were the 1/8th inch thickness of a wooden matchstick, the nearly 400,000 people living in the 12 NCDE counties would be the width of a 4 foot sheet of plywood. The 2.4 million people that visited Glacier National Park in 2015 would be 24', the length of a small RV!

We ask that you quit trying to divide and conquer the Lower 48 grizzly bear ecosystems and instead link them back together with more bears, better attitudes, and more secure habitat.

Sincerely,

Keith

Keith J. Hammer
Chair

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Allendorf, F. and N. Ryman. The role of genetics in population viability analysis. In Population Viability Analysis / [ed] Beissinger, S.R. and McCullough, D.R., Chicago: University of Chicago Press, 2002, p. 50-85.

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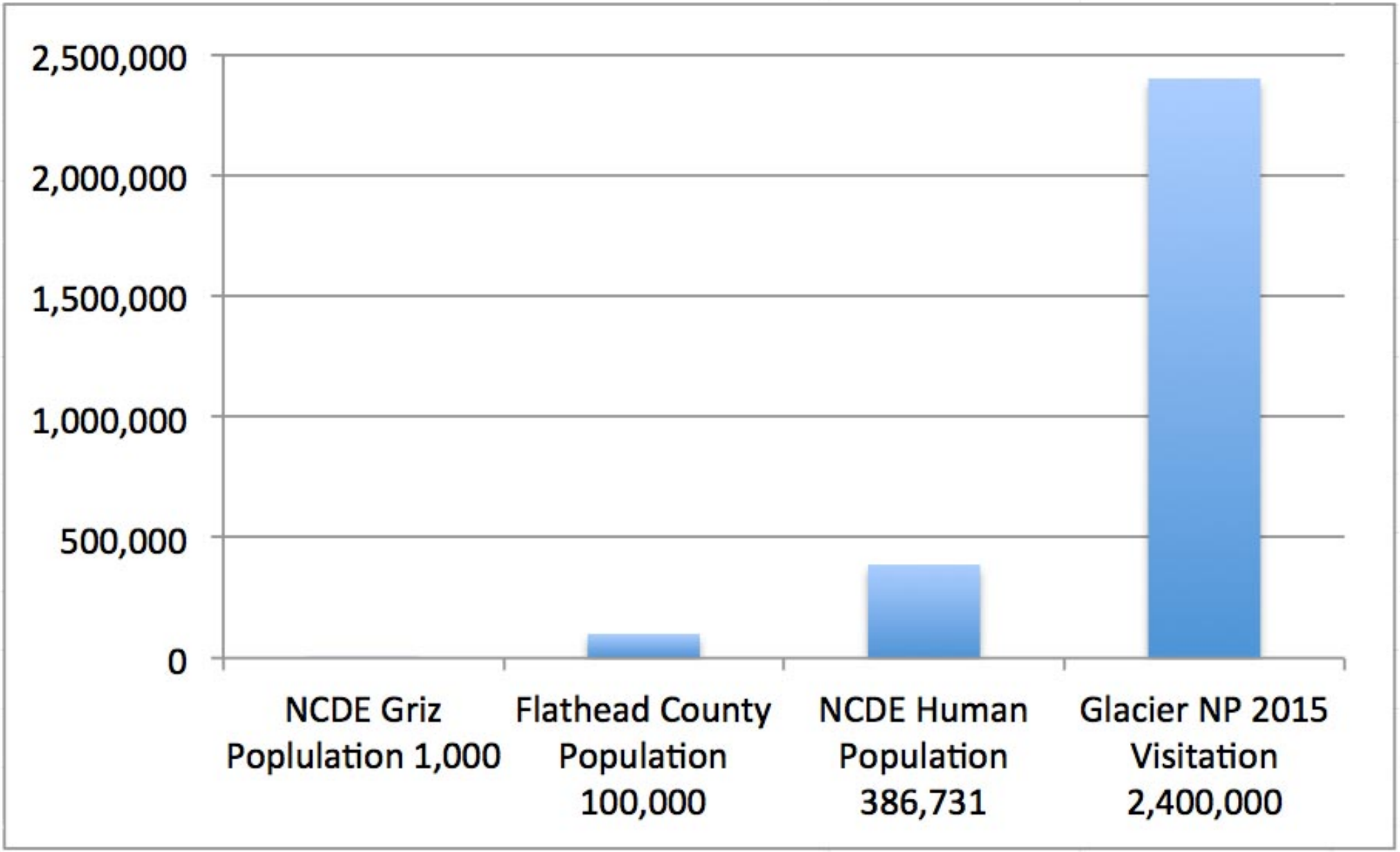
Public Comment Received re: MAR 12-505
159


2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
NCDE Griz Poplulation 1,000
Flathead County Population 100,000
NCDE Human Population 386,731
Glacier NP 2015 Visitation 2,400,000

Grizzly Bear ARM – Wildlife Division
Department of Fish, Wildlife & Parks
P.O. Box 200701
Helena, Montana 59620-0701 **October 2, 2018**

Sent via email to: FWPGRIZZLYBEARARM@MT.GOV

Comments on Proposed Montana Administrative Rulemaking for NCDE Grizzly Bears

These comments on the proposed Grizzly Bear ARM are submitted on behalf of the organizations listed below who are cooperating members of the Flathead-Lolo-Bitterroot Citizen Task Force.

We submit these comments under protest.

The proposed ARM and associated Comment Period have inappropriately been confined to Chapter 2 of the Conservation Strategy, a document for which the U.S. Fish & Wildlife Service is legally responsible and for which they are obligated to conduct a formal public comment period on the entire 327-page document.

The ARM is presented without context. There is no explanation of the importance of the grizzly bear to the American people, nor the spiritual and cultural significance to independent Indian Nations within the area covered by the ARM.

The public hearing format was an open house rather than a public hearing. The purpose of public hearings is for public servants to hear from the taxpaying public. Instead the public had to listen to the servants. The listed schedule began with a 1 hour and 45-minute presentation by FWPs staff and attorney. Only then was the public comment scheduled at 8:15pm. A 15-minute introduction of the issue was what most expected. The schedule was unreasonable and many people who arrived at 6:30 left the hearing without presenting testimony.

The FWPs has been quoted in regional media as saying the ARM has nothing to do with delisting or hunting and "we don't want to hear about that." However, Martha Williams, FWPs Director described the ARM as "an important step towards federal delisting of the bears…" (Daily Interlake 9/26/18)

Despite numerous disingenuous public statements from FWPs personnel, hunting is an imminently foreseeable result of delisting and management by FWPs. The Montana Fish & Game Commission previously approved ARM 12.9.103, **which authorizes grizzly bear hunting** in Montana. This rule will become part of the proposed ARM if approved. It states:

ARM 12.9.103 (c) ***Hunting*** *and recreational use. The commission recognizes its responsibility to consider and provide for recreational opportunities as part of a grizzly bear management*

program. These opportunities ***shall*** ***include sport hunting,*** *recreational experiences, aesthetics of natural ecosystems, and other uses consistent with the overall welfare of the species.*

(c)(ii) Sport hunting is considered the most desirable method of balancing grizzly bear numbers with their available habitat, minimizing depredations against private property within or adjacent to grizzly bear habitat, and minimizing grizzly bear attacks on humans. (ARM 12.9.103).

The word shall has specific legal force and meaning. It means an action or plan is not optional. The public has not been informed of this plan to hunt the NCDE grizzly bear sub-population. It will be a matter of official policy that sport hunting of grizzly bears in Montana shall occur and "will be the most desirable method of balancing grizzly bear numbers…"

This sleight of hand has not been explained to the general public and is not included in the informational materials provided by FWPs at the public hearings. The FWPs has not revealed that hunting is the method they will use to limit population growth and reduce total population numbers by as many as 250 grizzly bears. Artificially constraining grizzly numbers in the Wildernesses of the NCDE also flies in the face of the Wilderness Act and FS regulations and policies.

FWPs is attempting to turn back the clock to a different era while time, new science and facts have moved progressively forward. The ARM and CS describe a grizzly bear sub-population that cannot be legally or scientifically defined as recovered.

Demographics are no longer viewed as separate from habitat. Habitat has a direct effect on birth rates, death rates, the chances of population persistence and a host of other factors including population-wide stochastic events. Demographics and genetics are intertwined with the factors of habitat fragmentation and isolation, human population growth, visitation and infrastructure expressed as dead bears, mortality risk and habitat loss. The effects of climate change could alter the abundance and distribution of key food resources, directly affecting birth and death rates.

By attempting to claim recovery and long-term viability through a strategy of isolation and removal of legal protections for the NCDE sub-population and its habitat, the ARM and CS ignore the basic precepts of the sciences of conservation biology and conservation genetics. The isolation approach has also been invalidated by recent Court rulings; Humane Society et al. v. Zinke (2017); Crow Tribe et al. v. United States of America, et al. (2018).

The goal of 800-1,000 bears will not ensure long-term viability and effectively puts the NCDE sub-population into an extinction curve. From 2,500-5,000 grizzly bears are needed for survival and genetic variation (Allendorf & Ryman; others). Since the NCDE isn't geographically large enough to support this many bears, it must be linked with the other 4 grizzly bear sub-populations in the Northern Rockies.

The proposed ARM is deficient on numerous counts and should not be approved. At the same hearing as the vote on the proposed rule, scheduled in December, 2018, ARM 12.9.103 should be rescinded by the Montana Fish & Game Commission.

Sincerely,

George Nickas, Executive Director
Wilderness Watch
P.O. Box 9175
Missoula, Montana 59807

Cass Chinske, President
Friends of the Rattlesnake
717 Cherry St.
Missoula, Montana 59802

Larry Campbell, Conservation Director
Friends of the Bitterroot
PO Box 442
Hamilton, Montana 59840

Jake Kreilick
WildWest Institute
Missoula, Montana

Josh Osher
Western Watersheds Project
Hamilton, Montana

Mike Jarnevic, US Army Special Forces (ret.)
Steering Committee Member
Flathead-Lolo-Bitteroot Citizen Task Force
Piltzville, Montana

Sent by: Mike Bader, independent consultant
700 Longstaff St.
Missoula, Montana 59801

From: _____
To: FWP GRIZZLY BEAR ARM,
Subject: Drop Proposal to Limit Grizzly Bear Recovery
Date: Friday, October 26, 2018 9:14:24 PM

Dear Montana Department of Fish, Wildlife and Parks,

I'm writing to ask you to reconsider your proposal for grizzly bears in the Northern Continental Divide Ecosystem. The proposed demographic objectives won't adequately protect the area's grizzlies. And the state's plan to limit the minimum population to just 800 bears is troubling, since Montana hasn't collected accurate population data and estimates show more than 1,000 bears living in the area.

It's also clear that the end goal of this policy is to aid the removal of Endangered Species Act protection from these bears. I don't support that at all. Doing so could eliminate the potential for Montana's grizzlies to connect with Yellowstone bears and occupy new habitat.

Such a piecemeal approach to recovery was found to be illegal just last month in the District Court of Montana. So your department's insistence on moving forward with demographic objectives so quickly, without accurate population data, is unjustified.

Please — deny these harmful proposals and focus instead on continued recovery of these magnificent bears.

Sincerely,

[Each letter contained the name and contact information for the person who submitted the letter.]

From: Andy Millman
To: FWP GRIZZLY BEAR ARM,
Subject: Fwd: management of grizzly bear population in MT
Date: Friday, October 26, 2018 4:30:18 PM

TO WHOM IT MAY CONCERN

RE: PLANS TO MANAGE 800 GRIZZLIES IN MT

I write to express my concern about Montana's plans to reduce the number of grizzly bears to 800, should the Northern Continental Divide Ecosystem population be de-listed. This is a reduction of approximately 200 bears than known to exist today and will reduce the breeding population of an already threatened species.

Do you have evidence to suggest that 800 bears is enough to ensure they can connect and interbreed with the Yellowstone population? The need for interbreeding to maintain the population was one of the factors which contributed to Judge Dana Christensen re-listing Wyoming Grizzlies. He was not convinced that cutting these populations off from each other would not impact on the survival of the species.

Grizzly bears are already confined to less than 2% of the range, which hardly represents the recovery of the species.

I strongly object to Montana's Department of Fish, Wildlife and Game's plans to reduce the grizzly population to only 800 and ask the agency to reconsider, for the sake of the survival of the species.

Respectfully,

Dr. Andy Millman

From: Wendy
To: FWP GRIZZLY BEAR ARM,
Subject: Grizzly Bears
Date: Friday, October 26, 2018 5:45:30 PM

Sirs,

It is absolutely vital more than 800 grizzly bears remain in the Northern Continental Divide Ecosystem as very simply, reconnection with Yellowstone and other isolated ecosystems is imperative. Experts in this field have said the figure of 5,000 bears brings a population viability, and genetic diversity disappears with lesser numbers

A 90% probability of maintaining 800 bears in the NCDE core is a ridiculously inadequate target. How many bears and how much habitat is needed for a single, connected population in the Yellowstone, NCDE, Cabinet-Yaak, Selkirks, and Selway-Bitterroot ecosystems?

Currently the "lower 48" grizzly bears were listed under the ESA as "threatened" with extinction. Why are MDFWP and U.S. Fish and Wildlife Service insistent on taking a divide and conquer" stance rather than "connect and recover" for these ecosystems?

Confined currently to a mere 2% of their former range and numbers. MDFWP should be ashamed if trying to write into Montana law even the slightest suggestion that this could in any way constitute bear "recovery."

Grizzly bear hunting would kill bears needed for population expansion and ecosystem connectivity.

A new law should certainly be written, that of make grizzly bear trophy hunting illegal in Montana forever.

Sincerely,

Wendy Dore-Sutton

Sent from my iPad

From: Heather Meyer
To: FWP GRIZZLY BEAR ARM,
Subject: NCDE Grizzly Population Proposal
Date: Friday, October 26, 2018 10:04:24 PM

To whom it may concern
I am writing to you in regards to the Grizzly Bears that call the NCDE/Glacier-Bob Marshall area home. Montana has an opportunity to assist in Grizzly Bear recovery with creation of a safe corridor for connectivity between the Grizzlies that call the GYE home and the bears of NCDE. In order to ensure Grizzly recovery the the groups must have the opportunity to interbreed. For this to occur bears must be allowed to establish home ranges in the areas between the NCDE and GYE. Adequate habitat and security is needed as well as changes to how DMA areas are managed. Don't ignore what is necessary to protect and maintain Grizzly populations.

I oppose the-proposed population of only 800 bears. This would not be an adequate population numbers needed to connect the populations. How many bears and how much habitat is needed for a single, connected population in the Yellowstone, NCDE, Cabinet-Yaak, Selkirks, and Selway-Bitterroot. This question must be answered!

Grizzly bears are currently confined to about 2% of their former range and numbers. MDFWP should be ashamed to try and write into Montana law that this constitutes bear recovery. Recovery and delisting should only occur when the species inhabits all of their prior ranges.

Sincerely
Heather Meyer
Sent from my iPhone

From: Saunie H.
To: FWP GRIZZLY BEAR ARM,
Subject: NCDE/Glacier-Bob Marshall area
Date: Friday, October 26, 2018 10:05:28 AM

The "lower 48" Grizzly bears were listed under the Endangered Species Act as "threatened" with extinction. Why are MDFWP and our U.S. Fish and Wildlife Service trying to divide and conquer rather than
Connect and recover these ecosystems?

We need far more than 800 grizzly bears in the Northern Continental Divide ecosystem so it can reconnect with Yellowstone and other isolated ecosystems.

Grizzly bear hunting would kill bears needed for population expansion and ecosystem connectivity. If you want to write a law, make grizzly bear trophy hunting illegal in Montana forever.

Most sincerely,
Saundra Holloway

From: Carolyn Hall
To: FWP GRIZZLY BEAR ARM,
Subject: Opposing Grizzly Bear ARM 12-505
Date: Wednesday, October 24, 2018 9:01:40 PM

Dear Director Williams,

I **oppose** the proposed Grizzly Bear NCDE ARM unless modifications are implemented allowing for the continued, and sustainable recovery of the grizzly bear. Thus, I adamantly oppose managing for less than the current number of all grizzly bears in the NCDE. Your proposed number of grizzlies to manage is less than what is in the NCDE which is not enough to sustain a healthy population, and doesn't allow for connectivity within conservation systems. The grizzly bear has faced many challenges primarily due to human conflicts. The majority of human conflicts are the result of poor judgement and lack of education on part of humans resulting in the death of a staggering amount of grizzly bears. As it stands, 45% of all cubs die, 36% of all yearlings die, and 34% in the swan range meet the same fate. While the numbers of grizzly bears have increased, Montana as whole has had the highest number of fatalities. I believe most of this is due to the lack of education, and lack of good judgement by humans.

Make a stronger plan that focuses on connectivity, recovery, and conflict management for your proposed management of Northern Continental Divide grizzly bears

The importance of grizzly bears in the Northern Continental Divide Ecosystem (NCDE) as a source population for broader recovery of grizzly bears in the lower 48 states, including the critically-imperiled Cabinet-Yaak populations and restoration of grizzlies to the Bitterroot ecosystem, cannot be overstated. Additionally, establishing genetic and demographic connectivity between the NCDE and Greater Yellowstone populations is critical to full recovery of grizzly bears, FWP should explicitly commit to establishing demographic connectivity, as well as genetic connectivity, between the NCDE and Greater Yellowstone grizzly populations.

You must explicitly commit to maintaining a stable-to-increasing population of 1,000+ grizzly bears in the NCDE and allowing bears to expand their range. Research shows that a population of several thousand grizzly bears in the lower 48 is necessary for full recovery. Additionally, there is no discussion in the proposed regulation of population estimation methodology and whether the current methodology will be used in the future. This is an important issue and must be addressed in the regulation.

Survival rates and mortality thresholds specified in Section 3 of the proposed regulation, based on Chapter 2 of the NCDE Grizzly Bear Final Conservation Strategy, exceed female survival rates and independent female/male mortality thresholds as per FWP's own research to ensure long-term sustainability of the NCDE grizzly bear population. Additional research is needed by independent scientists to adequately discern appropriate survival rates and mortality thresholds.

The public raised numerous issues regarding grizzly bear habitat and conflict management, critical factors in achieving full recovery of the NCDE grizzly bear population, that were not adequately addressed or accounted for in the NCDE Grizzly Bear Final Conservation Strategy. In addition to population factors/Chapter 2 of the Conservation Strategy, MT FWP must also

invite and consider public comment on Chapters 3 and 4 of the Conservation Strategy regarding habitat and conflict management.

All or part of four of the six grizzly bear recovery areas in the lower 48 are in Montana; thus Montana is absolutely key to broader grizzly recovery and the state must get it right.

Montana is in the forefront of being a leader in the management, and sustainability of the grizzly bear thus; developing a good plan to managing grizzlies allowing for them to sustain their population, but the current suggested NCDE Arm is not it.

Sincerely,

Carolyn Hall
1603 Fran Lou Park Lane
Columbia Falls, MT 59912
406-897-2599
carolynhall1998@gmail.com

From:	Nancy Ostlie
To:	FWP GRIZZLY BEAR ARM,
Subject:	Proposed Administrative Rule pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Tuesday, October 23, 2018 4:18:55 PM

Dear Fish Wildlife and Parks,

I have read the proposal to manage grizzly bears in the Northern Continental Divide ecosystem and I am submitting comments on behalf of my group, the Great Old Broads for Wilderness, Bozeman Broadband. Our efforts are focused on promoting the strongest possible protection of wild lands, which is Designated Wilderness. The strongest case for why we need Wilderness is to preserve habitat for wildlife.

First, I want to echo the substantive comments provided by my colleague Michele Dieterich of Hamilton Montana, submitted to you previously. Those comments point out shortcomings of your administrative proposal, such as deriving target numbers of bears, but not analyzing the habitat requirements to support a viable population which will connect with other populations of bears for the sake of genetic diversity. Your report cites factors affecting habitat security, such as management of motorized access routes to manage human use. It says that the science is inconclusive about "high intensity use non-motorized trails" which displace bears but may not kill them. In fact, current figures show that bear mortality is increasing, not because of unsecured trash which may have been a problem in decades past, but because of conflicts with humans in a more direct way. There are 59 dead bears so far in the Greater Yellowstone Ecosystem, and a near-record 39 mortalities in the Northern Continental Divide ecosystem. The trend lines are increasing from the 19 bears average per year of human-caused deaths. From 1998 to 2017 this is 88% of all mortality, per your report. Combine the increasing mortality with ever-more increasing human population and climate change effects on habitat, and I don't believe that your management plan will ensure that if delisted, bears in the NCDE will never again require listing as a threatened or endangered species.

These two factors, increasing human population and climate change, will impact bears in ways we cannot predict based on past statistics and models. Climate change will bring reduced snowpack spread over a shorter season each winter, affecting denning times. With shorter denning times, there will invariably be more human/bear conflicts. As climate change affects food availability, bears will seek out meat-based diets, again increasing human/bear conflicts. Plant species availability will shift in ways we cannot reasonably predict at this time. A net loss in forested areas can be predicted as plant species shift, reducing available habitat and cover over time, in ways we cannot foresee. Human population increase likewise cannot be predicted reliably based on past data, since climate change will create waves of climate refugees never seen before. I have lived in the Southwestern U.S. and I am familiar with the water shortage issues that are likely to drive massive numbers of the population to relocate to our region within the next twenty years. The pressure on wildlife populations, especially large carnivores, will introduce new risks to their continued existence.

Another issue that drives my comments has to do with the desired connectivity between bear populations in North America. At this time, the Custer Gallatin National Forest is proposing a Plan change that will increase human activity in bear habitat. The proposed "Recreation Emphasis Areas" in the northern part of the Gallatin Mountain Range would cut off critical corridors that would allow bears from the Greater Yellowstone ecosystem to cross north into the Bridger/Crazy Mountains, Little Belt and other zones. We are pushing hard for those

corridors to receive protection as Wilderness instead, but with human pressures on recreation, the Forest will be hard put to satisfy all interests. Wildlife lose in an equation that strives to balance human recreation with competing extractive uses of the Forest. I have personally participated in a Collaborative seeking to "divide up" the resources in the CGNF among competing "interests" (users). At no time in the four years of that Gallatin Collaborative was science considered, Wildlife did not have a "seat at the table."

Because of the lack of priority humans place on habitat protections when they infringe on recreational desires, connectivity should be assured before any population of bears is delisted. There is only a 70-mile gap preventing bears from connecting between the GYE and the NCDE, but your own Conservation Strategy acknowledges that Zone 2 lands, which are to provide bears opportunities for connecting, is 62% private land. We cannot count on private landowners to do the right thing for wildlife habitat.

I second Michele's point that in Montana law, (ARM 12.9.103c) "Sport hunting is considered the most desirable method of balancing grizzly bear numbers with their available habitat." The FWP Commission should eliminate this outdated instruction, for many reasons. Putting grizzlies in intentional conflict with humans will only hasten their demise, and assure that the "Sixth Mass Extinction" event on our planet wipes out these large carnivores along with untold numbers of species worldwide.

The goal of 800-1000 bears is inadequate. Michele cites a scientific study by Allendorf and Ryman that says a population of 2500-5000 bears are necessary in the NCDE for survival and genetic variation. I am in favor of FWP implementing a plan that a stable to increasing population of 1000 bears be maintained, per the Costello et al "Grizzly Bear Demographics in the NCDE 2004-2014."

The recent court decision against a plan to delist GYE bears stated, "The Service's determination that it need not provide for either natural connectivity or translocation is contrary to the best available science." This should be interpreted to mean that stronger steps to support connectivity between and among all Northern Rockies grizzly populations are required.

Thank you for the opportunity to comment on this important part of wildlife management in our amazing country.

Sincerely,

Nancy Ostlie
Leader, Great Old Broads for Wilderness
Bozeman Broadband
406-556-8118

From: Dawn Serra
To: FWP GRIZZLY BEAR ARM,
Subject: 800 grizzlies in the NCDE is not sufficient
Date: Monday, September 24, 2018 10:44:23 AM

Dear FWP,

I writing to express my opposition to the state's proposal to maintain merely 800 grizzly bears in teh NCDE/Glacier-Bob Marshall area. This is less than is thought to exist today and far fewer bears than needed to sustain grizzlies over the long term. Please abandon this ill-advised plan. The bears are hanging on in the last two percent of their former range, and we should be recovering them, rather than driving them to final extinction.

The "lower 48" grizzly bears were listed under the ESA as "threatened" with extinction. Why are MDFWP and U.S. Fish and Wildlife Service trying to "divide and conquer" rather than "connect and recover" these ecosystems?

Thank you for the opportunity to comment and please do what's right for the bears.

Sincerely,
Dawn Serra

From: Margaret Strainer
To: FWP GRIZZLY BEAR ARM,
Subject: 800 grizzlies is not enough
Date: Saturday, September 22, 2018 8:59:34 PM

To sustain a healthy population of grizzlies in the Rocky Mountain from Yellowstone to Glacier and the Yaak and Cabinets, we need more than 800 bears as the stress on these animals and their habitat is increasing exponentially! A much more robust population is essential for widespread dispersal of Grizzlies to maintain a healthy genetic line! I appreciate and have studied for decades the work of leading grizzly scientists and remain convinced 800 bears is way to small a number with the increased rate of highway deaths and loss of wildlife corridors! Please do not let another species become annihilated.

--

Margie Strainer
406-755-0887
212 E. Nicklaus Ave.
Kalispell, MT 59901

From: Alexandra Scranton
To: FWP GRIZZLY BEAR ARM,
Subject: Comments on NCDE ARM 12-505
Date: Friday, October 05, 2018 5:14:04 PM

To the FWP:

I attended the public hearing for this in Missoula a few weeks ago. A first comment about that. It would be helpful in the future if you could give a better sense of the schedule ahead of time. That is, stating clearly in the announcement, when the hearing will start, how long the presentations will be, and at what time you will be taking public comments. I understand that not everyone in the room is at the same place with the information - some knew it all really well, and for others it was quite new. So giving a sense of the schedule ahead of time would resolve that problem, and be a better use of everyone's time.
Also - that the FWP needed an hour and a half to make presentations before taking public comment was really unnecessary (especially without prior notice of this schedule). I brought my kids to the hearing - in hopes of giving them an experience - both of the opportunity to learn from the FWP and from the other public commenters. Clearly with the schedule as it was, it meant that we only heard part of the presentations and none of the public commenters which was disappointing. We appreciated the opportunity to leave written comments however. I think a half hour of presentations should really do it. - If more time is needed for complex issues, then having extra time before the presentations start with displays and individuals to talk to and ask questions of would be a better use of everyone's time.

As for my comments on the proposed Rule:
1) I don't believe that 800 bears (or even maintaining at least 90% population at 800 bears) is sufficient for the survival of the bears in this area. I think those calculations need to be reviewed again.
2) I saw nothing in the rule that gave any indication of what actions would be taken if the plan failed to maintain the 800 bears (which I think is likely). I think there should be a clear plan spelled out in the rule that when the count is below 800 bears, certain activities newly allowed under the plan (whether they be hunting, or greater allowances for outdoor feeding for livestock owners etc) be immediately revoked until the next count assures the population is back up. The way it is written now - it is simply too optimistic, with no apparent plan for failure.
3) I appreciate that the plan includes connectivity between the different geographic units and recognizes the importance of that connectivity for genetic diversity. What the plan fails to acknowledge however, is that although the different geographical units may have different needs/strategies/numbers for conservation, the bears in each unit are still ecologically dependent on the survival of the bears in every other unit. So the plan needs to have accountability for that. If one unit has a catastrophic mortality rate, it means the strategy and plan of the nearby connected units must correspondingly change to account for it. I didn't see any accounting for this in the current plan. I agree that the success in each unit can be managed separately as far as having different rules - but the overall strategy has be coordinated in the case of failure in any of the units. When one population crashes, the goal for the nearby

populations have to increase - to allow for bears to repopulate that crashed unit - and continue to maintain the sustainable numbers in the healthy unit.

Thanks again for the opportunity to comment.

Alexandra Scranton
83 Lacota Drive
Missoula, MT 59803
agorman29@yahoo.com

From: Paul Edwards
To: FWP GRIZZLY BEAR ARM,
Subject: delisting in the NCDE
Date: Monday, September 10, 2018 11:54:10 AM

Sirs:

Are you such ignorant throwbacks, such defective cretins, that you know nothing of science, nothing of biology, of ecology, of bioethics?

Delisting the Grizzly Bear is an atrocious act of willful folly and only whores for idiot redneck hunters and extractive industry pirates could even consider such a crime.

Reach deep, and see if you can find any humanity left in your desiccated hearts and, if you do, drop this sick and vicious proposition. You damn yourselves and dirty your own professional reputation in working for the extinction of this apex predator.

In raging contempt for you, I am,

Paul Edwards

From: Lynn Roebuck
To: FWP GRIZZLY BEAR ARM,
Subject: GRIZZLY RECOVERY
Date: Monday, October 08, 2018 4:54:05 PM

Dear Sir or Madam,

Grizzlies have not recovered. We need far more than 800 grizzly bears in the Northern Continental Divide Ecosystem so it can reconnect with Yellowstone and other isolated ecosystems. Please pay attention to science and experts - experts say that a 5,000 bear population viability needs to exist in an interconnected ecosystem in order to maintain genetic diversity.

The lower 48 grizzly bears were listed under the ESA as "threatened" with extinction. Why are MDFWP and U.S. Fish and Wildlife Service trying to "divide and conquer" rather than "connect and recover" these ecosystems?

Again, Grizzlies have not recovered. Please do the right thing and abandon your plans that will be devastating to Grizzlies and to a healthy ecosystem.

Thank you,

Lynn Roebuck

From: A Cavell
To: FWP GRIZZLY BEAR ARM,
Subject: Grizzly bear population of Montana
Date: Tuesday, October 02, 2018 9:44:22 AM

To whom it may concern,A
healthy population of bears would number more than 5000 not 800 ,the ESA has listed grizzly bears as threatened.
They now only cover 2% of their range.
I am a UK citizen ,you are not encouraging tourism from the UK !by eradicating (murdering)predators ,your attitude of killing for a perverted reason is not encouraging ,in fact I will never visit the United States.
Don't waste your time answering me ,saying that you are going to allow perversion !.I am not interested.

Sent from my iPad

From: chattzee@aol.com
To: FWP GRIZZLY BEAR ARM,
Subject: Grizzly Bears
Date: Sunday, September 23, 2018 9:40:00 AM

I feel the need for more than 800 Grizzly Bears in the Northern Continental Divide Ecosystem so it can reconnect with Yellowstone and other isolated ecosystems. Thank you for your concern.

From: Elaine
To: FWP GRIZZLY BEAR ARM,
Subject: Grizzly Bears
Date: Friday, September 21, 2018 8:16:31 PM

We need far more than 800 grizzly bears in the Northern Continental Divide Ecosystem (NCDE) so it can be reconnected with Yellowstone and other isolated ecosystems.

A goal of maintaining 800 grizzly bears in the NCDE core is an inadequate target. Grizzly bears are currently confined to about 2% of their former range and numbers. 800 bears definitely do not constitute bear "recovery". Montana Department of Fish, Wildlife, and Parks must increase potential grizzly bear numbers for there to be a realistic recovery.

Grizzly bear hunting would kill bears needed for population expansion and ecosystem connectivity. If you want to write a law, make grizzly bear trophy hunting illegal in Montana forever.

We need more grizzly bears!

Elaine Woodriff
717 N. McDowell Blvd., #307
Petaluma CA 94954

From: Roger Sherman
To: FWP GRIZZLY BEAR ARM,
Subject: Habitat Security
Date: Monday, September 10, 2018 9:33:22 AM

Dear FWP
There should be NO limitation, such as you suggest, on the number of grizzlly bears in the NCDE.You are using an arbitrary number of 800 which is 200 bears less than the estimated number that now exist. This puts limitations on the amount of bears that it will to take to insure inter connectivity of populations with the Yellowstone fractured group. I think the science is very clear that bears will not travel, in a single season, from one ecosystem to the othe,r therefore they will establish a home range in between.

In my opinion it is a mistake to restrict managing bears is separate demographic monitoring areas. It is a HUGE mistake to for you to designate each ecosystem as distinct populations. You then ignore how this affects the other ecosystems.

Lastly the grizzly is confined to less than 2% of its former range so how can you claim that there is a complete recovery? To allow a small hunt will kill bears that are needed to connect an recover. NO HUNT!

Thank you
Roger Sherman
280 Brimstone Dr.
Whitefish MT

From:	Christine Dickinson
To:	FWP GRIZZLY BEAR ARM,
Subject:	please reconsider the Grizzly bear population
Date:	Thursday, October 04, 2018 9:14:17 AM

I am not at all in favor of the new, proposed baseline population target for Grizzly bears. How can a species survive on 800 individuals? FWP needs to start working on a real solution or we will lose this magnificent bear. Pull together our resources to connect range and eco-systems. And above all, please do not allow big game hunting on these bears. That is barbaric.

Thank you for your time and efforts.

Christine Dickinson
St. Ignatius, MT
PO Box 136

From:	K ksstraight
To:	FWP GRIZZLY BEAR ARM,
Subject:	Protect the Grizzlies, More than 800
Date:	Saturday, September 22, 2018 6:33:15 AM

Hello,
I want more than 800 Grizzlies in the Continental Divide Ecosystem. The "lower 48" grizzly bears were listed under the ESA as "threatened" with extinction. Why are MDFWP and U.S. Fish and Wildlife Service trying to "divide and conquer" rather than "connect and recover" these ecosystems? It is important to protect them.
Karen Straight
Kalispell, MT
406-257-7159

From: telemark87@gmail.com
To: FWP GRIZZLY BEAR ARM,
Subject: Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date: Monday, October 08, 2018 7:20:41 PM

I agree that FWP should set demographic goals for the grizzly population in the northern continental divide ecosystem, but the numbers the numbers set forth in the demographic objectives were set by special interest groups and not by biologists after careful consideration of management objectives and population stability. I do not believe that the commission will make a decision that is in the best interests of the animals and the people of Montana. Ultimately the commissioners will be bought by a special interest group and with the help of people in FWP, from people in the offices such as Neal Anderson to hunters education instructors such as Jay Moody and Rick Hjort, working against Montana sportsmen and the public at large, will subvert the opinion of the majority and the opinion of FWP biologists in an effort to further their own greedy desires such as making 103-50 a limited permit area when the people did not want it and biology did not support it. The worst part is that while we do have a large number of good people in FWP, ultimately these bad actors destroy the reputation of everyone associated with FWP. It churns my stomach to know that FWP has people that are working against the people and the wildlife to cater to the beliefs of special interest groups.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From: David Govus
To: FWP GRIZZLY BEAR ARM,
Subject: re: Grizzly Bear Management
Date: Monday, September 24, 2018 6:59:07 AM

Wildlife Managers

I object to the proposal to manage the existing population of Grizzly Bears in the Northern Continental Divide towards a goal of 800 bears. This is lower than the existing population estimate of 1000 bears and far below the 5000 population level thought necessary by most experts for a genetically viable population. Grizzly Bears now occupy less than 2% of their former range, A proper management goal should be to enlarge the Bear numbers and connect it with the isolated Yellowstone population thus insuring viability for the Bears.

A Montana management plan should not contemplate hunting Bears as this would decrease the population rather than increase it.

Regards

David Govus
3709 Big Creek Rd
Ellijay GA 30536

THE HUMANE SOCIETY
OF THE UNITED STATES

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October 26, 2018

Wildlife Division
Montana Department of Fish, Wildlife, and Parks
P.O. Box 200701
Helena, MT 59620-0701
FWPGRIZZLYBEARARM@mt.gov

RE: Proposed rule, Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem

Dear Director Williams and Commissioners,

On behalf of the Humane Society of the United States and our supporters in Montana, I thank you for this opportunity to comment on the proposed rule regarding grizzly bear demographic objective for the Northern Continental Divide Ecosystem ("NCDE") ("Proposed Rule"). HSUS has grave concerns regarding both the Interagency Grizzly Bear Committee ("IGBC") process that generated the demographic objectives under consideration as well as the scientific and legal bases for any reduction or removal of federal protection for the NCDE population of grizzly bears. For the reasons stated below, HSUS respectfully requests that the Commission withdraw the Proposed Rule until these concerns are addressed.

1. The 2018 NCDE Conservation Strategy Was Developed in a Procedurally Flawed and Illegal Manner

The content of the Proposed Rule is derived entirely from the present draft of the 2018 NCDE Conservation Strategy ("Strategy"). The Commission action under consideration here is functionally a state-level ratification of components of that document. While HSUS appreciates Montana FWP's decision to accept public comment on its state-level implementation of these mechanisms, this state process can only supplement – not substitute for – adequate public involvement at the IGBC level, where the Strategy was actually developed and voted on.

Unfortunately, the IGBC fell far short of providing sufficient opportunity for public involvement in considering and adopting the Strategy. The IGBC failed to provide even the most basic and routine elements of public participation at crucial phases throughout the development of the Strategy. Most glaringly, the public was afforded no opportunity to comment on the 2018 revisions to the Strategy which resulted in the demographic criteria under consideration here.

The most recent opportunity for formal public participation regarding the content of the Strategy was more than five years ago, on a 2013 draft version of the Strategy. Law and good governance require that the IGBC provide an opportunity for public input given (a) the exceptional length of time since comment was last solicited in 2013[1]; (b) the substantial changes[2]; to the document that have been made in the interim – including to Chapter 2 of the Strategy, which is the subject of this rulemaking; and (c) intervening developments in the scientific literature that the IGBC itself recognizes must inform the Strategy's demographic standards, such as the Costello *et al.* 2016 study whose findings are extensively relied upon in the current version of the Strategy, meaning these inferences and analysis were never subject to public scrutiny.[3]

The Commission process underway here, however well-intentioned, does not serve to remedy this egregious failure by the IGBC because the Commission lacks the authority – through this process or any other – to amend the content of the Strategy on its own. By ratifying elements of the Strategy, moving forward with the Proposed Rule will instead signal Montana's complicity in excluding millions of interested Americans and independent experts in this process and provide a misleading façade of legitimacy to a fundamentally illegitimate process.

2. The Proposed Rule is Piecemeal and Premature

Even if the Strategy were procedurally valid, the Commission should not adopt the Proposed Rule. The proposal is to adopt, at the state level, components of a single chapter of a non-final version of the Strategy. Adopting elements of the Strategy piece-by-piece as the Proposed Rule would do is not only inefficient but robs the Commission and the public of the opportunity to consider the interplay between the various mechanisms which together comprise a Strategy that is meant to be a "cohesive umbrella" that represents a comprehensive summary of how NCDE bears will be managed in the event federal protections are eliminated.[4] Comprehensive plans should be considered and adopted comprehensively, not piecemeal.

In any case, the Strategy is not yet final, having not been formally signed by the necessary signatories to the Memorandum of Understanding.[5] It is premature for the Commission to implement particular elements of an interagency plan that is still potentially subject to meaningful amendment.

[1] 78 Fed. Reg. 26,064 (May 3, 2013)
[2] IGBC, 2018 Conservation Strategy, at 8-13 (available at http://igbconline.org/wp-content/uploads/2018/07/NCDEConservationStrategyJuly3DT.pdf).
[3] *Id.*, at 9, 23-25; *see Idaho Farm Bureau Federation v. Babbitt*, 58 F.3d 1392 at 1401-05 (9th Cir. 1995) (APA requires public comment be reopened to allow public review on significant new studies).
[4] 2018 Conservation Strategy, at 14.
[5] 2018 Conservation Strategy, at 7.

THE HUMANE SOCIETY
OF THE UNITED STATES

3. NCDE Delisting is Premature

Underlying both the Proposed Rule and the Strategy it partially adopts lies the premise that NCDE grizzly bears should be removed from the federal list of threatened species under the Endangered Species Act. This position is not merely controversial; it is factually and legally incorrect. The comment attached as Exhibit A, submitted by HSUS to the U.S. Fish and Wildlife Service in 2016, outlines the persistent threats to the survival of NCDE grizzly bears including declining staple food sources, various sources of human-caused mortality, insufficient habitat protections, and loss of habitat due to climate change. These threats individually and collectively demand continued ESA protection. Additionally, the recent federal court opinion vacating the delisting of grizzly bears in the Greater Yellowstone Ecosystem casts grave doubt on the legality of delisting the NCDE grizzly bear population as a discrete population segment.[6]

We respectfully urge the Commission to withdraw the Proposed Rule until these serious defects are rectified.

Sincerely,

Nicholas Arrivo
Staff Attorney
Humane Society of the United States
narrivo@humanesociety.org

[6] "As the D.C. Circuit recently noted…'[t]he Service's power is to designate genuinely discrete population segments; it is not to delist an already-protected species by balkanization.' The Service's approach—evidenced first by this delisting and by its proposal to delist the other significant population, the Northern Continental Divide population—does not square with the ESA as a matter of statutory interpretation or policy. Here, the Service is engaged in a process of real-time 'balkanization…'" Crow Indian Tribe v. United States, No. CV 17-117-M-DLC, 2018 WL 4568418, at *5 (D. Mont. Sept. 24, 2018) (internal citation omitted, emphasis added).

July 22, 2016

Attn: Jennifer Fortin-Noreus
Grizzly Bear Recovery Office
U.S. Fish and Wildlife Service
University Hall, Room 309
Missoula, MT 59812
Jennifer_fortin-noreus@fws.gov

Re: FWS-R6-ES-2016-N060: Review of Habitat-Based Criteria for the Grizzly Bear in the Northern Continental Divide Ecosystem

Dear Ms. Fortin-Noreus:

On behalf of The Humane Society of the United States ("The HSUS"), the nation's largest animal protection organization, and our supporters, please find our comments to the U.S. Fish and Wildlife Service ("FWS" or "the Service") concerning its request for a review of the adequacy of habitat-based criteria for grizzly bears (*Ursus arctos*) in the Northern Continental Divide Ecosystem (NCDE). *See* 81 Fed. Reg. 29295 (May 11, 2016). This comment also addresses elements of FWS' Draft 2013 Conservation Strategy for the Grizzly Bear ("GBCS") in the NCDE as well as the U.S. Forest Service ("USFS") 2016 draft environmental impact statement ("DEIS") for the Flathead National Forest.

Having reviewed both the DEIS and GBSC and considering the best available science, including correspondence received from David Mattson, Ph.D., a former U.S. Geological Survey Research Wildlife Biologist and leading grizzly bear expert with more than thirty years of professional experience focusing on grizzly bear ecology and management, we assert that even with the USFWS' and USFS' proposed mitigation measures in place, ongoing threats to grizzly bears will require that they remain listed under the protections afforded to them under the Endangered Species Act ("ESA") (16 U.S.C. § 1533) for the reasons that follow. Furthermore, proposed state management schemes – including provisions allowing trophy hunting of grizzly bears – are both legally and practically inadequate to ensure the preservation of grizzly bears in the NCDE absent federal protections.

The HSUS respectfully encourages FWS to account for these factors in establishing habitat-specific recovery criteria for NCDE grizzly bears. Failure to do so will result in premature and scientifically unsound determinations regarding the status of the population.

I. Population projections for the NCDE population are too optimistic.

A. Dr. Mattson's concerns about the NCDE grizzly bear population.

The following section comes from correspondence by and discussion with Dr. Mattson concerning the NCDE's grizzly bear population and potential threats thereto:

Historically, grizzly bears who lived on the western side of the NCDE subsisted on salmon and berries, while those on the eastern side subsisted mostly on bison; now, however, both meat food sources are all but gone. Currently, bears on the western side of the NCDE are

heavily reliant upon berries—meaning that meat supplies less than 25% of their diet. On the eastern side of the NCDE, grizzly bears obtain 60-90% of their dietary energy from meat, including domestic livestock and elk. It is likely that many of the grizzly bears on the eastern side of the NCDE eat army cutworm moths, but this is understudied, unlike for the GYE population.

Based upon Mace et al. (2012), the FWS suggests that the grizzly bear population in the NCDE has been growing at 3 percent per annum, but Dr. Mattson contends that this assumption is wrong largely because Mace et al. (2012) based their estimates of survival rates on an anomalous six-year snapshot of data that happened to coincide with a brief downturn in ecosystem-wide mortality. The long-term trend going back to at least 1992 (the last 20 years) is otherwise of mounting mortality and axiomatically increasing mortality rates, save for another anomalous downturn in deaths that occurred during 2013-2014.

Unlike Mace et al. (2012), Dr. Mattson, using results presented in annual reports, peer-reviewed papers, and mortality databases, contends that the NCDE grizzly bear population has more likely been stable or in decline rather than growing during the last 20 or more years. There was, in fact, a 70 percent increase in annual numbers of known and probable deaths for this grizzly bear population between 1985 and 2004, far in excess of any increase that could have been explained by even the most optimistic estimates of population increase for this period. Likewise, between 2010 and 2013, deaths increased by roughly 30 percent, which is roughly twice what could be explained by extrapolating Mace et al.'s overly optimistic estimate of 3 percent per annum population growth. In other words, death rates almost certainly increased between 1985 and 2004, and again between 2010 and 2013.

Dr. Mattson's calculations indicate that growth rate for the NCDE population has been less than—perhaps substantially less than—the 3 percent estimated by Mace et al. (2012) and the more recent 2 percent estimated by Costello. True growth rate is currently unknown, even approximately, but almost certainly less than that claimed by the FWS or MFWP. Moreover, along with Doak and Cutler (2014), Dr. Mattson believes that complex population models driven by estimates of vital rates from radio-marked animals are inherently prone to error and acutely vulnerable to biases in data collection, as seems to be the case for the NCDE.

Like Dr. Mattson, The FWS agrees that population estimates are unreliable. It writes: "Because grizzly bears are long-lived, slow-reproducing, and inherently rare, it is difficult to get enough data to accurately estimate population parameters. As data accumulates over time, estimates may become more reliable, but this can take many decades" (GBCS: 34). The FWS also admits wide confidence intervals around lambda (intrinsic growth rate of a population) and survival rates make population estimates difficult (GBCS: 34).

According to Dr. Mattson, several factors explain the high level of mortality of the NCDE grizzly bear population. Based on the best available data from McLellan (2015) and annual reports for the Cabinet-Yaak ecosystem, between 1996 and 2010 the entirety of northwestern Montana, including the NCDE, experienced what amounted to a berry famine: the correlation between this dearth of berries and mounting numbers of dead bears in the NCDE is almost perfect. Moreover, evidence from McLellan (2015) suggests that population size in his study area declined substantially only after a lag of roughly 10 years behind declines in berry crops, which further emphasizes the crude and risk-prone nature

of reliance on monitoring population size as the primary tool for judging population status—as is the case in the NCDE. Adding emphasis to this point, Fiedler and McKinney (2015) note, as does the USFS in its DEIS, that whitebark pine has severely declined in the ecosystem—with 70% of mature whitebark pine trees dead and the remaining 90% infected with blister rust; virtually every projection for effects of climate change on alpine tundra shows a 90% loss over the next century, with almost certain dire consequences for army cutworm moths; and similar projections for berry-producing species show potential major losses of serviceberry, chokecherry, and buffaloberry throughout the NCDE.

The prognosis for and history of the dietary meat resource for grizzly bears in the NCDE is mixed. On the west side of the ecosystem, white-tailed deer populations are doing well, although moose populations have uniformly declined. More importantly, the meat-reliant bears on the east side of the ecosystem have benefited from sustained increases in elk populations, which, until recent years, has manifest in a negative correlation with numbers of bears dying annually. Unfortunately, the increased outward movement of bears into agricultural lands on the East Front, along with increased exploitation of livestock and beehives, has correlated more recently with an increase in bear deaths in this region. Likewise, the increase in numbers of homes and the associated increase in numbers of domestic animals such as chickens, pigs, and goats on the west side of the ecosystem has resulted in a substantial increase in conflicts involving household animals in this area. This increased incidence of human-bear conflict organized around livestock and other domesticated animals matters because humans have historically caused roughly 90% of all deaths of adult grizzly bears in the NCDE, and does not portend well for the future of this grizzly bear population.

Inasmuch as there have been increasing challenges emerge in the NCDE related to conflict between grizzly bears and livestock producers, this ecosystem has also produced some of the most important prototypes for fostering bear-human coexistence. The Blackfoot Challenge, a multi-agency collaborative in concert with local residents, has set up phone trees, instituted electric fencing around area apiaries and calving grounds, and removed livestock carcasses (which are composted behind electric fencing). As a result of employing these commonsense solutions, since 2003, human-bear conflicts have decreased by 96% in the Blackfoot Valley and the number of grizzly bears killed in the area correspondingly declined by 80% over that same timeframe. At the same time, the People's Way, a collaborative involving the Salish-Kootenai Tribe and multiple NGOs and government agencies, has resulted in the construction of multiple over- and underpasses along Highway 93, which demonstrated benefits for grizzly bears and other wildlife along an otherwise heavily-trafficked road. The Blackfoot Challenge and People's Way are a testament to the fact that if people are willing to co-exist with grizzly bears, using common sense simple measures, they can readily be accomplished.

Accordingly, we suggest that development of NCDE recovery criteria include (a) a critical analysis of population estimate methods that accounts for the overestimation inherent in models currently relied upon by FWS; (b) as discussed in more detail below, a thorough accounting for the loss of staple food sources including berries and whitebark pine and its implications on long-term stability of the population; and (c) implementation of novel programs for reducing human-bear conflict.

B. Resource availability determines bear population size; but many staples have declined.

As Dr. Mattson explains herein, grizzly bears in the NCDE have lost their historic meat sources: bison, elk and salmon; added to that, they experienced a prolonged berry drought as well as the loss of whitebark pine. Yet, as others have found, the amount of food in an ecosystem sets the population size. Craig McLaughlin (1999, p. 24) explains the import of food in (black) bear population regulation:

> There is little evidence that bear populations are regulated by internal factors, such as behavior that controls spacing of individuals, or declines in reproductive success. It is more likely that they are limited by their food supply, which may control age of sexual maturity, proportion of adult females that reproduce, and survival of bears (primarily cubs, yearlings, and subadults) . . .

While food is certainly important for regulating bear populations, biologists now believe that apex carnivores such as grizzly bears, are capable of self-regulation; that is, they limit their populations to avoid exceeding their carrying capacity through no- to slow reproduction, low densities, extended care of dependent young and infanticide (Wallach et al. 2015).

Another mechanism for relieving pressure in an area of declining carrying capacity is dispersal. In the case of the NCDE population, some bears are likely leaving their core area in a quest of food in order to survive. But this creates the illusion–as with GYE bears– that the NCDE population has expanded, when in reality, as with GYE bears, NCDE bear populations may be in contraction (see: Mattson discussion *supra*). These dispersing bears frequently experience mortality when they leave their secure core.

Like the FWS, the USFS writes that calculating carrying capacity is difficult and imprecise: "Carrying capacity or food production cannot be calculated for an omnivorous and opportunistic species such as the grizzly bear, because they eat a wide variety of foods, with availability that is constantly changing due to factors such as wildfire, plant succession, and annual changes in production due to weather" (DEIS: 405).

Because the carrying capacity for the grizzly bears who live on the NCDE may already be in decline because of a variety of anthropogenic causes, and because these bears are slow to reproduce and even harder to count, it is far too soon for the FWS to contemplate delisting NCDE bears in the face of myriad threats; rather, recovery criteria must take into account the potential decline in carrying capacity of the NCDE and take care to avoid misinterpreting the dispersal of bears searching for food sources for an expansion in the population.

II. Given the multitude of threats that grizzly bears face or could face in the future on the NCDE, neither the USFS's nor FWS's proposed secure core habitat and mitigation measures are adequate recovery criteria and may not sufficiently protect grizzly bears if they are delisted.

A. Grizzly bears are not resilient; they face of multiple human threats in the NCDE.

Grizzly bears have both low reproductive and dispersing potentials, but are highly susceptible to anthropogenic threats. Grizzly bears are very slow to disperse – male offspring's home ranges are only about 18 to 26 mi from their mothers, while females will overlap or be 6-9 miles away (GBCS: 9). Bears mate in May – July, with a peak in mid-June; embryos implant in late fall – but only if the mother has enough fat to survive the winter and nurse cubs for 2-3 months in the den (GBCS: 9). Age of reproduction starts at 5.4 years in the NCDE, but can vary from 3-8 years (GBCS: 9). In fact, NCDE grizzly bears have one of the slowest rates of reproduction among large mammals due to small litter sizes and long intervals between births (GBCS: 9). ". . . it may take a single female 10 years to replace herself in a population" (GBCS: 10). Females cease productivity in the mid to late 20s (GBCS: 11).

Because of this natural history, grizzly bears are a "conservation-reliant" species; that is, they need to be cared for into perpetuity or likely face extinction. If delisted, the FWS would is expected to only require a 5-year monitoring period on the NCDE. Yet, on the Flathead National Forest, the conservation measures, mitigations, and standards and guidelines for grizzly bears would only have to be in place for the remainder of the life of the forest plan or until the plan was amended (DEIS: 399). Without the protection of the ESA, grizzly bears lack any guarantee for their basic security or conservation. Without the protection from the ESA, grizzly bears on the NCDE would <u>not be protected into perpetuity</u>; if delisted, they would be extinction prone.

Several traits peculiar to the social structure and life cycle of grizzly bears make them particularly sensitive to human-caused mortality. They are large-bodied and only sparsely populated across vast areas; they invest in few offspring; they provide extended parental care to their young; they have a tendency towards infanticide; their females limit reproduction and social stability promotes their resiliency (e.g., Weaver et al. 1996, Wielgus et al. 2013, Creel et al. 2015, Wallach et al. 2015). Human persecution affects their social structure (Darimont et al. 2009, Wielgus et al. 2013, Bryan et al. 2014, Wallach et al. 2015) and harms their persistence (Wielgus et al. 2013, Zedrosser et al. 2013, Darimont et al. 2015). The consequence of these characteristics is that the effect of human persecution on grizzly bears is "super additive" and far exceeds what would occur in nature (Wielgus et al. 2013, Darimont et al. 2015, Gosselin et al. 2015).

Hunting mortality has direct effects on population growth rates because of increased mortality, but also has devastating indirect effects such as disrupting the sex and age structure of a population (Wielgus et al. 2013, Gosselin et al. 2015). Gosselin et al. state: "In species with sexually selected infanticide ("SSI"), hunting may decrease juvenile survival by increasing male turnover." These studies show that hunting mortality can harm social organization of species, because it promotes male turnover and thus increases sexually selected infanticide upon cubs of deceased males. This is especially true when – as here – carnivores are hunted as trophies, because trophy hunters tend to select for, and hunting quotas skew toward, males (Gosselin et al. 2015). "In species with SSI, harvesting males can have an indirect negative effect on the population by reducing juvenile survival" (Gosselin et al. 2015).

Compounding this harm, females with cubs generally avoid males as a strategy of avoiding sexually-selected infanticide, often leading them to choose suboptimal habitats, including habitats in closer proximity to humans, leading to increased human-bear conflict. This also affects their diet quality and reduces their reproductive potential (McDonough and Christ 2012, Gosselin et al. 2015).

Because grizzly bears are a conservation-reliant species, they require special federal protections so they are not extirpated or extinguished. Recovery criteria must recognize these unique traits and account for both the reliance of NCDE grizzly bears on federal protections and the uniquely damaging effect that the removal of these protections would have on such a conservation-reliant species.

B. The primary purpose of the DEIS and GBSC is to delist grizzly bears, but the minimal habitat protections provided will fail to conserve them into perpetuity.

In the DEIS, the proposed action is "to ensure the adequacy of regulatory mechanisms regarding habitat protection across the national forests in the NCDE in support of the de-listing of the grizzly bear" (DEIS: 2). Similarly, the goal for the GBSC is to "demonstrate the adequacy of regulatory mechanisms in order to delist this grizzly population . . . . Thus, the Flathead National Forest proposed to update its forest plan where necessary to incorporate the relevant desired conditions, standards, guidelines, and monitoring items related to habitat management on NFS land to support a recovered grizzly bear population" (DEIS: 7).

Similarly, the GBSC's objective is to maintain a recovered grizzly bear population within the NCDE, but only within the stingy confines of the primary conservation area ("PCA") and Zone 1 (GBCS: iii) Figure 1. Furthermore, the objective is to allow a "regulated" grizzly bear hunt (GBCS: 5).

Rather than managing for a robust, abundant and well-connected grizzly bear population with a goal to conserve bears including designating and protecting corridors between subpopulations, both the USFW and the FWS' plans chart what is essentially the status quo which includes human "hyperpredation" of grizzly bears and their habitats.

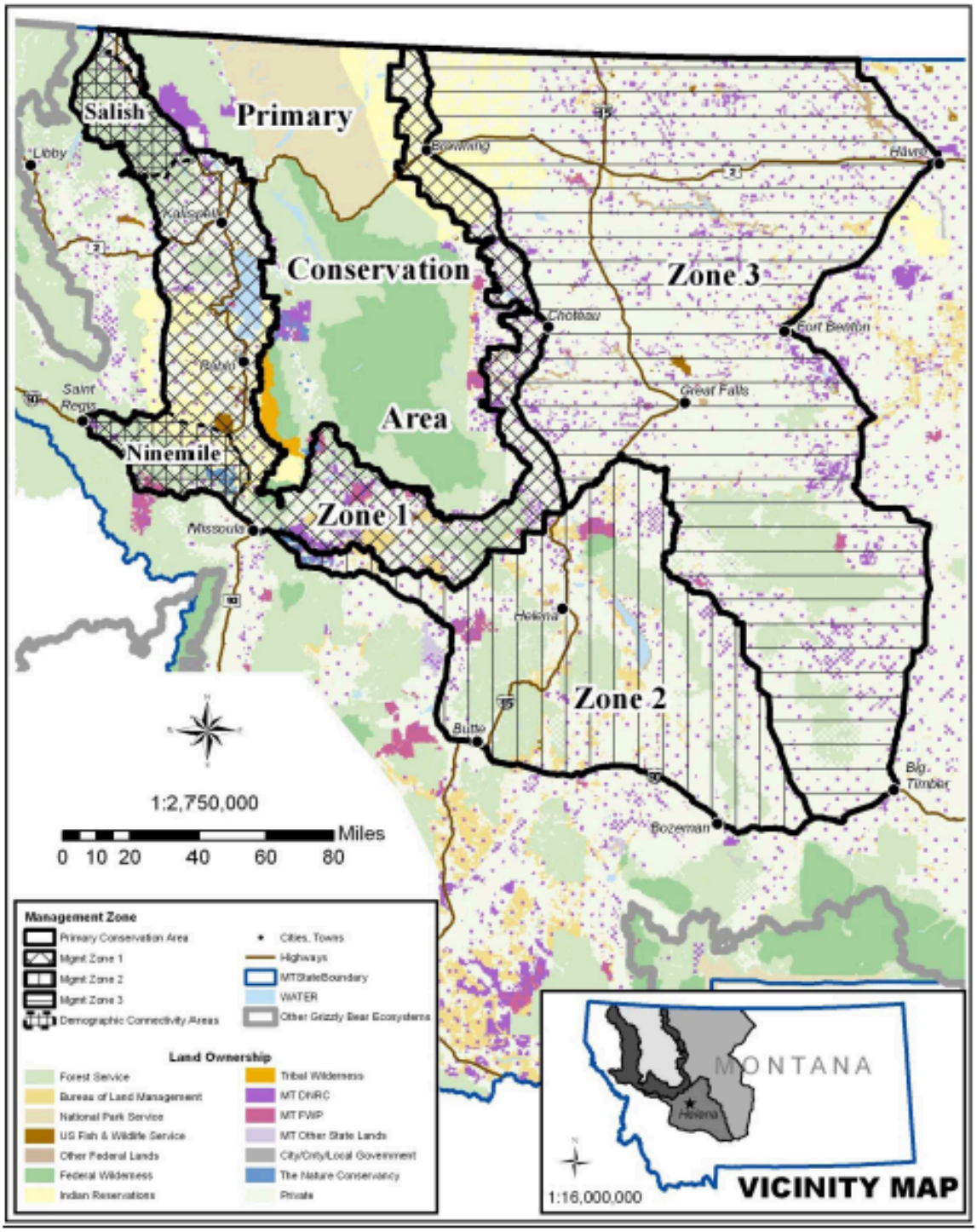


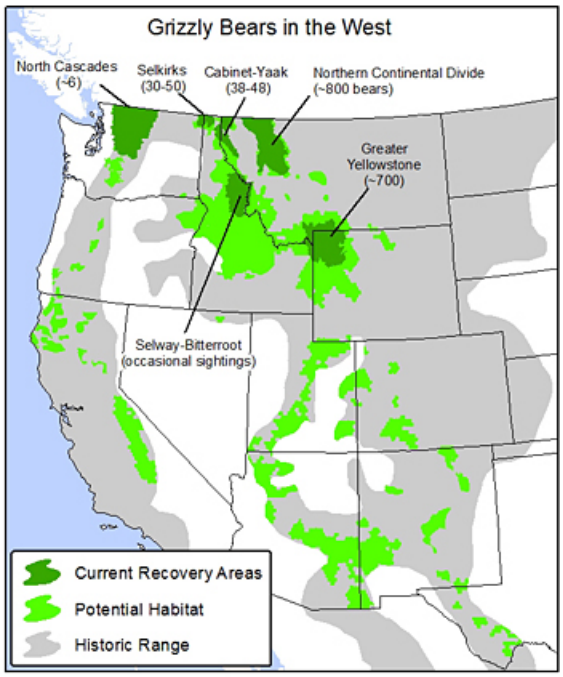
Figure 1, (Image From: FWS's NCDE GBSC 2013)

Currently, top carnivores face an extinction crisis in North America and across the earth (Berger et al. 2001, Ritchie and Johnson 2009, Estes et al. 2011, World Wildlife Fund 2014, Darimont et al. 2015). In July 2011, 23 biologists issued an admonition in the prestigious

journal, *Science*, with the sobering title: "Trophic Downgrading of Planet Earth." Authors forewarn that catastrophes will befall Earth's ecosystems as a result of the loss of apex consumers. Estes et al. (2011: 301) write:

Until recently, large apex consumers were ubiquitous across the globe and had been for millions of years. The loss of these animals may be humankind's most pervasive influence on nature. Although such losses are widely viewed as an ethical and aesthetic problem, recent research reveals extensive cascading effects of their disappearance in . . . ecosystems worldwide. This empirical work supports long-standing theory about the role of top-down forcing in ecosystems but also highlights the unanticipated impacts of trophic cascades on processes as diverse as the dynamics of disease, wildfire, carbon sequestration, invasive species, and biogeochemical cycles. These findings emphasize the urgent need for interdisciplinary research to forecast the effects of trophic downgrading on process, function, and resilience in global ecosystems. While top carnivores are integral to biological diversity and ecological function, many may forever disappear (Berger et al. 2001, Ritchie and Johnson 2009, Estes et al. 2011, Darimont et al. 2015). Human-caused extinctions result from habitat loss and fragmentation, loss of dispersal corridors, overhunting, poaching, the spread of invasive species, the change in species assemblages; changes in ecosystem function, disease, sickness, and a host of other problems (Cardillo et al. 2004, Gaston 2005). Already, nearly one quarter of the world's mammals are at "high risk of extinction" with top carnivores especially affected (Cardillo et al. 2004, Estes et al. 2011, Darimont et al. 2015).

Figure 2



Co-adaption between large carnivores and humans must happen, if carnivores are to persist; that means that humans must be willing to share habitat and tolerate the small level of risk they pose (Carter and Linnell 2016). Humans must curb their own "hyperpredation" of other species and their habitats (Darimont et al. 2015, Chapron and López-Bao 2016). Large carnivores, grizzly bears in particular, and their habitats are not resilient to human persecution or habitat degradation (Weaver et al. 1996, Estes et al. 2011, Ripple et al. 2014, Darimont et al. 2015). A grizzly bear needs large habitat devoid of human conflict in order to search for food, mates, cover and den sites. Mattson (1993) recommends, after conducting a thorough review of the literature, that a secure grizzly bear area contain a core of approximately 290 hectares and be situated roughly 2-4 kilometers from the nearest road or human facility. Given their particular need, it seems that plans to protect the largest grizzly bear population in the lower 48 is utterly miserly [Figure 1 and 2] and more focused on minimal habitat protections with no- to little institutionalized co-

existence programs, which have a proven track record for keeping both people and bears safe, whether in Yosemite National Park or across various European nations (Rogers 2014, Carter and Linnell 2016, Chapron and López-Bao 2016).

On the Flathead National Forest and on the NCDE, land and wildlife managers seek to protect only minimal amounts of potential grizzly bear habitat rather than thinking expansively [e.g., Figure 2, potential grizzly bear habitat]. Yet, as the USFS notes, protecting grizzly bears resolves issues for numerous rare and endangered species including boreal toads, lynx, wolves, bull trout and several rare avian species.

A guiding principle of conservation biology is connectivity; that is, maintaining linkages between subpopulations so that genetic material can be exchanged to keep populations vital, maintain genetic diversity, and prevent genetic drift and inbreeding depression.[1] Habitat connectivity affects grizzly bears at multiple scales: between bear ecosystems; within ecosystems and within a home range (DEIS: 418). The disruptors of connectivity are communities, highway, agriculture and more. Bears avoid highways, especially at night. Bears' presence is negatively related to volume of traffic on a road or highway (DEIS: 419).

As the USFS notes, connectivity is never static because of changes on the forest including fire, forest succession, insects and disease (DEIS: 34). While the FWS extols the virtues of the NCDE bear population's connectivity to Canada, it has failed to consider that on the Canadian border, activities such as timber cutting, oil and gas exploration, coal mining and associated human development occur as well as grizzly bear trophy hunting (DEIS: 420, GBCS: 14). This disruption results in gene loss from Canada. Furthermore, Montana has stated as part of its "consensus" comments to the Service (May 19, 2016) that it would not support mandating connectivity for grizzly bears if they are delisted (see discussion below).

* * *

Within the NCDE, according the GBCS, the grizzly bear habitat will be managed using a Primary Conservation Area (PCA) or the Recovery Zone. In addition, the FWS contemplates three additional zones, each with descending protections:

Zone 1: Defined as the "source" for other grizzly bear populations in the lower 48 (GBCS: ii). (Despite this lofty definition, few grizzly bears successfully disperse, with none from the NCDE recruiting in the GYE, for instance, and few bears surviving in the CYE (Haroldson et al. 2010, Kendall et al. 2016)). Zone 1 is also the buffer zone around the recovery area. In the Recovery Zone and Zone 1, bears' mortality will be tracked and monitored.

Zone 2: Like Zone 1, Zone 2 is also designated as a "source" population (GBCS: ii) that is designed to allow bears, particularly males, to move between the NCDE and adjacent ecosystem including GYE (see our concerns above). In Zone 2, the emphasis is on human-bear conflict and response to interactions, some of which will invariably be lethal.

[1] *Genetic diversity* increases a species' chances of long-term survival because negative traits (such as inbreeding) become widespread within a population when that population is left to reproduce only with its own members. *Genetic drift* refers to a populations' loss of genes, making a population less vital, more disease prone, and unable to overcome natural disasters. (Mills and Allendorf 1996).

Zone 3: While on the one hand acknowledging that grizzly bears are a habitat generalist, the FWS has determined that Zone 3 does not have enough suitable habitat to support population growth (GBCS: ii). That is because the "traditional food sources" in this zone, elk and bison, have been displaced with cattle, sheep, chickens; goats, pigs and beehives (GBCS: 20), resulting in a high potential for conflict.

While the most expansive of all the alternatives for grizzly bears, as Figure 2 indicates, only a fraction of the NCDE would be actually protected for grizzly bears. In management Zones 2 and 3, grizzly bears would enjoy little security.

On the Flathead National Forest, the USFS has developed a new DEIS with four alternatives. They too vary in degree of protection for grizzly bears, as follows.

Alternative A, Amended. Under Alternative A, the preferred alternative, 518 miles of roads would be reclaimed; 57 miles of trails would no longer allow wheeled motor vehicles (DEIS: 258) and 98,388 acres would be recommended for wilderness designation (DEIS:82).

Alternative C. The most conservation-minded alternative, Alternative C would reclaim no additional roads, although it emphasizes protecting the most acres in wilderness (506,919 acres for recommended wilderness) and backcountry. It also emphasizes more non-motorized values than the other alternatives (DEIS: 26). Motorized transport and travel would not be permitted in recommended wilderness (DEIS: 28). In this alternative, roads open to public motorized use could not exceed baseline levels and those densities may actually decrease to allow for the highest level of habitat security and connectivity of any alternative.

Alternative C would not permit surface area occupancy for any oil and gas leases in the primary conservation area and Zone 1 (see Figure 2 below) (including connectivity areas). Roads in the grizzly bear secure core could not be opened temporarily (DEIS: 27). New or re-authorized permits for ski areas would have to include mitigation measures to reduce grizzly bear-human conflicts. This alternative would have greatest benefits to water quality and quantity because of the limited land management activities (DEIS: 83).

This alternative would have the lowest risk of disturbance or displacement of bears–especially for females with cubs during den emergence because they would be protected by the largest amount of wilderness (DEIS: 428-9). Under this alternative, areas now opened to over-snow vehicles would be closed during den emergence (the so-called "late-season play areas": Challenge-Skyland; Lost Johnny; and Six Mile) would be eliminated under the WA (DEIS: 429).

* * *

The Flathead National Forest has proposed a new management plan for the forest. The DEIS proposes four alternatives, with Alternative C offering the most protections for grizzly bears and all other species of concern.

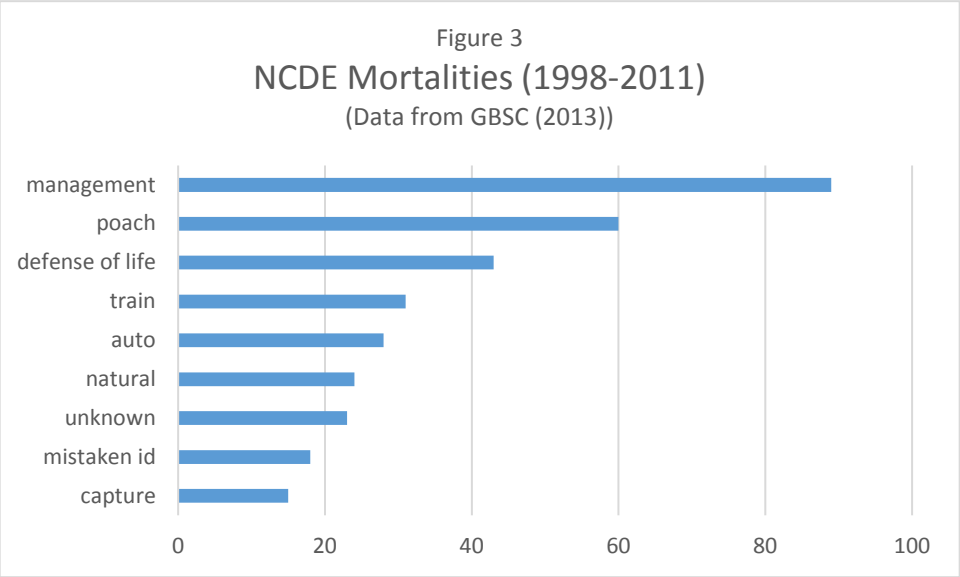
The USFS' Alternatives B and D utterly fail to sufficiently protect grizzly bears, and especially Alternative D, which emphasizes industrial extraction and human winter "playgrounds" over conservation in the last best place for grizzly bears in the lower 48 on a national forest.

Because of the extinction crises facing large-bodied carnivores, the best available science indicates that humans must be willing to share the planet with them and accept the small amount of risk they pose, or these species could forever disappear. Given the historic range that grizzly bears once roamed, they are now penned into tiny reserves, and land and wildlife managers plan to manage them at what appears to be the most nominal levels so as to appease a minority of people who do not want large carnivores on the landscape. To ensure recovery and sustained survival, FWS and USFS must consider Zones 2 and 3 as secure habitat, rather than giving away huge areas to for purposes of industry or recreation.

III. Grizzly bears face a myriad of threats that hamper their recovery and must be addressed in recovery criteria.

A. Direct mortalities from humans cause a large number of grizzly bear deaths.

FWS notes that grizzly bears are highly susceptible to human-caused mortality from a variety of sources including anthropogenic fragmentation; proximity to human populations; small, isolated populations, which are vulnerable to extinction from genetic drift; and decreased birth rates (GBCS: 13). In the NCDE, highways and rail lines are barriers that prevent genetic interchange to other subpopulations, because both cause high mortalities (GBCS: 13). According to the FWS, the greatest source of NCDE grizzly bear mortality is from management removals, secondarily from poachers, and thirdly from hunters killing bears for "defense of life". Figure 3.



In a newer document, the USFS notes, citing Costello et al. (2016, in press) that poaching/malicious kills are the highest percentage of grizzly bear mortality on the NCDE (as least 27%); management removals (16%); illegal defense of property (11%); and natural causes (9%). Grizzly bears are also killed mistakenly for black bears (DEIS: 420). It makes sense that the number of bears killed by poachers were undercounted by the FWS in its

GBCS because these kills are difficult to count, and for that reason, the FWS must recognize this ongoing threat in its recovery criteria.

i. FWS must work to abate the ongoing threat posed by grizzly bear poachers.

FWS must consider the ongoing threat that poaching poses on the NCDE grizzly bear population and work to abate it – before delisting can be considered—including prosecuting poachers even if they claim mistaken identity. While poaching is an ongoing threat, if bears are delisted, poaching could actually increase. While FWS and others suggest that if human-bear conflicts are resolved quickly, people will exhibit less negative behaviors towards grizzly bears (GBCS: iv). Yet, a new study suggests that poaching is not diminished when governmental programs kill nuisance bears, despite agencies' best intentions (Chapron and Treves 2016). FWS and others cannot operate under assumptions. Instead, what drives intolerance is people's orientation including education levels, social and cultural norms and emotional factors – not just material interactions (Treves and Bruskotter 2014, Carter and Linnell 2016).

Poaching is a major mortality factor in large carnivore populations, and a major, if not primary cause of mortality for NCDE grizzly bears. This prevents grizzly bears, a low density species, from recovering (Andren et al. 2006). Poaching, even in small numbers, can harm populations if a species occurs in low densities (Saether et al. 2010). Approximately half to two-thirds of grizzly bears killed by humans go unreported (Schwartz et al. 2003). Without radio collars, grizzly bear management agencies would be unaware of one-half (46 to 51 percent) of the killings that occur (McLellan et al. 1999).

Researchers in Washington discovered that approximately 20% of hunters in Washington failed to report the black bear they killed (Koehler and Pierce 2005). Additionally almost 25% of bears killed by hunters were lost in vegetation (Koehler and Pierce 2005). Park boundaries are the places where grizzly bears experience high rates of mortality compared to the areas where they are fully protected (McLellan et al. 1999). Furthermore, The HSUS has tracked poaching numbers of gray wolves by state during the periods when wolves were delisted. Minnesota wildlife managers tracked zero poachers during the period when the Western Great Lakes population of gray wolves lost their federal protections and were subject to hunting.[2] In short, studies indicate that if states are permitted to hold a trophy hunting season on grizzly bears, far more bears will be killed by poachers than if they retain their federal ESA protections. Moreover, given the high incidence of known poaching mortality of NCDE bears, the agencies must not only enforce codes and laws, they must build institutionalized education programs that help people understand not only the importance of grizzly bears, but how to co-exist with them (Slagle et al. 2013, Carter and Linnell 2016, Chapron and López-Bao 2016).

Because of the extremely vexing problem of grizzly bear poaching on the NCDE, the FWS must account for this ongoing threat in its recovery criteria, including abating this illegal activity.

[2] Personal communication between DNR Steve Merchant and Wendy Keefover of The HSUS (Jan. 15, 2015) (on file with The HSUS).

ii. The FWS must acknowledge the high number of "management kills" account for them in recovery criteria, and work to reduce them.

A majority of grizzly bear mortalities come from management removals (DEIS, GBSC). FWS must account for these ongoing, but preventable threats to grizzly bears. Management removals are associated with human-caused problems such as poor domestic animal husbandry practices, unguarded apiaries, or exposed human food sources including birdseed, ripening fruits, chickens, compost, orchard fruits, livestock carcasses, boneyards and unsecured garbage and BBQ grills (DEIS: 403). Illustratively, the Blackfoot Challenge has demonstrated that if agencies and communities work together, these threats can be almost entirely diminished by employing commonsense measures and changing social norms. Implementation of these and similar measures should be built into FWS' recovery criteria.

While the literature on grizzly bear co-existence is sparse, a considerable literature concerning abating human-black bear conflict exists, which is informative here. Community-based education programs that emphasize the benefits of bears (Slagle et al. 2013), combined with avoidance, aversive conditioning and stringent law enforcement are effective means of reducing human-bear conflicts (Masterson 2006). Yosemite Park reported a 92% decrease in conflicts after it both educated the public and <u>enforced</u> special codes (Rogers 2014). FWS must consider institutionalizing grizzly bear co-existence using the highly successful Blackfoot Challenge as its model. This is particularly crucial because as FWS suggests, Montana's *homo sapiens* population is expected to expand, recreational use is expected to increase, and greater habitat loss and fragmentation will also increase contributing to greater human-bear conflicts, which exacerbate grizzly bear mortalities - especially on private lands (GBCS: 33).

Trash management, animal husbandry practices (using electric fencing, sanitary carcass removal, using lambing or calving sheds), public education, code enforcement and hazing could alleviate human-bear conflicts as the Blackfoot Challenge has effectively demonstrated. In addition to stepping up education/co-existence programs for homeowners and recreationists, FWS must also monitor and account for these ongoing threats such as tracking the numbers and locations of bear attractants and working to minimize conflicts to avoid overzealous grizzly bear mortalities as a result of management removals.

iii. The FWS must recognize the ongoing threat that hunters afield pose to grizzly bears and work to reduce unintended kills for "defense of life" reasons or mistaken identity.

A majority of unnecessary grizzly bear mortalities in the NCDE come from "self-defense" kills by hunters afield. These kills are avoidable. Hunters can reduce the risk of a bluff charge or attack if they travel in groups and use pepper spray rather than shooting bears. Also, far too many black bear hunters mistakenly kill grizzly bears. Species identification can be readily learned. If a hunter does not know his quarry, he should not pull the trigger. One of the first tenets of ethical hunting is knowing one's prey. If a hunter does mistakenly pull the trigger, he should accept the consequences of his actions and lose privileges and rights. The FWS must recognize the threats that hunters pose to grizzly bears and work to reduce these threats. Implementation of accountability for hunters who take grizzly bears must be built into the recovery criteria.

iv. Vehicles and trains strike large numbers of grizzly bears resulting in mortalities which the FWS must work with allies to abate; safe passages between subpopulations must be restored.

Vehicle- and train-bear collisions cause distressingly high numbers of grizzly bear mortalities, including, in recent days, "Snowy": the cub of Grand Teton National Park's famous mother Bear 399 (one of three bears killed on roads this year alone).[3] The FWS must consider this ongoing threat to grizzly bears and work to address it in its recovery criteria. Vehicle-wildlife collisions can be avoided if sufficient over- and underpasses are built on roads and highways.

Habitat connectivity affects grizzly bears at multiple scales: between bear ecosystems; within ecosystems and within a home range (DEIS: 418). Roads reduce that connectivity on all three of those scales. Largely on account of this phenomenon, grizzly bears' genetic health is at stake in the lower 48 states.

Haroldson et al. (2010) using DNA evidence, found no connectivity between the NCDE and GYE grizzly bear populations, the largest two grizzly bears populations in the lower 48. They noted that the quest to document connectivity between these two subpopulations has been conducted since 1959; yet, despite 50 years' of study, no natural movement has been documented (Haroldson et al. 2010). Haroldson et al. (2010) noted that Walker and Craighead (1997) suggested that the best pathways for connectivity are: 1) the Big Belt-Bridger-Gallatin mountain ranges; 2) the Boulder-Tobacco Root- Gravelley-Taylor-Hillard ranges; and 3) Selway-Bitterrot-Lemhi-Centennial-Madion ranges. Grizzly bears need forest cover and low road densities in order to successfully move between populations (Haroldson et al. 2010). They also need not to be killed. Long-distance dispersal is dominantly conducted by male grizzly bears and connectivity by males (at a minimum) is necessary to maintain the genetic health of both the GYE and NCDE grizzly bear populations (Haroldson et al. 2010).

As part of its recovery criteria, the FWS must consider the large numbers of mortalities as a result of vehicle and train strikes. Because of this problem, connectivity for grizzly bears from the NCDE to the GYE and other subpopulations is hindered. This is an ongoing threat to grizzly bears in the lower 48, but one that could be resolved if safe passages were institutionalized for grizzly bears.

B. In the NCDE, projects and roads harm grizzly bear persistence and FWS must consider these threats in its recovery criteria.

As Figure 2 shows, the land base that could potentially provide habitat to grizzly bears could be quite robust if agencies were not so quick to engage in "hyperpredation"; that is the degradation of former habitats (Chapron and López-Bao 2016). On Western public lands, hyperpredation of habitat comes from, but is not limited to, hard rock mining, grazing, logging, oil and gas exploration and drilling, coal mining and ski area expansions.

[3] http://news.nationalgeographic.com/2016/06/grizzly-bear-399-cub-snowy-killed-hit-and-run-grand-teton-national-park/; three grizzly bears killed on highways this year: http://www.localnews8.com/news/grizzly-cub-killed-by-car-on-highway-in-northwest-wyoming/40818890.

In their study of grizzly bears in the Cabinet-Yaak Ecosystem ("CYE"), Kendall et al. (2016) note that "excessive" human-caused mortalities to the CYE population has prevented it from expanding and has inhibited recovery. Because of the high density of roads and competing activities on the Cabinet and Yaak forests, these grizzly bears struggle to survive (Kendall et al. 2016). The failure of this subpopulation to persist should make wildlife and land managers cautious about opening up the Flathead National Forest and other lands on or near the NCDE to roads, timber, mining, recreational development and other projects, and failing to restore habitat from these ongoing threats on the NCDE.

Grizzly bears are an umbrella species. If managers would protect them, many other species could also persist as the USFS noted throughout its 2016 DEIS:

- Reducing roads in grizzly bear habitat would also benefit boreal toads (DEIS: 300-1).
- Because of grizzly bears require a secure core, the lack of developed recreational sites would benefit bald eagles, who are easily disturbed (DEIS: 303).
- Limiting motorized access in grizzly bear habitat would benefit mountain goats (DEIS: 316).
- By reducing livestock grazing, the risk for invasive species would be reduced (DEIS: 322).
- Road access restrictions would benefit flammulated owls for nesting because snags would be retained (DEIS: 341).
- Securing habitats for grizzly bears would also make them safer for gray wolves and thus "reducing the risk of excessive wolf mortality" (DEIS: 359-60).
- Plan components to benefit grizzly bears and wolves would also benefit white-tailed deer, mule deer and moose (DEIS: 360).
- Access management to benefit grizzly bears would also help fisher who prefer large snags and downed trees that are often taken by wood cutters (DEIS: 383-4).
- "Watersheds with bull trout and westslope cutthroat trout populations which are, or are nearly genetically pure, match up nicely with the Primary Conservation Area for grizzly bear which will also limit the road network" (DEIS: 116).

While acknowledging that protecting grizzly bears would protect a host of imperiled species, the USFS and FWS also recognize that potential "projects" on the NCDE would disturb or harm grizzly bears including salvage logging, timber cutting, and increasing road density and road occupation, recurring low-level helicopter flights, mining operations and oil and gas exploration (GBCS: 51).

These harms occur because, if aroused, bears will abandon den sites. Causes of arousal include seismic or mining activity (GBCS: 11), which could cause females in the NCDE to lose cubs, because they are the most vulnerable while in the den or upon emergence (e.g., DEIS: 413). Despite the threats and potential for long-term habitat damage, FWS has suggested toothless mitigation measures, particularly if projects are considered "temporary", but even "temporary" projects are given liberal latitude to expand so long as project managers get extensions from the NCDE coordinating committee (GBSC: 52).

i. Hard rock mines, coal, or oil and gas development on the NCDE could pose irreversible threats, including loss of critical habitat that FWS must account for in its recovery criteria.

As FWS and USFS have noted, mining and oil and gas exploration can cause a myriad of problems for NCDE grizzly bears (GBCS: 27, DEIS: 417, 427), some of which are irreversible, but must be accounted for before the FWS can assume NCDE bears are recovered, or will be conserved into perpetuity:

- Land surface and vegetative disturbance;
- Water table alterations;
- Loss of fragile riparian zones and wetlands;
- Construction of facilities: impoundments, rights of way, roads, pipelines, canals, transmission lines, drill pads or other structures;
- Food storage and sanitation issues at mine and campgrounds;
- Keeping domestic pet (attractants) at camps;
- Road-kill attractants that lure grizzly bears to roadways;
- Non-native seed mixes expanding invasives;
- Wildlife feeding;
- Increased road densities that attract traffic and expand the reach of hunters and poachers;
- Personnel carrying firearms, but not mandated to carry pepper spray.
- Human-bear conflicts;
- Permanent habitat loss;
- Fragmentation and displacement from surface disturbance…

Given that the NCDE might be the best remaining habitat in the lower 48 states for grizzly bears, FWS and USFS must consider conserving the NCDE ecosystem to the greatest extent possible. It must not permit mines and oil and gas exploration in the one last great grizzly bear refuges. At some point, the hyperpredation of habitats must cease if large-bodied carnivores are expected to persist on our planet. Because mining and oil and gas exploration and drilling pose an ongoing threat to grizzly bears, the FWS must account for this harm in its recovery criteria.

ii. Roads are insidiously harmful to grizzly bears and wildlife in general.

One of the greatest threats to grizzly bear vitality is the incursion of motorized activity in their habitats (Craighead 2002). Grizzly bears generally avoid roads; they can cause direct mortality (collisions) and disturbance (GBCS: 21); indirect mortality from ecosystem degradation and especially riparian/wetland degradation. Roads increase access for big game hunters, trophy hunters and poachers (Craighead 2002), all of whom could kill grizzly bears. Because of roads are such an insidious ongoing threat to grizzly bears, the FWS must account for this ubiquitous harm in its NCDE grizzly bear recovery criteria.

The USFS does not presently know the extent of roads on the Flathead National Forest. It writes: "The USFS does not have complete knowledge of its old road system or the status of all roads on adjacent private lands" but it can update this information through aerial images as data become available (DEIS: 401). This information must be updated and made

public as soon as possible so that comment regarding the actual extent of harm caused to the NCDE may be solicited.

a. Roads cause direct mortalities to grizzly bears or cause avoidance or disturbance, among other issues.

Watershed restoration over the past 20 years on the Flathead National Forest has focused on culvert removals, road decommissioning, road relocation and slump stabilization including the removal of 900 miles of road in grizzly bear habitat (DEIS: 116). For this work, USFS must be commended. While previous guidance on the forest, ("INFISH"), has improved riparian zones management for many streams on the Flathead (DEIS: 35), some of the greatest harms to watersheds and aquatic systems still come from roads because they can cause runoff, soil erosion, alter sediment composition and delivery to streams, and change channel morphology (DEIS: 47). Many miles of roads on the Flathead were not designed to meet BMP resulting in continuing decline of these systems: "these roads either continue to affect watersheds through chronic erosion or are at risk from mass failure from undersized stream crossings or locations on sensitive lands types" (DEIS: 47).

The importance of riparian areas and wetlands cannot be emphasized enough. Montana, part of the arid West, frequently faces drought and yet riparian areas and wetlands provide the greatest biological diversity of any habitats and so these species habitats must be conserved. The USFS states that riparian ecosystems are "rich in bear foods such as skunk cabbage and other herbaceous plants with nutritious bulbs" and grizzly bears and other species of concern are often associated with riparian habitats (DEIS: 56).

USFS must do more to reclaim and decommission roads on its forests and other habitats on the NCDE. Moreover, the ongoing loss of these important habitats must be a consideration FWS uses as part of its recovery criteria for grizzly bears on the NCDE.

iii. Vegetation projects could improve or harm grizzly bears.

With logging or salvage operations, the forest canopy is reduced – sometimes drastically in the event of clear cut. Canopy reduction may create areas with enhanced grizzly bear forage, but only if nearly roads have no traffic (DEIS: 416, 426 GBCS 27). With logging, comes roads and traffic which could harm or displace grizzly bears, and destroy riparian, wetlands and other fragile habitats. Also, during logging operations, the potential for human-bear conflicts could arise as a result of unsecured attractants, thereby increasing mortality (GBCS: 27). As USFS and FWS have failed to note, roads increase access for big game and trophy hunters as well as poachers.

On the Flathead National Forest, invasive weed removal would likely need to occur during the springtime when grizzly bears are emerging from their dens, but this work could disturb them (DEIS: 256). Like with winterized recreation and mining projects, this project could even lead to den and potentially to cub abandonment.

The reduction of invasive-weed spread would reduce in the long-term from road closures intended to protect grizzly bears. But work to close roads, such as ground disturbance needed to decommission roads, would cause weeds to spread unless treated in disturbed

areas. Road closures then make it harder to treat invasive species in some areas of the forest (DEIS: 258).

Because of the ongoing threats from vegetation projects on the NCDE, the FWS must fully account for these projects as part of grizzly bear recovery criteria on the NCDE.

iv. Recreation on the NCDE could result in habitat loss, increase human-bear conflicts and cause other troubles for grizzly bears.

Sites developed for public recreation on the NCDE include campgrounds, trailheads; lodges, rental cabins; summer homes, restaurants, visitor centers, boat launches and ski areas. With more people on the forest, the potential for negative human-bear encounters increases, particularly because of human food attractants. USFS suggests that habituation or food conditioning is low because food storage orders across the Flathead National Forest exist – although it is unclear to the extent those order are enforced because USFS provided no law enforcement data (DEIS: 425). On the other hand, USFS suggests that the Whitefish Mountain Resort located on the PCA doesn't permit overnight stays, but the ski area likely causes disturbance or displacement to grizzly bears during their non-denning season (DEIS: 430).

USFS also contends that no evidence exists that mechanized transport (bikes) disturb or displace grizzly bears any more than hiking (DEIS: 428). Yet, for cougars, erratic movements are more likely to provoke attacks (Mattson et al. 2011). Unfortunately, a Forest Service law enforcement officer was killed by a surprised bear when he was mountain biking with a friend near West Glacier National Park.[4] It would be beneficial to decision makers and the public alike if USFS or FWS could provide a rigorous analysis of grizzly bear attacks to determine if certain human behaviors exacerbate attacks as Mattson et al. (2011) have done for mountain lions before making drawing conclusions about the effect of mechanized transport on bear populations.

v. **Snowmobile Use in the Primary Conservation Area can harm grizzly bears - particularly breeding females.**

USFS identifies the "official" denning season in Flathead National Forest as spanning from December 1 to March 31, but documented emergence occurring between April 16 to May 29 (DEIS: 413). USFS then states that in 2015, with lower than average snowfall and earlier den emergence, male bears came out April 23 and females on April 28 in order to justify the Forest's recreational guidelines that permit snowmobiling in the primary conservation area (DEIS: 414).

Bears, if aroused, will abandon den sites (GBCS: 11). According to the FWS, in the NCDE, females with cubs generally emerge from early April to early May (GBCS: 11); motorized, winter recreation could potentially cause females to abandon cubs. While the FWS notes that snowmobiles have the potential to disturb grizzly bears in their dens after emergence, and that disturbance results in energetic costs to grizzly bears including increased activity; elevated heart rates and possibly den abandonment and even potentially cub mortality

[4] http://flatheadbeacon.com/2016/06/29/grizzly-bear-kills-person-near-west-glacier/

(GBCS: 23-4), the USFS in its DEIS dismisses this concern. It concludes: "there is no known or discernible impact from current levels of winter motorized creation evidence of the population of grizzly bears in the NCDE" (DEIS: 31). Yet, while claiming that snowmobiles won't harm grizzly bears, the USFS notes that winter recreation effects on den sites is not well studied, and snowmobiles causing bears to abandon dens is only "anecdotal"(DEIS: 412). Those positions are not only contradictory, allowing disturbance of a "threatened" species under the ESA is considered a "take." Because of the potential for one female to abandon one cub, or one bear to be disturbed from hibernation, the USFS must immediately cease allowing snowmobiles in the primary conservation area of the NCDE.

The USFS states that the Flathead has only limited snowmobile access to portions of the forest – areas outside of favored den sites within the primary conservation area at Canyon Creek, Challenge –Skyland, Lost Johnny and Six Mile. The USFS justifies this recreational activity despite suggestions by Haroldsen et al. (2002) and Mace and Waller (1997) that snowmobiles could harm females and particularly their cubs either before den entry or after emergence. The USFS states that this phenomenon has not been documented in a scientific study (DEIS: 413). Yet, this is just common sense; and take of an ESA-protected species is against the law.

C. Invasive species cause direct and indirect harms to grizzly bears that must be accounted for in recovery criteria.

i. Livestock.

While only limited grazing for cattle is permitted on the forest and is in decline, livestock are the class of species most likely to result in management removals - the cause of a majority of grizzly bear mortalities. (More than one-half of the Flathead National Forest's allotments have been closed and vacated, and cattle grazing is delayed until after July 1 to further reduce conflicts (DEIS: 426)).

Because of the conflicts caused by livestock including chickens, pigs, and apiaries, the FWS must account for this ongoing threat to NCDE grizzly bears as part of its recovery criteria.

While the USFS suggests that grizzly bears generally leave adult cattle alone, smaller animals such as calves, chickens, sheep and goats are their prey and predation events on these small animals continues to result in conflicts. Luckily, the USFS notes that a number of NGO's are working on reducing the conflicts to reduce GB mortality (DEIS: 415). But that is not enough – agencies that manage grizzly bears or their habitat must get involved.

Not only are grizzly bears killed because of invasive livestock, bears compete with livestock for their forage (GBCS: 25). For all of these reasons, the FWS must account for these ongoing threats to grizzly bears in its recovery criteria.

ii. Blister rust and pine beetles have devastated whitebark pine.

Whitebark pine lives in montane and subalpine forest areas in the West and is a keystone species (Hansen et al. 2016). It helps to increase cover, protect the snowpack, and prevent runoff, while supplying seeds to multiple wildlife species including grizzly bears (Hansen et al. 2016). This keystone tree species is experiencing "a steep decline because of the

combined effects of mountain pine beetle (*Dendroctonus ponderosae*) outbreaks, fire exclusion management policies, and the introduced disease white pine blister rust (causal agent *Cronartium ribicola*)" (Hansen et al. 2016: 2).

Prior to the loss of whitebark pine, grizzly bears living on the NCDE fed on whitebark pine seeds from late summer through the fall. Because of the loss of this food, more grizzly bears on the NCDE eat meat – both animals and hunters' gut piles (DEIS: 405). Males eat more than females, 32% and 21%, respectively—which exposes more bears to poaching and or "defense of life" kills. Bears' compensatory predation on wild ungulates has caused poachers to target bears because they believe that they are in competition for elk (Carter and Linnell 2016). Moreover, the loss of this key staple – whitebark pine – harms grizzly bear persistence by forcing them to switch to eating meat, exposing them to conflict with other predators (wolves and other bears) and humans (livestock growers, elk hunters, and people living and recreating in the grizzly bear habitat). This exposure has led to an increase in grizzly bear mortalities over the past two decades.

a. Whitebark Pine Conservation Strategy

The "vast majority of whitebark pine forests occur on public lands" so the federal government must ensure its survival – which the Flathead proposes to do under all its management plan alternatives. The goal is to replant rust-resistant seedlings from mature trees. The lack of seeds in sufficient quantities to support Clark's nutcracker has reduced natural potential for regeneration. The Flathead has replanted 840 acres, using approximately 168,000 seedlings of rust-resistant whitebark pin across the forest since the late 1990s. Nevertheless, a warming climate favors blister rust (DEIS: 231-2).

Fire-burned areas are the best havens for whitebark pine seedlings because fires create the best growing conditions with the least amount of competition from other vegetation. Thus thinning and fuel reduction in whitebark pine stands are important elements for restoration—particularly in areas where live, rust-resistant stands still live. These activities remove competing trees, improves tree vigor and resistance to stressors – especially for mature, cone-bearing trees that could survive fire. The Flathead has conducted thinning projects to benefit whitebark pin on about 100 acres.

The DEIS discusses the benefits and negative aspects of tree thinning to restore whitebark pine on Wilderness Areas (noting the decline of a keystone species because of unnatural conditions, but recognizing that this heavy type of habitat manipulation is not normally permitted on WAs (DEIS: 232-3).

iii. Mountain pine beetle harms multiple coniferous species.

The mountain pine beetle harms lodgepole pine, ponderosa pine, western white pine and whitebark pine (DEIS: 138). The "epidemic" levels of beetles, particularly found in lodgepole pines, is spreading to other trees (DEIS 138-9). Tens of thousands of acres of trees have been killed off by mountain pine beetle on the Flathead since 1979 (DEIS: 139). Because of the devastating effects from mountain pine beetles to forests, and particularly to whitebark pine, the FWS must account for this ongoing threat to grizzly bears as part of its recovery criteria.

iv. Tick-borne pathogens could harm grizzly bears.

A recent study in Europe observed that tick-borne pathogens may pose a novel risk to grizzly bears as carrier species migrate (Paillard et al. 2015). This 18-year study of Scandinavian brown bears (*Ursus arctos*) showed that ticks and tick-borne diseases are moving northward as a result of a warming climate (Paillard et al. 2015). This trend is likely already occurring with many parasites in the United States. Indeed, ticks readily feed on bears, including on black bears (*Ursus americanus*), a well-studied phenomenon in the U.S. (Paillard et al. 2015 citing Leydet and Liang (2013) and others). According to the U.S Center for Disease Control and Prevention, the Rocky Mountain region is now a common area for infected ticks.[5] Because tick-borne pathogens could harm grizzly bears, the FWS must account for this ongoing threat as part of its recovery criteria.

D. Climate change will profoundly harm grizzly bears' recovery.

The USFS notes that grizzly bears' habitat is changing in the face of global warming including a reduction in snow pack; shifts in denning times; a shift in the abundance and distribution of natural foods; and changes in fire regimes due to summer droughts (DEIS: 420). The warming climate in the NCDE will decrease snowmelt run off, lesson soil moisture, which will further decrease food availability and change plant community distributions. Plants will attempt to shift both higher and further north. With decreased snowpack, there will be decreased avalanche chutes, reducing food for grizzly bears during their springtime emergence. The denning season will shorten too because food will become available later in the fall and earlier in the spring (time in the den is influenced by food availability and weather). Increased time outside the den could result in greater human-bear conflicts, resulting in an increase management removals. At the same time, wildfires could pose future devastating problems as the Forest has not had fire for the last 100 years (DEIS: 74).

On the NCDE, grizzly bears dig dens on steep slopes at elevations usually above 6,400 feet where the wind and topography cause an accumulation of deep snow and where the snow is unlikely to melt during warm periods; they occupy the den for 4-6 months, beginning in October or November (GBCS: 11).

While fire can reduce canopy and make some berry crops more abundant, reduction of canopy can increase sun intensity, lower moisture contents and expose berry plants to more wind/sun and frost. Fire frequency is likely to increase in severity. Fires reduce hiding cover and delay regrowth of vegetation -- but one study found an increased production of forb foliage and root crops as a result of the Yellowstone fires of 1988 (Blanchard and Knight 1996) (GBCS: 31-32).

A recent study by Roberts et al. (2014) examined food shifts for grizzly bears in the Canadian Rocky Mountains and found that bears' foods are migrating to higher elevations. This exposes low-elevation grizzly bears to greater human-bear conflicts, and these alterations from climate change "may reduce [grizzly bear] survival rates" (Roberts et al. 2014).

[5] http://www.cdc.gov/niosh/topics/tick-borne/.

Bojarska and Silva (2012) conducted a seminal worldwide review of grizzly bear food selection relative to their geography (latitude, longitude, altitude) and a multitude of environmental variables such as snow depth and duration. They found that "temperature and snow conditions" constituted some of the "most important factors affecting the feeding ecology of the brown bear." (Bojarska and Selva 2012). Their conclusions demonstrate that FWS must treat climate change impacts on grizzly bears with the utmost gravity:

> . . . [I]t may be expected that climate change will greatly affect brown bear food habits through changes in food availability, hibernation patterns, nutritional and energetic demands, and foraging behaviour. Globally increasing temperatures are yielding shorter winters with less snow, especially in northern latitudes and higher elevation areas (Sagarin & Micheli 2001, Wilmers & Post 2006). Early snow melt substantially reduces the amount of late-winter and early-spring carrion, which is vital for bears after hibernation and until other food resources become available (Wilmers & Post 2006). Climate change may affect brown bear feeding habits also through changes in plant distribution and phenology. As a response to warmer temperatures, Rodríguez et al. (2007) documented a long-term decrease in the contribution of boreal and temperate food items in brown bear diet during the hyperphagic season, when brown bears typically consume high amounts of fruit to accumulate fat for winter dormancy and for successful reproduction. Changes in the timing and intensity of fruiting and ripening of fruit and mast, and declines in the availability of high-quality fruits . . . may have important consequences for brown bear population dynamics (Rodríguez et al. 2007). If key brown bear food resources disappear without the corresponding change in the timing of alternative food resources, a serious food bottleneck could develop.

Bojarska and Silva (2012: 133-4). The best available science is clear: climate change has and will continue to threaten NCDE grizzly bears by detrimentally altering their habitat. This will result in further loss of staple foods and an increase in human-bear and inter- and intra-specific conflict as bears attempt to adapt to new food sources. Further study of the effects of climate change on NCDE grizzly bears, particularly as it relates to the availability of food due to adverse effects on the quality of habitat, must be done and their results built into recovery criteria.

E. Degraded riparian areas and wetlands on the Flathead National Forest harm habitats and therefore, indirectly harm grizzly bears.

As a result of human manipulation over the past 100 years, including changing stream channels, timber cutting, road building, dams, changing fire regimes (DEIS: 50-1) and livestock grazing the water quality on the Flathead has been degraded harming fish and other aquatic species – and resulting in sand, silt, sedimentation and pollution (DEIS: 52). Pollutants on the NCDE include PCBs, mercury, nitrogen, phosphorus. Wetlands are key habitats that support grizzly bears. Because they are degraded in places on the Flathead National Forests and portions of the NCDE, the FWS must account for these ongoing threats to grizzly bears as part of its recovery criteria.

IV. States will not provide adequate protection if NCDE grizzlies are delisted; state management programs must be critically analyzed in any recovery criteria

FWS suggests that, if NCDE bears are delisted, hunting will be conducted using "the best available science" and part of "established public process" and "consistent with demographic standards in this Conservation Strategy" (GBCS: 40). But the history of predator management at the state level, and current state proposals regarding GYE grizzly bears, rebut this assumption. FWS must require a firm, legally binding commitment to the health and long-term sustainability of NCDE grizzlies at the state and local level as a precondition to declaring them recovered.

When the FWS delisted Rocky Mountain gray wolves, Idaho, Montana and Wyoming immediately commenced trophy hunts designed to slaughter wolf populations to the federally-mandated minimum. Wyoming designated over 80% of the state as a "predator zone", permitting unlimited wolf hunting using any manner conceivable, including running over wolves with snowmobiles. Idaho still permits hunters and trappers to slaughter up to 5 wolves per person per year in during overly-long seasons that harm wolf packs. Idaho even permits wolf hunting during the denning season. Montana permits long seasons and trapping with cruel leghold traps that frequently non-target species.

Given the precedent these set for gray wolf management - an emphasis on killing but not conservation - it is of little surprise that they have postured themselves similarly regarding GYE grizzly bears. The tri-states contend in their May 2016 "consensus" comment letter (and in recent media) that they have been *forced* by the FWS to reveal their hunting framework *before* grizzly-bear delisting can occur, while simultaneously and duplicitously posturing for the trophy hunt—as recorded in their own documents:

1) the Tri-State Memorandum of Agreement allocated bears for the purposes of "discretionary mortality available for regulated harvest" within the DMA as follows: Wyoming may authorize hunting for 58% of the quota, Montana 34% and Idaho 8%;
2) Wyoming's draft Grizzly Bear Management Plan states that a proposed season and hunting regulations will be left entirely to the discretion of its game commission pursuant to state statutes; and
3) Montana's Draft Season Structure Proposal for grizzly bears proposes seven game management units for GYE bears, with both spring and fall hunting seasons.

Equally alarming, in their comment letter, the tri-states contend that grizzly bears are not a "conservation-reliant species", who do not need to be managed into "perpetuity". The tri-states comments even chided the FWS for its suggestion in the Proposed Rule that the states stipulate lasting, conservation mandates instead of allowing states to manage grizzly bears using an unspecified and meaningless "adaptive management" framework (p. 3-4). The tri-states even complain that they should not have to consider genetic connectivity and exchange with other subpopulations; their comments even going as far to argument that the GYE population's genetic health is "very strong", despite its isolation from all other subpopulations.

Also of concern are the states' complaints about coming up with mandates to reduce

human-bear conflicts. 1) As part of its comments regarding Wyoming's elk reduction program, the states balk at the notion that hunters would be mandated to carry pepper spray – rather than carry on with the status quo which involves high numbers of grizzly bears killed because of "defense of life" reasons (p. 10) (or that the numbers of elk and bison have declined and have been supplanted by invasive species such as livestock (p. 14)); and 2) the states balked at the FWS's common-sense that mandatory food storage orders, that is, safely making bear attractants off-limits will fail to reduce human-bear conflicts, and subsequent bear mortalities (p. 15) – even as management removals of bears is the greatest source of grizzly bear mortality and even though there is an enormous literature on human-bear conflicts, particularly for black bears.

The GBCS notes that the Lacey Act will protect grizzly bears from trafficking and in the "absence of ESA protection, other State, Federal and Tribal laws remain that endeavor to protect grizzly bear or regulate[] the hunting of bears" (GBCS: 112). But the Lacey Act is limited in its scope, only covering inter-state movement of bears that are taken illegally, and in any case is dramatically under-enforced.

More importantly, the Lacey Act does nothing to protect grizzly bears from hostility permitted by state governments that do not share FWS' commitment to conservation. Rather than abdicating responsibility for management of this conservation-reliant species to state governments that have historically proven indifferent - if not outright hostile - to large predators, FWS should build requirements for meaningful, binding, and enforceable state- and local-level protections into its recovery criteria.

V. **Conclusion**.

The HSUS appreciates this opportunity to comment. For the reasons stated above, we respectfully urge FWS to consider the dire, ongoing threats to NCDE grizzly bears as it develops habitat-specific recovery criteria. Doing so is the only way to ensure that, as required by law, any determination as to the recovery of the population is made in accordance with the best available science and in order to ensure the long-term viability of the population.

Sincerely,

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10-2-18

Please do the right thing for our children & grandchildren. We need a plan that protects & links all 5 of the grizzly bear populations in the Northern Rockies Region.

Carol Daniels
308 22ND AVE. W.
Polson, MT. 59860

(a grandma who cares about wildlife & grandkids.)

SIERRA CLUB

USA 32

30 USA

OCT 05 2018

FISH, WILDLIFE & PARKS
WILDLIFE DIVISION

Grizzly Bear ARM –
Wildlife Div., Dept.
Fish, Wildlife & Parks
P.O. BOX 200701
Helena, MT 59620-0701

October 22, 2018

RECEIVED
OCT 25 2018
FISH, WILDLIFE & PARKS
WILDLIFE DIVISION

Grizzly Bear ARM
Wildlife Division, Fish, Wildlife and Parks
P O Box 200701
Helena, MT 59620-0701

NCDE CONSTRAT July3, 2018

Connectivity with North Cascades OMITTED

"…may serve as a source population to other grizzly bear ecosystems in the lower-48…"

"There is no need for habitat protections specifically developed for grizzly bears on Federal and State lands in Zone 3"

The proposed Coordinating Committee to keep the States adhering to the statutes of the ESA is the epitome of feckless Management Review bureaucracy.

NCDE CONSTRAT Oct15, 2018

"MFWP is developing an Administrative Rule for its…grizzly bear population management objectives…" **Attempt to bypass ESA statutes and practice?**

ONLY "Designated roads in timber sale areas will be closed…" **Who designates which roads stay open?**

Adherence to Connectivity and Genetic Diversity statutes with other Recovery Ecosystems

North Cascades, WA is isolated from and a low probability for natural connectivity processes to infuse an endangered ecosystem with genetically diverse domestic individuals.

Even Ryan Zinke, Secretary of the Interior, has supported establishing a viable population in the North Cascades Ecosystem; yet the budget for such action was blacklisted zero$ in Dec2017.

*Why should the 1991 NCE Recovery Plan be restricted to only **alien** Canadian bears? The minimum viable population is estimated at 200 grizzlies. Candidates should be **trans-located** from "alleged" (how else do you describe available?) surplus individuals from the GYE and NCDE targeted for extermination by the private sector hunting seasons. There is no common sense, earthly reason to import bears from Canada.*

The Administrative Rule Montana, should express translocations, to ALL Grizzly Bear Ecosystems, as the primary action superseding any kind of hunt in Zones 1 & 2 & 3. Zone 1 provides a buffer for the Primary Conservation Area to enclose the Demographic Monitoring Area currently the recovery benchmark. There are no "linkage zones' to other Ecosystems in Zone 3. Only Zone 2 has travel corridors linking the GYE population with the NCDE population which MFWP abstained to codify; as in its "no-action" alternative with Idaho & Wyoming.

Sincerely,

Steve Reed, 1257 S Gilbert St, Castle Rock, CO 80104-2327

From: Daniel H. Gallancy
To: FWP GRIZZLY BEAR ARM,
Subject: Delisting the grizzly bears of the Northern Continental Divide Ecosystem
Date: Friday, October 26, 2018 8:30:20 AM

Dear Sir or Madam:

I am deeply concerned about upcoming plans to delist the grizzly bears of the Northern Continental Divide Ecosystem. Please consider the following important points:

1. 800 bears in the NCDE is not enough bears needed for a single, connected population between NCDE, Yellowstone, Cabinet-Yaak, Selkirks and Selway-Bitterroot ecosystems;
2. Grizzly bears occupy less than 2% of their former range and numbers. This is not remotely sufficient for "recovery";
3. A divide-and-conquer strategy is precisely the opposite of what is needed in order to preserve the grizzly bear populations of the lower 48 states. Instead, we need a connect-and-recover strategy, promoting a contiguous area within which grizzly bears can continue to recover;
4. Any hunt would kill bears that are necessary for connectivity between the populations. We must have a permanent and complete ban on the trophy hunting of grizzly bears in Montana.

Thank you for your attention in this matter.

Regards,
Daniel H. Gallancy

From: Edwin Fields
To: FWP GRIZZLY BEAR ARM,
Subject: Grizzlies
Date: Monday, October 08, 2018 11:02:04 AM

First I applaud FWP for not having a trophy hunt at the current time. My name is Edwin Fields and I am President of Headwaters Montana. These comments do not represent the organization and are my own only. I believe that life begets more life. From the microscopic to the largest of all creatures the web of life is intertwined. It is our obligation to promote the health of this web. Obviously we have not done a great job of this through time. We are fortunate that in Montana we have so much wildlife and wild lands. We have the capability to rewild and replenish species that would otherwise be gone. And wouldn't that be sad if they were gone. I have been involved in promoting wildlife and wild lands for what seems like the better part of my life. The last 30 years I've commented on things , organized and met in rooms with a lot of hostile people and you know I'm still surprised by all the resistance that I run into. Because of my beliefs, I think that any arbitrary limit to the growth of species is short sided. Specifically a 1000 Grizzly Bears Is a significant number for the Glacier ecosystem but the isolation of that population from the Yellowstone could eventually lead to genetic issues. Population need connectivity as well as other populations to be established in Montana and Idaho. If the caldera in Yellowstone turns into a super volcano what happens to the gains there. The idea is not to just create isolated zoos but to rebuild the web. Thank for taking my comment,
Edwin Fields, 511 Lakewood Ct., Whitefish, MT 59937

From:	Carolyn Knoll
To:	FWP GRIZZLY BEAR ARM,
Subject:	Grizzly Bear Recovery
Date:	Thursday, September 27, 2018 1:52:33 PM

To Whom It May Concern:

What happened to the previous plan that supported linkage zones. . .Here is a quote from a letter signed by Montana Fish, Wildlife & Parks among other organizations. . .

“To address the issue of habitat fragmentation, the IGBC supports the identification of those areas within and between the major grizzly bear ecosystems where wildlife can live or move between existing large blocks of relatively secure habitat. These areas are called linkage zones. Wildlife habitat conservation and the eventual recovery of listed species such as grizzly bears will require connections between populations.”

The US Fish & Wildlife Service finalized a recovery plan for the Bitterroot ecosystem based on natural immigration based upon linkages.

Why has this plan been abandoned?

We need a plan that protects and links all five of the grizzly bear populations in the Northern Rockies region.

Thank you for your consideration. . .

Carolyn Knoll
Orinda, CA

"Human salvation lies in the hands of the creatively maladjusted." - Martin Luther King, Jr.

From: Sara S
To: FWP GRIZZLY BEAR ARM,
Subject: Grizzly Bears Public Comments
Date: Friday, October 26, 2018 7:18:52 AM

Hello,

I would like to voice my concerns on handling the grizzly bear ecosystem under your jurisdiction.

800 bears in the Northern Continential Divide Ecosystem is not enough bears needed for a single, connected, healthy population between NCDE, Yellowstone, Cabinet-Yaak, Selkirks and Selway-Bitterroot ecosystems. It is simply too few bears to sustain a healthy population that does not fall to inbreeding and recessive traits.

It is against public policy, as the majority of Americans support a healthy habitat and protection for grizzlies, to "divide and conquer" rather than "connect and recover" the grizzly bear populations of the lower 48 states. It is much easier to separate these animals than working on ways to keep them together. I encourage the USFWS to exclude power hungry, money hungry big cattle ranchers that almost always want all of wildlife destroyed for cattle grazing land from these discussions since their suggestion is always the same: Make way for beef. That is a poor, short-sighted suggestion and I know plenty of children with asthma and plenty of towns with fecal matter in the water that would like to thank them personally for their methane emissions and massive excrement output.

Grizzly bears occupy LESS THAN TWO PERCENT of their former range and numbers. That statistic does not fall in the category of "recovery".

Any hunt paid for by wealthy trophy hunters would kill bears that are necessary for a diverse gene pool and connectivity between the populations.

Please take these comments into consideration.

Thank you,

Sara

From: Debra Wilson
To: FWP GRIZZLY BEAR ARM,
Subject: Grizzly Bears
Date: Tuesday, October 09, 2018 8:15:00 AM

Dear Montana Fish, Wildlife and Parks,

No shortcuts. We need a plan that protects and links all five of the grizzly bear populations in the Northern Rockies region.

It is imperative that we, as a nation, to what it takes to ensure the healthy survival of all species.

Defend the Wild,

Debra A. Wilson
6093 Drum Point Road
Deale, Maryland
20751-0440

From: Alan Gratch
To: FWP GRIZZLY BEAR ARM,
Subject: Grizzly population
Date: Friday, September 21, 2018 11:08:24 AM

We want far more than 800 grizzly bears in the Northern Continental Divide Ecosystem so it can reconnect with Yellowstone and other isolated ecosystems! Please, do not be shortsighted. Grizzly bears are currently confined to about 2% of their former range and numbers. MDFWP should be ashamed to try and write into Montana law that this constitutes bear "recovery."

Alan and Sallie Gratch, residents of Logan Creek, Star Meadow, Tally Lake Ranger District

From:	Sandra Zelasko
To:	FWP GRIZZLY BEAR ARM,
Subject:	NO SHORTCUTS!
Date:	Tuesday, October 09, 2018 8:53:26 PM

It's time for USFWS and FWPs to face the music. There are no shortcuts. We need a plan that protects and links all five of the grizzly bear populations in the Northern Rockies region.

Sandy Zelasko
Valley Center, CA 92082

From:	F.hoppener@gmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Friday, October 26, 2018 9:59:39 AM

Could you explain to me what sense it makes to delist grizzly's when it is obvious to see that reconnection with Yellowstone is necessary for survival of the species? I can't believe anyone in his right mind can come up with such policy

---

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	ljwilloughby@harewaves.net
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Friday, October 26, 2018 8:55:21 AM

We need far more than 800 grizzly bears in the Northern Continental Divide Ecosystem. The greater Yellowstone area is an isolated pocket and this ecosystem beeds to thrive and provide the corridor of protection all the way up to the Yukon. We NEED far more than 800 grizzly bears for bear DNA diversity

---

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	andyhudak@montanasky.net
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Saturday, September 22, 2018 5:58:47 PM

Leave the bears alone, so they can recover and unite the sub eco-systems from Glacier to the Yellowstone populations of grizzlies.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	matthewlamberts@outlook.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Monday, September 17, 2018 12:32:39 PM

I want to see a chain of ecosystems linking the NCDE and the Yellowstone ecosystems, so grizzlies can viably, realistically mix genes between these.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	jwcb309@yahoo.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Saturday, August 25, 2018 1:55:06 PM

Allow the grizzly bears to expand across I-15 and into the Missouri Breaks and CM Russell Wildlife Refuge. Stop trying to manage these bears as an 'island population' as you do around Yellowstone National Park. Allow them to expand their range. Their original historic range has been decreased by 98%.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	kyran@americanprairie.org
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Friday, October 26, 2018 3:46:48 PM

Comments on 2018 NCDE Grizzly Bear Conservation Strategy

Overall the plan appears progressive and robust to ensure bear conservation in the NCDE.

I think further assessment though is needed on the following.

A strong argument can be made that at least the southern portion of Zone 3 is potential connectivity habitat between the GYE and NCDE. The Little Belts, Crazies, and Castles provide relatively secure and large habitat and possible stepping stones. These ranges are larger than the ranges in the southern end of zone 2.

I could find only 2 citations in literature cited on connectivity between NCDE and GYE. I think more review of that is needed to address the above.

Bears appear to be recolonizing some of zone 3 faster than zones 1 or 2 and the value of that zone for adding resiliency to the NCDE should be considered further.

More literature and review and discussion is also needed on conflict prevention tools including range riders and guard dogs.

Thank you for this opportunity to comment.

Kyran Kunkel Phd, Wildlife Biologist, Affiliate Professor, University of Montana

---

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From: Levi Jensen
To: FWP GRIZZLY BEAR ARM,
Subject: Re: Conservation Strategy for the Grizzly Bear in the NCDE Comments
Date: Friday, October 26, 2018 3:19:12 PM

Here is an example of how important information these crossings are and how data can be collected.
https://amp.livescience.com/43463-photo-black-bears-grizzlies-crossing-the-highway.html

On Fri, Oct 26, 2018 at 2:54 PM Levi Jensen <ljjensen@gmail.com> wrote:

> Thank you for taking comments on this plan!
>
> The plan should lay out a framework to collaborate with the transportation agencies (DOT and local) to develop effective standards for grizzly crossings on the transportation network (railroads, interstates, highways, etc.). A response to comments at the end sort of addresses the issue, but more effort should be given to studying and applying grizzly bear specific measures that improve not only the safety of bears crossing these features, but also their propensity to use them.
>
> This plan should provide framework to study grizzly bear movement in zone 2. This would help the agencies monitor the goals and effectiveness of the plan for this management area to determine how bears are currently moving between the population segments and how that movement changes over time.
>
> USFS should consider grizzly habitat when reviewing permitted recreational uses/leases (such as as heli-skiing). It may not be appropriate to permit these activities at all, or apply seasonal restrictions, when bears are coming out of hibernation and are sensitive to stress.
>
> Thanks!
> Levi Jensen
> Gillette WY

FERGUSON
LAW OFFICE PLLC

Phone: 406.532.2664 Fax: 406.532.2663
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Mail: PO Box 8359, Missoula, MT 59807

fergusonlawmt.com

October 26, 2018

Wildlife Division, Department of Fish, Wildlife & Parks
P.O. Box 200701
Helena, Montana 59620-0701 3

Re: Save the Yellowstone Grizzly, Inc. Comment on Proposed Administrative Rule Adopting Chapter 2 of Conservation Strategy for the Norther Continental Dived Ecosystem Population

To Whom It May Concern:

Save the Yellowstone Grizzly, Inc. (STYG) is a Montana Nonprofit Corporation dedicated to stopping the delisting and ensuing trophy hunt of grizzly bears. STYG strives to maintain Northern Continental Divide Ecosystem (NCDE) bears to ESA protections, ensure connectivity with the Greater Yellowstone, Selkirk, Cabinet, and Yaak Valley grizzlies for long-term genetic sustainability. STYG promotes the long-term genetic sustainability by protecting the safety and welfare of all grizzlies south of Canada. Members of STYG include predominant scientists in the field as well as notable naturalists, environmentalist and authors on the subject of grizzly bears and grizzly bear habitat.

STYG appreciates the opportunity to comment on the proposed grizzly bear Administrative Rule Making (ARM) adopting Chapter 2 of the Conservation Strategy for the Northern Continental Divide Ecosystem (NCDE) population of grizzly bears. However, Montana's decision to only accept comment on the single chapter of the conservation strategy in which only the isolated population of NCDE grizzlies are addressed is highly imprudent to the aims of public involvement and contravenes underlying policies of the Endangered Species Act. Because the revised Draft Conservation Strategy has not undergone a full notice and public comment period since 2013, STYG urges Montana to reopen this process for the entirety of the Conservation Strategy.

By its plain language the Rule incorporates the revised Conservation Strategy in stating "Upon delisting from the Endangered Species Act, management of the grizzly bear and its habitat in the Northern Continental Divide Ecosystem (NCDE) will be guided by the Conservation Strategy ..." However, no opportunity to comment on the other portions of the Conservation Strategy was provided. This is legally incorrect. Data and circumstances have changed significantly since the Conservation Strategy's introduction. In particular, the science of climate change and its radical effects on the flora and fauna of the NCDE continues to emerge. The Conservation Strategy must meaningfully address this growing and ever-evolving threat.

Moreover, the current proposed Rule negates the established goal of achieving connectivity by relying on a minimum numerical population metric. In no way does the established population target of 800 bears address how the stated goal of achieving connectivity among bears populations will be fulfilled. Similarly, the goal of spatial distribution of the bear population among 21 out of 23 bear management units within the Primary Conservation Area does not ensure migratory connectivity of bears from the PCA, through Zone 1 and into the Bitterroot, Yaak or Yellowstone Ecosystems. If recovery of all five Distinct Population Segments is truly a goal, then Montana's conservation strategy and applicable ARMs must take affirmative steps to promote connectivity from the established population strongholds, to the non-existent or waning populations. Monitoring alone does not facilitate or even encourage this established goal.

The critical importance of this issue to the ultimate successful delisting of Grizzly bears was most recently highlighted by Judge Christensen's order vacating the Yellowstone Delisting Rule. If Montana wants to ever successfully delist its grizzly bear population, both in Yellowstone and the NCDE, it must take seriously its legal obligations to affirmatively promote and effectuate genetic variability through connectivity of the Distinct Population Segments. This includes taking concrete measures to reestablish a viable population of grizzly bears in the Bitterroot and Cabinet-Yaak DPSs. The proposed rule at issue here is legally deficient because it fails to meet this necessary recovery requirement.

Respectfully submitted this 26th day of October, 2018

FERGUSON LAW OFFICE, PLLC

Attorneys for Save the Yellowstone Grizzly, Inc.

I am an ecologist with expertise in grizzly bear population dynamics and minimum viable population size. I appreciate this chance to submit comments on Chapter 2 and I wish to address the nature of any "recovered" grizzly bear population in the contiguous 48 states.

It is long overdue for Montana Fish Wildlife and Parks to recognize the well-documented, scientific reality that any truly recovered grizzly bear population will include thousands of individuals. In the Northern Rockies, such a population is possible only within a network of subpopulations and connecting zones through which significant genetic exchange occurs.

Research by MTFWP* finds no evidence for genetic exchange between the Yellowstone Ecosystem grizzly bears and those in other subpopulations. It also implies that occupancy of linkage corridors by reproductive females bears will be required for genetic exchange to occur.

Montana has special responsibilities for grizzly bear recovery in the contiguous 48 states. That recovery will require that the Yellowstone and Northern Continental Divide Ecosystem subpopulations are effectively linked and those linkages lie largely within Montana.

In view of this responsibility and given the best available science, it is clear that MTFWP must:

1. Abandon the pretense that 800 or 1000 grizzly bears can ever be considered "recovered" or even healthy.
2. Recognize that grizzly bears in potential corridors between the Yellowstone and other ecosystems are essential to a recovered population and therefore:
    - Do everything possible to give those corridors the highest level of security for bears and
    - Commit to not hunting grizzlies until their subpopulations and corridors are occupied, secure and producing surpluses.

*C. Costello IGBC presentation 12 De., 2017.

From: National Parks Conservation Association on behalf of _____
To: FWP GRIZZLY BEAR ARM,
Subject: Comment on proposed grizzly bear population administrative rule
Date: Wednesday, October 24, 2018 12:28:27 AM

Oct 24, 2018

Director Martha Williams
1420 East Sixth Avenue, P.O. Box 200701
Helena, MT 59620

Dear Director Williams,

The state of Montana has an opportunity right now to build the foundation for connected and protected grizzly bears in Glacier National Park and across the northern Rockies.

Grizzlies, like many other species, need to be able to safely move beyond park borders to reach important resources and connect with other bear populations such as the Yellowstone population.

Along with thousands of other park lovers, I'm asking MT FWP to commit to creating the safe pathways that Glacier grizzly bears need through education, outreach to private land owners, and partnerships across landscapes. This state process should not simply reflect where bears live today. It should be a vision for where we want bears tomorrow, how we can connect genetically isolated populations, and how we'll live with them for generations to come.

In addition, FWP also must put in place durable management plans that allow grizzlies to disburse to new areas and thrive in their current home ranges.

Thank you for considering my comment.

Sincerely,

[Each letter contained the name and contact information for the person who submitted letter.]

From: _____
To: FWP GRIZZLY BEAR ARM,
Subject: Grizzly Bear ARM
Date: Friday, October 26, 2018 9:22:20 AM

Commissioners and Director Williams,

Dear Commissioners and Director Williams,

Thank you for your work to promote grizzly bear recovery and to reduce conflict in the NCDE. Thanks to efforts by the Department, conservation groups and the Endangered Species Act, these grizzly bears have made a strong comeback, but I want to see grizzly bears continue to thrive if and when federal protections are removed.

The Department should manage for a robust, growing population of at least 1,000 grizzly bears, able to roam and connect with other populations, including in all areas of suitable habitat. FWP should ensure that NCDE grizzlies are able to connect to Yellowstone, the Cabinet-Yaak and the Bitterroots. One way to do that is for the Department to craft a statewide grizzly bear management plan.

Additionally, I urge the Department to work with other state and federal land management agencies to secure strong habitat protections throughout the ecosystem.

Finally, when seeking to reduce conflict, management should focus on non-lethal methods --lethal removal of a grizzly bear should only occur as a last resort or when human life is in danger.

As a small business owner in rural Montana, I have witnessed the economic value these great beauties possess, alive and protected. My business and many other depend on a healthy population of wild grizzlies, connecting them geographically will ensure a strong future for a successful Montanan.

Thank you for the opportunity to comment.

[Each letter contained the name and contact information for the person who submitted the letter.]

From:	lancolsn@gmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Friday, August 24, 2018 1:10:42 PM

It would be arbitrary and capricious to assume that any specified number of grizzly bears could be maintained without habitat sufficient to support that number of bears. And, importantly to all wildlife in Montana, and possible especially so for grizzlies, habitat is expose to change of more kind than one.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	pbaxter289@aol.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Sunday, September 16, 2018 9:48:48 AM

Population objectives that are required to be established should reflect the best estimate of normally, unencumbered numbers expected to exist in the area. Management should be geared toward maintaining and improving their habitat and public education for coexistence, not culling.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

28 Aug 18

Karen;

I have lived in Montana since 1977. I am a consumptive user of our renewable natural resources. I hunt, fish and trap.

The Grizzly bear population has been rising ever since their being listed. The human population of Montana has been rising steady also. Alot of these humans desire to live in the country.

Bears and people simply cannot coexist. This is a "fantasy" idea from animal rights activists.

The wild Grizzly bears in Montana are not some anthropromorphic "Smokey the bear". They predate livestock; depending on the individual bear itself; some are aggressive toward humans.

We are going to have to either reduce the bear populations or reduce the human populations to reduce conflicts. The ignorant idea of relocation

6 miles or less on trapped problem bears is NO sense at all. Something is going to have to give. Martha Williams wrote an article in Mt. Outdoors a few months back that had an animal rights slant to it. It sounded like humans should learn to get along with bears period. Be more tolerant ETC. No solution whatsoever. As the bear population rises so will the conflicts and the problems rear their ugly heads.

Reduce the bear numbers some-how focussing on the problem repeat offenders that's the only solution that makes any common sense. Thanks for taking time to read my opinion.

Sincerely;

Dennis J Schultz

406-7773929

Larry L Maurer
2390 26th Ln NE
Brady, MT 59416

Sept. 27, 2018

Grizzly Bear ARM
Wildlife Div.- Dept of Fish Wildlife & Parks
P.O. BOX 200701
Helena, MT. 59620-0701

We have far too many grizzly bears in Montana. The first step is to delist them. Then a hunting season of more than just a few years would be good. Litigation needs to be stopped.

Grizzly bears are legally endangered, however if they were really endangered you would rarely see them. That is not the case. They are commonly seen along the front.

They are no longer afraid of people.

people get mauled every now and then by the grizzly bears. (Someday a big shot (person) could get killed by one of them.

Thank you

Sincerely,
Larry L Maurer

RECEIVED
OCT 01 2018
FISH, WILDLIFE & PARKS
WILDLIFE DIVISION

Sept. 19, 2018
Montana Dept. of Fish Wildlife & Parks
514 S. Front Street
Conrad, Mt. 59425

Re: Comments on Grizzly Bears

To Whom it May Concern:

The Fish & Wildlife Commission proposed administration rule setting & administrative rules setting the population mortality objectives for NCDF grizzly bears.

First of all, "what is the NCDF? "

Secondly, were there any ranchers, farmers, otherwords those that are directly involved & dealing with the grizzlies on the board, if not, why not?

Thirdly, are there any proposals for future hunting the grizzlies with a limit, of course, to help control the excess of them, sort of like the wolves? Sure would bring good money to the State funds.

Lastly, there needs to be consideration for those involved when it comes to safety of family members & loss of livelihood to the point that they need to have the RIGHT to protect their own property with common sense, of course, however they deem necessary at the time.

PLEASE take into consideration that people are more important than bears anyday! You cannot replace loved ones, there will always be more grizzly bears & hopefully, one can survive at their chosen way to make a living vs. over population of grizzlies.

Kind Regards;
Mrs. Dorothy A. Skelton
Mrs. Dorothy A Skelton, pres.
AMS RANCH, INC.,
4 Bismarck Ct.
Conrad, Mt. 59425-2717

From: Jim Bennett
To: FWP GRIZZLY BEAR ARM,
Subject: Grizzly Bears
Date: Friday, August 24, 2018 3:00:26 PM

Do not allow more bears in areas that there not welcome! Ranches, farm lands, hunting areas! Grizzly bears will adapt to new areas on their own! Reduce property taxes on property owners who deal with these bears! How many more people have to be killed to introduce this animal?

Sincerely,

Jim Bennett
CRS, REALTOR, Designated Broker, Co-Owner

360.870.6767 mobile
360.528.3434 office
360.754.6640 fax
JimBennett@remax.net
www.OlyHomes.com

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From:	tuma@northerntel.net
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Friday, October 26, 2018 7:57:39 PM

The Grizzly Bear recovery is well beyond what M,F,W&P where shooting for.Now we are in an very dangerous overpopulation,where its not "If but when some family will suffer a bear attack as they go about the business of ranching and farming on the prairies. This is unacceptable. We must have a truthful count of the bears that have moved out to the prairie.We must have a hunt.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From: powersdoug53@yahoo.com
To: FWP GRIZZLY BEAR ARM,
Subject: Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date: Friday, October 26, 2018 5:02:50 PM

You have overpopulated the area with bears, when we see pictures of 5 or 7 together at a time you have reached saturation. I'm concerned that you FWP are not pushing hard enough to get a hunting season. I believe you have underestimated bear population, you are having more bear problems every year, because you are managing people not bears. When FWP knows there are bears in the area and don't inform the local public I believe you are not helping to mange the bears or the public. I know that the FWP have chased bears out of trees at farmsteads within half a mile of Valier, the same FWP that pulled a trap into the same trees minutes before. When asked why they chased the bear out with cracker guns they said because they didn't know where to take a bear if they trapped it, I would say that is clue #1 that you have to many bears. and that was over 3 years ago.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	donnaridgway1@hotmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Friday, October 26, 2018 4:09:10 PM

You have way to many bears living in this area.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	swansonsuenclay@gmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Wednesday, October 24, 2018 4:33:45 PM

I live on Big Sky ,Mt .I drive 250 miles away from here to get away from the grizzly when I am hunting elk or deer! Too many hunters have been mauled in Montana and Wyoming in the high density grizzly populated areas. Reduce the population somehow.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	Grader4@hotmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Tuesday, October 23, 2018 9:39:25 PM

There are far to many bears that cause them to spread further on private land far from the original recovery plan. There is no management to it anymore. The cost is astronomical for just the problem ones. They have caused people to stop enjoying and recreating in the outdoors for fear of someone, especially children, being hurt. With millions of acres of public land for them to roam, it isnt necessary to allow them in yards, towns, near schools etc. They can and should be delisted and under control. Peoples lives and livelihood is at stake, whether it be fruit trees, gardens, fields, livestock, fences, granaries, anything they tear up and kill. This problem needs to get back IN CONTROL. Thank you

---

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	cldowns35@gmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Sunday, September 30, 2018 10:20:39 AM

Please consider managing for fewer bears in northwest Montana than the 1,000 that is currently proposed. The current population is too high from a social perspective. There are more bears getting hit on the roads, killed by hunters in self-defense, or killed by FWP for depredation reasons because the population is increasing and pushing out into areas that are no longer good bear habitat because people or human infrastructure is there. That's a fact and it's not changing in the bears' favor. These incidents are not some "new threat" to the grizzly bear populations across the West. It's an obvious sign they are doing well and are fully recovered. There should be some places in western Montana people can hike off-trail into the woods for hunting or any other reason without having to worry about a serious conflict with a grizzly. It used to be if you didn't hunt around Yellowstone, Glacier or in the Bob, you had a pretty low chance of encountering grizzly bears. That's no longer the case. Conflicts will continue to increase with the currently proposed population objective because the current population density is high in some core areas resulting in bears looking for new territories and habitat in other un-occupied areas bringing more conflict. Geneticists will always tell you we should have more of any species to prevent genetic bottlenecks. I'm sure that's true from a theoretical perspective, but begs the practical question as to how come grizzly bears and wolves have done so well coming back from really low numbers (note genetics were not a huge concern with the re-establishment of Yellowstone wolves) without any practical or observable adverse impacts from theoretical genetic bottlenecks. Another example is the Swan Lake lake trout population where genetic evidence suggests two or three individuals started the population which is booming and appears quite healthy. The world is full of examples of smaller isolated populations that have been around for generations and generations. The current population of bears in northwest Montana is anything but a small, isolated population. Managing for a population of 500 bears (50/500 rule) would likely work just fine from a population persistence perspective (we were there not too long ago) and would slow the expansion of bears and conflicts with people. Thank you.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	Rmtslone@gmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Thursday, September 20, 2018 10:07:20 AM

Trap transfer the abundance of grizzly to California, Utah, Colorado, Oregon.

There are plenty of bears.

Hunt them, or transfer the Bears.

All states above had grizzley bears historically.

Manage them, other states and federal fish and wildlife need to restock other ecosystems.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	jeberle52@hotmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Monday, August 27, 2018 8:17:14 PM

The plan effectively calls for at least 1,000 bears and current estimates stand at 1,000. It seems the bears are over crowded at 1,000 as more move onto the prairie. Seems clear the population goal is high.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From: orion6959@hotmail.com
To: FWP GRIZZLY BEAR ARM,
Subject: Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date: Saturday, August 25, 2018 6:59:08 PM

Dear Commission:

I am strongly opposed to this proposal because the impact grizzlies will have on the moose and elk populations. It is okay to have some grizzlies, but there are already too many predators in region one to justify having a 1000 Grizzly bears. I think the state should take control and manage the grizzly population through hunting, but the bear population has to be reduced if anything because of impacts on the other wildlife. I do not understand the big push for more predators around the state because it is only harming the moose and elk numbers. This is a simple economics problem because too many moose and elk are being taking by predators and humans, which means those populations are suffering because they cannot produce enough off-spring to continue with the rate of consumption. Grizzlies are fine, but we cannot justify this many because of the negative impacts that will only get worse for moose and elk. At some point this commission has to think about more than simply grizzlies because this proposal ignores the moose and elk, which impacts a lot of wildlife advocates. I sincerely hope this commission does not proceed forward with a goal of nearly a 1000 grizzlies in region one.

Thank you for you consideration,
Orion Hutchin

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From: mischenkodon@yahoo.com
To: FWP GRIZZLY BEAR ARM,
Subject: Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date: Saturday, August 25, 2018 1:06:39 PM

I've lived and raised my children here in the northwestern corner of troy Montana sense 1997. And have seen an increase of grizzly bear sittings my self in the last 8 years. I have always been aware of bears but I have become even much more so these days then ever before! So yes their is a great need for grizzly bear management here! I'm seeing at least 3 grizzly's a year now adults and cubs. What I would not like to see is more road closers!! The grizzly's that I'm incountering are not on the roads but out in the forest's! Why'll big game hunting stream fishing and trail hiking. I have faith that a good plan will be past for all of us outdoor people and are future outdoorsman and children to injoy.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	duey818@gmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Saturday, August 25, 2018 9:02:42 AM

There are too many of them. Let fwp control the population as they do with any other wildlife that becomes a problem.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	cthatranch77@hotmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Saturday, August 25, 2018 8:35:50 AM

How many grizzly bears do we need to satisfy all the environmental and animal rights extremists ? When will human safety and private property rights be given equal or greater importance than furry creatures with sex appeal? Grizzly populations and their habitat should end at wilderness boundaries! We are not living in the 1800's and livestock owners and the public should not be forced to live in dangerous situations to satisfy the whims of govt. bureaucrats or extremists with nothing but emotionally based arguments .

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	suebandsam@hotmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Friday, October 26, 2018 9:40:34 PM

The grizz population is far to high. I believe they need to be delisted and a hunting season opened for a few bears a year, so they will get some fear of humans once again. I farm north of Great Falls and have had 3 or 4 separate bears on our property this summer.
Thanks for your time, Brent MacDonald

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

Grizzly Demographic Objectives in the NCDE ARM 12-505
Written Comment

Name: Paul Olbert
Address: 164 Handkerchief Cr. Dr.
E-mail: olbert@montanasky.US

After Attending the meeting in Kalispell, Mt. on 9/27/2018, and listening to the presentation and comments, I have a few thoughts.

I live against the swanfont on Eastside of Lake Blaine I've lived here @ this location for 25 years. We used to see a few bears in the spring, never in the summer, and are in a great while the fall. It's now necessary to give my younger 2 boys a ride to the bus stop in the spring and fall. My youngest son, who is 13 ran into a Sow Grizzly with 2 cubs on the way to the bus stop on the morning of 9/25/2018. That afternoon while weed whacking that Afternoon another blackbear walked by me @ about 20 yards. I'm a trophy mountain mule deer hunter. Over the years, many of favorite spots from the Flathead to the Canadian Border. I have a friend who was mauled in Moran Creek of the North Fork. I've been charged by a Sow with Cubs on the face of Mt. Marston above Murphy Lake. I can't hunt above my house, Blaine Peak, Doris Peak etc without running into Grizzly bears. Not just sign but seeing bears.

Its my opinion that the Grizzly population is underestimated by my own experiences including experiences well west of US Hwy 93. I'm fed up with these environmental/wildlife groups dictating wildlife and fish policy. We don't need to slaughter all Grizzlies in the Northern Rockies or the Yellowstone ecosystem but we do need to hunt a few of them. I Guarantee I can kill one without any vehicle from my house this hunting season if it were legal. We need to hunt some of these Bears!

All comments must be received by 10/26/18 at 11:59 pm, and can be sent to:
Grizzly Bear ARM Comments – Wildlife Division,
PO Box 200701, Helena, MT 59620-0701
or emailed to FWPGRIZZLYBEARARM@mt.gov
Thank you for your comment.

From: jim jezorski
To: FWP Wildlife
Subject: ** Email from fwp.mt.gov **
Date: Tuesday, September 11, 2018 7:50:48 AM

Name: jim jezorski
Phone Number: 607 857 5495
Email: jimjezorski2000@yahoo.com

I am commenting on the grizzley bear issue at hand in the state of Montana. As I understand the state wishes to keep a population of 1000 bears. I feel that once a population of 1100 has been reached, a workable hunting season should be introduced. Possibly, a once in a lifetime harvest per hunter. These great bears are a welcome addition to the wildlife of the state. But, as their population increases, so does the chance for dangerous encounters, especially in populated areas. I feel a hunting season is needed to keep the bears wary and afraid of human contact. Thank you!

From: Kenneth stack
To: FWP Wildlife
Subject: ** Email from fwp.mt.gov **
Date: Wednesday, September 26, 2018 5:50:09 AM

Name: Kenneth stack
Phone Number: 4064598675
Email: stack2941@gmail.com

This is a comment on grizzly bears. The numbers have increased during the endangered listing. Being said they still need to be managed. More and more human interactions at test to the increase. Hunting is the best way to manage. How many tags would actually be filled. I am a lifelong Native (born and raised here) and believe that FWP will manage this as they have in past.

From:	Lloyd R. Brown
To:	FWP GRIZZLY BEAR ARM,
Subject:	Adoption of New Rule I pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem Proposed ARM 12.9.140
Date:	Wednesday, October 17, 2018 10:37:29 AM

I would like to comment on the proposed new rule on Grizzly Bear Demographic Objectives.

1. I think a population 800 Grizzly Bears minimum is a reasonable goal.

2. There is no upper limit on the Grizzly Bear population and I think there should be. There are approximately 1050 Grizzly Bears which is obviously exceeding the carrying capacity of the Northern Continental Divide Ecosystem. I say the carrying capacity is exceeded based on multiple reports of bears in the plains east of the Rocky Mountain Front. My population estimate is based on the report GRIZZLY BEAR DEMOGRAPHICS IN THE NORTHERN CONTINENTAL DIVIDE ECOSYSTEM, MONTANA: RESEARCH RESULTS (2004–2014) AND SUGGESTED TECHNIQUES FOR MANAGEMENT OF MORTALITY.

3. If another better Grizzly Bear population estimating technique is discovered I would hope the Commission would adopt that technique instead of relying on the stated technique in the proposed ARM.

4. I believe the best way to control the Grizzly Bear population is hunting. Hunting could be a net benefit to the Fish Wildlife and Parks Department economically as well as bring the population back into the carrying capacity of the ecosystem.

Thank you for this opportunity to comment.

Lloyd R. Brown

3406 Twin Gulch Dr

Lincoln, MT 59639

From: Greg Hinkle
To: FWP GRIZZLY BEAR ARM,
Subject: Grizzly Bear Comment
Date: Thursday, August 30, 2018 10:01:55 AM

Dear FWP,
The hunting of Grizzly Bears should be allowed in the entire state, not just the Yellowstone/ Northern Rockies area. Frankly, I am convinced there are far more Grizzly Bears in the Cabinet/Yaak system than what we are told. Please open Grizzly Bear hunting, once doing so will help begin the process of instilling a fear of humans in the bears. Long term, this will reduce human/bear conflicts and it will benefit both sides of the issue.

Greg Hinkle
5 Gable Rd
Thompson Falls, Mt. 59873

Virus-free. www.avast.com

From: Charlie Fite
To: FWP GRIZZLY BEAR ARM,
Subject: Grizzly
Date: Saturday, September 22, 2018 5:22:58 PM

In my opinion, which I feel is relevant! These majestic critters are awesome! But they still need management beyond responding to complaints! Time to hunt! Mt. Is not NJ! Get on the bus! It's time!!
Sent from my iPhone

From: Garett Bacon
To: FWP GRIZZLY BEAR ARM,
Date: Friday, September 07, 2018 6:11:08 PM

We need to have a hunting season on the Grizzlies as a method to control their growth. They've exceeded their recovery numbers and they have exceeded the habitat that they can live in. You are going to get more Grizzly conflicts with humans and livestock if we don't start to control their numbers to fit their habitat.

From:	duane.drogitis@yahoo.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Friday, October 19, 2018 10:31:27 AM

I feel that the proposed grizzly bear hunt should be upheld. Biologists and Fwp opinions and facts outweigh the emotional and personal opinions of anti hunting groups. If there are enough bears to harvest conservetly then it would be ok. The stringent regulations proposed will not harm the current grizzly bear population. Thanks for your time.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	ask247365@yahoo.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Tuesday, October 16, 2018 8:47:40 AM

If you open up grizzly bear hunting like you did the wolves, it will wise up the bears and keep them further away from human contact, therefore less incidental accidents with humans i.e. traffic, hunters, etc. and keep them pushed further in the back country where they belong. Furthermore, As a woman hunter I no longer feel safe in the woods and can?t even take children out for a close hunt. This is unacceptable to me, to fear the woods I?ve grown up in camping, hiking, exploring, and roaming. No person is safe if they wander off out of sight even a moment, to me that makes no sense. I?m even afraid to let my family ride motorbikes or 4-wheelers, because we live in a rural community and had an incident where we were out jogging on a back country road down low and a grizzly came out of a coulee and took chase. Long story short, it turned back to it?s domestic calf kill meal and we ran back to our vehicle a mile down the road. Not cool. We?ve always had grizzlies out here, but you rarely ever saw them now it?s common and scary as hell. The funny thing is the deer and elk population have suffered tremendously out here since the prey population has grown exponentially. It?s sad to see more predators in a day than game, which will only lead to one thing-problems. Problem bears, problem wolves, lions, coyotes, all vying for food sources that aren?t available because the prey populations are suffering with the high predation. Please don?t let these pretend environmental groups, who are nothing more than animal activists sway common sense management tools. Delist NOW before we have no viable game animal heards to rebuild back to numbers like we used to have! In the end proper management will save more Grizzlies lives long term, than hunts will kill, the smart ones always prosper.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From: dmt85@blackfoot.net
To: FWP GRIZZLY BEAR ARM,
Subject: Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date: Friday, September 28, 2018 8:44:13 PM

The Grizzly population in MT is from Wyoming to Canada. We have grizzlies in the Blackfoot, no doubt they have traveled to Yellowstone and Glacier. I don't know why the F&G hasn't followed their travel , it is well documented and all these bears are one big family. The researcher who was attack in The Cabinets (sure hope she is back to normal) should supply some research to this population that interbreeds with Canadian bears. Surely the F&G have tracking collars and know where these bears roam, which some cases in the past were hundreds of miles from their home range. I don't care to hunt them but it seems us hunters are being gradually forced out of hunting all together. The trapping ban on public lands will be the end of moose in MT, seen this in AK even though there are no trapping bans yet. There is also A big lie about the last time MT had a grizzly hunting season which was going on when I moved here in the 70's and was most likely drawn up by our world re known bear biologist who's son is still a bear manager in region 2. A limited hunt, a female bear killed going towards a quota like it was years ago. Good luck and let science prevail over emotion here in MT thanks for the comment place JTKloote

---

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From: gustafsn@3rivers.net
To: FWP GRIZZLY BEAR ARM,
Subject: Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date: Thursday, September 27, 2018 3:51:25 PM

I doubt the accuracy of your 1000 Grizzly Bear Count derived from hair or DNA samples garnered from barb wire sets, due the strong likelihood that not every bear is going to even encounter or leave hair on a barb wire set and that the Grizzly population only increases 3% a year. Assuming the 1,000 Grizzly Bear Count is accurate (I believe it is substantially understated) and 50% of them are females and 30% are of reproductive ages, and each female only has 1 cub a year, although often 2 or 3 cubs a year, that should be a 30% increase per year rather than a 3% increase. Regardless, since there has been complete recovery of the Grizzly Bear population in the NCDE and they have been delisted or removed from the "threatened specie" list I see no need whatsoever to further protect them, particularly outside of Glacier National Park, and we should be allowed to hunt or dispatch them elsewhere, and especially if they come on to private lands where our ranch and farm families reside, work, recreate and play. Grizzlies, like all other non-threatened game species, should be managed by a hunting season. It has worked well with the wolves, formerly a threatened specie also, where Fish, Wildlife & Parks has been collecting substantial revenues from the sale of wolf permits the past several years. A hunting season fosters temerity and results in a "timid bear" and "timid offspring" less likely to confront and harm humans, not one of whose life is worth all the grizzly bears on the continent. Thank you for your thoughtful consideration of my comments and the value of the lives and well-being of our citizenry and tourists.

Respectfully submitted,

Gale R. Gustafson,
Attorney, Rancher and Block Management Participant

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	grizrun1@msn.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Thursday, September 27, 2018 12:46:17 PM

Declassify the grizzlies and start a hunting season in 2019

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	glouden22@hotmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Wednesday, September 26, 2018 12:20:00 PM

I am a strong supporter of managing part of the Grizzly population with Hunting. I think that there are plenty of Grizzlies in the Region 1 area and they need to be managed. Just like we manage the wolf and the mountain lion. The data supports a more than healthy population that we can manage with hunting.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	Joe.yeager@bhhsmt.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Monday, September 24, 2018 12:11:16 PM

I have hunted on the rocky Mountain front for 30 years. I see more Grizzly bear every year and have learned to coexist with them. However there are also more bears that have exhibited habituated behavior as time goes on. Those bears for whatever reason are not afraid and can not be expected to fear or avoid man. Those are also the same bears that will be killed first by accident or on purpose.
It only seems logical to allow a season where those bears can be harvested. FWP will have a handle on the quota and the bears will not be considered the nuisance, dangerous, and out of control predator of the wild.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	mike@avconstructionmt.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Friday, September 21, 2018 10:47:21 PM

Please allow management of the grizzly same as we do with all other wildlife. I feel it is especially important for the grizzly as they are increasing in population, spreading into more populated areas, and interactions are too often tragic.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	jwatkins@zipbeverage.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Tuesday, September 18, 2018 2:19:16 PM

I am all for allowing the state of Montana to issue a hunting season for Grizzly Bears. As a person who hunts in heavy Grizzly country for many years, I have personally seen where bears have reached a healthy population and now require management. We should treat them no different than moose, bighorn sheep, or mountain goats where tags should be released on a very limited basis and treated as a rarity for hunters.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	cathyloewer@wyoming.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Tuesday, September 18, 2018 12:57:48 PM

The time to allow for a grizzly bear hunt is long overdue. The grizzly population has recovered and should be considered an incredible success story. Montana, Idaho and Wyoming's governors all agree. The same goes for the Interagency Grizzly Bear Committee (IGBC), whom unanimously recommended the USFWS remove grizzly bears in the Greater Yellowstone region from federal protection. The IGBC includes the top managers from every state and federal agency managing grizzlies and grizzly habitat. USF&W's committee stated, ? Scientists think the Yellowstone area population is recovered and may have reached its capacity for resident grizzlies. Efforts to reduce conflicts with people and preserve habitat for dispersal and, eventually, connectivity with other populations outside of the GYE will be essential for further restoration.? The conflicts between grizzlies and hunters / hikers are increasing and in the most recent case in Jackson Hole turned deadly. The bears have no fear of man and a rifle acts more as a dinner bell for these predators, as opposed to a deterrent. In this case, bear spray did not help either. Delaying the scheduled grizzly hunt by U.S. District Court Judge Dana Christensen any longer could result in further conflicts and the blood of those injured or killed will be on her hands. The studies have been done, the IGBC is in agreement that the species has recovered and the time to restore management is long overdue.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	rickschoening112@gmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Thursday, September 13, 2018 10:42:40 AM

I support FWP once again allowing taking/hunting of grizzly bears. The biology supports it.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	kylehuebner61@gmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Tuesday, September 11, 2018 9:52:36 AM

I haven't seen any hair sample population estimates like what is provided by Montana FWP for black bear. Given that the population is relatively robust I think a properly constructed hunting season should be implemented. An additional note on this hunting season is that it will probable have to be based on a quote. It is likely that many tags sold will go unfilled.

Thank you for your time.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	jessy.shaw.mt@gmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Tuesday, September 04, 2018 10:25:25 PM

I would like to see a hunting season for grizzly bears they don't fear humans and there are more and more encounters every year. It seem like I see the same amount or more griz than black bear. The elk herds take a hit in the spring it would be a good choice all around for both the health of our animal populations and encounters having them fear man.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	spurgear77@hotmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Tuesday, September 04, 2018 4:21:54 PM

Get the Grizzly tags for sale as soon as possible.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	Bigskyguy2004@yahoo.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Tuesday, September 04, 2018 2:04:46 PM

Yes start hunting these bears

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	lynnhash@hotmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Tuesday, September 04, 2018 8:48:53 AM

I fully support a managed grizzly bear hunting season based on scientific data.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From: clintevenson@gmail.com
To: FWP GRIZZLY BEAR ARM,
Subject: Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date: Monday, September 03, 2018 12:52:49 PM

I would support a responsible grizzly bear hunt in Montana in the 2019 hunting season. I live on the Flathead Indian Reservation and hunt within the Yellowstone greater ecosystem. On the reservation where i live i have seen countless grizzly bears in the valley where i pheasant hunt. I hunt on a cattle ranch who has at least a cow killed every year by a grizzly and they kill pet animals and come to farm equipment regularly. I fear hunting for pheasant in cattails. I dont have as much of problem with over aggressive bears in elk country, but some bears have begun using ranch land as a habitat and source of food. Although prairie is a bears natural environment they have come began relating human activity or gun shots with food. The bears have no predator other than man and without any fear they have become dangerous and over eager. I would not like a open hunting season,but i would like to see a limited hunt for bears for repeated trouble bears. Not relocation, but hunted and licenses for them. Let the hunters pay for management through tags rather than tax dollars for the relocation program that does not work. Thanks clint evenson

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This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	faithandasmile@yahoo.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Saturday, September 01, 2018 2:05:53 PM

Forget population quotas for bears and wolfs. When either is a problem let the public kill them, instead of wasting tax payers money to move them around like a shell game.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	Michaelsilvonen@gmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Tuesday, August 28, 2018 9:10:29 PM

I believe that it would be advantageous for the State of Montana to open up a season for Grizzlies. The economic impact on small towns would be a benefit for outfitting and hunting projects. We would also see a properly managed bear population that would be finally be contained in the proper home ranges for the bears. At this moment the complex is overpopulated and we are starting to see bears in areas that will create conflict between rancher and home owners. Just like wolves, the grizzly bears need to be managed to help balance out the ecology of our forrests.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	tsquare@bresnan.net
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Monday, October 22, 2018 12:29:13 PM

While I agree a grizzly population needs to be maintained, I also believe there's such a thing as too many bears. I spend a lot of time outdoors, working and recreating and from my experience there are currently too many grizzlies. I believe a very limited number of hunting permits are needed. The proposed plan seems to pacify the anti's by operating a program that will require years and avoid the courts. The number of grizzly encounters continues to be on the rise. A program aimed at increasing the grizzly population over X amount of years will only promote the expansion of bears into areas that will cause more conflicts and the very real possibility of loss of human life.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

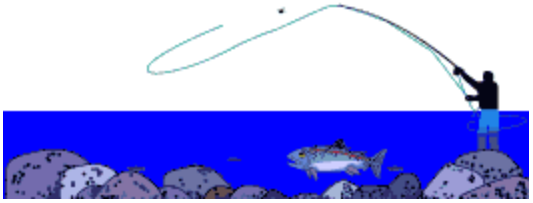
From: Darwon Stoneman
To: FWP GRIZZLY BEAR ARM,
Subject: To many grizzly bears
Date: Friday, October 26, 2018 4:50:09 PM

Dear Grizzly Bear Committee,

It used to be the only Grizzly Bear attacks were in Glacier National Park. Now every year there are multiple incidents outside the park. They are roaming In the valleys and the Rocky Mountain Front is infested with them. If you manage for 1000 pretty sure you will have substantially more as your number have been in question both on Wolves and Grizzly Bears. As someone who has spent a lot of time in the National Forest both hunting and recreating I am seeing a lot of Grizzly Bears and they are becoming aggressive. When they got hunted some they had a fear of man. Now they pretty much think they are at the top of the food chain. It is unfortunate that people who do not have to deal with them and really know very little about them seem to have all the control. Do not get wrong I like having them around just not so many. Please cut your numbers down!

Thanks,

Darwon



Darwon Stoneman
Glacier Outdoor Center/ Glacier Raft Company/Glacier Anglers
General Manager
darwon@glacierraftco.com
www.glacierraftco.com
Business phone 406 888 5454
Cell 406 261 2551

From: talarim.82
To: FWP GRIZZLY BEAR ARM,
Subject: Delisting grizzlies
Date: Friday, August 24, 2018 6:58:33 AM

Hello,
My name is alan trexler. I live in choteau montana. It seems like every few days there are Grizzlies close to town. They aren't just in the mountains they are in our backyards, fields, and roaming down our streets. I feel the population is high enough that we need to introduce a season. Special drawing would be the way to go. When I can get multiple pictures on my game camera of at least 4 different bears less than 300 yards from a house there might be a problem. I support the delisting and management, and would strongly suggest introducing a season.

Thank you for your time

Alan trexler

Sent from my Verizon, Samsung Galaxy smartphone

From: Mann, Jody S.
To: FWP GRIZZLY BEAR ARM,
Subject: Grizzly hunt
Date: Monday, August 27, 2018 11:46:40 AM

I fully support a managed Grizzly Bear hunt. Also, for areas east of the Rocky Mountain front there should be a general season for Grizzly Bears, archery included. The bears that get too far east just end up in trouble and end up being euthanized; sportsman should be allowed to hunt this non-desired and wandering population on a general tag, call it the prairie region. Grizzlies and humans will never co-exist in the "prairie region" regardless if it was part of the grizzlies original habitat and range.

Jody Mann
Colstrip, MT

From: Rick Holzheimer
To: FWP GRIZZLY BEAR ARM,
Subject: hunt
Date: Sunday, August 26, 2018 3:48:32 PM

I believe a grizzly hunt is the best way to manage the over populated griizzly bear

From:	none@email.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Tuesday, August 28, 2018 4:51:16 PM

As habitat decreases and numbers of grizzlies increases, the opportunity to hunt grizzlies should occur. After all look at what the Pittman-Robertson act did for antelope. There will never be as many opportunities to hunt griz however. Numbers of problem bear encounters in a geographic area in one year should dictate where bears can be hunted the next year, along with citizen education in the area to reduce unwanted encounters. Montana is speacial in having grizzlies. It's a good thing. other griz deaths due to traffic, self defense etc are already tabulated and used to forecast population growth. These numbers should, by now, be reliable for future forecasting if the science behind the numbers is honest, factual and solid. I'm tired of politics driving science off the rails as it has in recent years. We spent all this time and money conducting observational data for a reason. Use it more than irrational fear. If people are afraid of grizzlies. Don't come to Montana. The bears were here before we were. They don't have gps or an understanding of english or of the Law. They are Gods creatures too!

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	Dutchdeick@yahoo.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Tuesday, August 28, 2018 4:13:01 PM

To whom it may concern, in regards to the current and ongoing Grizzly objectives. There is a great deal of concern with a growing population and no current measure to legally hunt them. There needs to be a plan to allow management of the species. Hunting not only is a sound management practice it also financially beneficial to the species.
Thank you,
Dutch Deick

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	rdenning3@gmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Tuesday, August 28, 2018 3:22:28 PM

Glad to see the bears have made a recovery but I'm not interested in seeing them in the Little Belts or the Snowies where I elk hunt. And I'm sure the residents of Choteau have had enough. Its time for a hunting season on the grizzlies, everyone knows that, now its up to you to implement. And, these comments should only be open to Montanans, seems like anyone can comment. I live in Great Falls, thanks. Richard Denning

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This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From: lensx800@yahoo.com
To: FWP GRIZZLY BEAR ARM,
Subject: Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date: Monday, August 27, 2018 5:12:02 PM

LETS GET IT DONE. TIME TO GET THIS GOING. WE ARE OVER OBJECTIVES. I CAN'T EVEN BOWHUNT MY FAVORITE SPOT ANY MORE. TO MANY BEARS. TIME TO QUIT HAVING PEOPLE TELL THE STATE OF MONTANA WHAT TO DO. I HIKE IN THE SPRING AND I CAN TELL YOU THIS THERE ARE PLENTY OF GRIZ IN THE WOODS. I DON'T KNOW WHAT THESE PEOPLE ARE COMPLAINING ABOUT, WE ARE NOT HUNTING IN THE PARK. I DON'T SEE THESE PEOPLE WHERE I RECREATE. IF THEY WANT TO SEE BEARS GO TO THE PARK FOR GOD'S SAKE. IT'S TIME TO MANANGE. LETS GET THIS HUNT STARTED.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	duanegebhardt@gmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Monday, August 27, 2018 5:01:43 PM

Bears have recovered to a point that they need to be managed. Hunting is the best way to manage game populations. People questioned the hunting of wolves and it has been a success story. Wolves have remained viable while becoming more cautious of humans. Hunt the bears.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	spurin48@yahoo.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Monday, August 27, 2018 11:31:03 AM

We need to start hunting these bears. It's fairly obvious considering where they are showing up and the numbers they are doing it in. Unfortunately we will cater to the liberal anti hunting agenda and when we do hunt these bears it will not be the best management plan it will cater to politics. Unfortunately a 46,000 salary doesn't attract the best of the bet and our biologists have their own agendas as well. The grizzly bear problem will only get worse as time goes on because we are already mismanaging them. A real hunt with real numbers that everyone has a chance to participate in will never happen because our fwp is too worried about offending someone and not what is best for MT resident and the grizzly bear pop.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	trapperjohnwilson@gmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Monday, August 27, 2018 8:33:24 AM

Lets get this moving forward, and get to where we can manage these bears by harvesting through hunting. Like any animal it is time to start managing these beast.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	speters00@centurytel.net
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Monday, August 27, 2018 8:31:44 AM

there,s plenty of grizzlies open a hunting season

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From: mcnamee_42@hotmail.com
To: FWP GRIZZLY BEAR ARM,
Subject: Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date: Sunday, August 26, 2018 1:14:36 PM

Need to be able to hunt and manage the grizzlies. I am confident that with the help of the MT hunters FWP will do a good job in this effort.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	bigskyhal@excite.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Sunday, August 26, 2018 9:21:27 AM

The grizzly is recovered. A general hunting season should be implemented. With these bears expanding into rural areas out of the mountains, it only makes sense to put some controls on this population. We now have people who are afraid to allow their kids to play outside for fear of bears. The loss of domestic livestock by grizzly attacks is appalling. As a Montana resident, I am tired of paying for relocation of bears that seem to show up in the same areas they were causing problems in after they were relocated. Open a season! It only makes sense!

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	Buck.thomas@gmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Sunday, August 26, 2018 3:48:01 AM

Hello,
As a resident of the Eureka area and an avid hunter I am completely for opening a grizzly season in our great state.

Their population numbers are up and they have fully recovered. It?s time to start controlling their numbers. I spent three weeks scouting prior to black bear season three years ago and had NINE different bears on my game camera in 4 days in the Pinkham creek area. I have had two on my property alone this year.

Thanks,
J Thomas

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	steves@itstriangle.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Friday, August 24, 2018 11:02:12 PM

I firmly believe a hunt based on science is called for. It is unsafe to hunt by yourself in some of the areas that hunting would be allowed in

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This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	310pjs@gmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Friday, August 24, 2018 3:55:10 PM

It is of key importance to stress that the hunting of a healthy, renewable population of grizzly bears is necessary for their long-term acceptance and toleration. Hunting these bears is not only for sport, but to condition the bears over time to the danger represented by humans. Such conditioning will not prevent all bear attacks, but it will reduce the number of tragic encounters, which is a good outcome for humans and bears.
What needs to be stressed is that the hunting of grizzly bears is not simply a sporting issue, but an issue of viable coexistence of humans with bears. Allowing limited hunting of grizzlies therefore addresses issues of public health and grizzly health, as well
as sport hunting. This may appear to be a paradox, but such is the truth of these relationships between grizzly hunting, public health, and public toleration of grizzlies.
Please emphasize these points at your meetings and in your planning.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	nizzoli@wavecable.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Friday, August 24, 2018 2:17:35 PM

As an avid outdoorsman who has fished and hunted all over the western USA and Canada, I have a much better perspective on grizzlies from encounters with these magnificent beasts, as well as actually being "out there" with them.

The grizzly bear is an iconic western wildlife specie that needs to be a part of our great outdoors. That said, they are also an apex predator that needs to be managed. I support state management of the grizzly, which includes highly regulated hunting.

We all lived through the debacle that was the wolf re-introduction. And we MUST NOT allow those that financially benefit from suing the government to once again control the narrative and completely derail the process. SCIENCE MUST BE THE PROCESS BY WHICH ALL DECISIONS ARE MADE!

As the wolf management program has shown, with no doubt, hunting is a viable management tool. All the emotional blabber about the wolf disappearing again were just that; emotional blabber. The same will be proven to be true with the grizzly.

Additionally, grizzlies need to learn to fear humans. We have seen all too often how humans are attacked, some killed, due to unprovoked grizzly attacks. Once highly regulated hunting starts taking place, grizzlies will (just like wolves) begin to fear, and therefore avoid, humans. This will greatly benefit unarmed hikers and birders.

The SCIENTIFIC proof is already in the pudding: controlled hunting of apex predators is beneficial to ALL members of our society, as well as the environment and the wildlife community itself.

Respectfully submitted,
Curt Nizzoli
Port Orchard, WA

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	barl4@mtintouch.net
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Friday, August 24, 2018 11:38:11 AM

Does "population management" include a hunting season???? It should, with limited draw permits.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

9/5/18

I urge you to prevent grizzly bear hunting in MT! Our State Animal needs increased habitat protection including road-less areas, low road density areas, & habitats.

As a native Montanan, it sickens me to think of our precious population of bears being further diminished. Put a stop to this possibility!

Amy M in Missoula

It was on vacation to western Montana that I decided to make this state my home. One of the highlights of that trip was seeing a grizzly - my first. Like most Montanans, I remember every grizzly sighting I've had in the years since. As our state animal and an important part of our ecosystem, grizzlies need protection. Their habitat must be preserved + their hunting should be illegal. Thank you,

Alison Robb

October 25, 2018

Dear Department of Fish, Wildlife, and Parks -Grizzly Bear ARM Division,

I've lived in grizzly country for over eight years. During that time I've enjoyed about 150 hikes in the Missions, Swans, and the Bob. I always carry bear spray and have practiced using it effectively. I holler to announce I'm in the area and pay attention to the wind. I do everything I can to avoid surprising wildlife, but it's always exciting when I come across any wildlife sign.

In the last eight years I've walked over 1,000 miles in excellent grizzly habitat. I don't remember how many piles of grizzly poop I've seen, but I'll never forget the six wild grizzlies I was blessed to see in real life. About 60% of my hiking miles have been in the Missions and Swans. I have seen grizzly sign in the Swans and Missions, but all six of the wild grizzlies I've seen were in the Bob. Not having seen one grizzly in eight years of hiking in the Missions and Swans makes it clear to me we should not kill more grizzlies.

The behavior of the six wild grizzlies I saw in the Bob is significantly different from the half dozen or so grizzlies I've seen in Yellowstone with 500 of my best friends from California. Those grizzlies didn't mind having humans everywhere and simply went about their business of eating. Yellowstone grizzlies are great for our tourism industry, but making sure we have a healthy population of wild grizzlies seems to be what matter most to Montana's wildlife future.

As you know the Bitterroot may be the best grizzly habitat in the lower 48 states, yet we haven't re-established a healthy population of grizzlies in the Bitterroot. It seems premature to start killing grizzlies if we haven't established a healthy population of grizzlies in one of their most likely habitats. I also worry about which grizzlies we would kill. I doubt it would be grizzlies in Glacier National Park that are accustom to humans. I fear you would allow the killing of wild grizzlies in places like the Bob, leaving only the grizzlies that live off apple orchards and trashcans.

I am a native Utahan. Utah killed off the their last grizzly about 80 years ago. The last grizzly in Utah was called Old Ephraim. After the killing of Old Ephraim the Boy Scouts of American erected a monument to Old Ephraim. I want to live in a place with live wild grizzlies, not monuments. Please don't allow the killing of our remaining grizzlies.

Sincerely,

Lee Boman
Seeley Lake, Montana

October 9, 2018

To the Fish, Wildlife and Parks Department,

I would like to express my opposition to a grizzly bear hunt in any of their home states, including Montana, Idaho, and Wyoming. Several valid and science-based reasons are listed below:

1. There is no reason to hunt grizzly bears. They do not provide a source of meat for human consumption due to taste, parasites, and possible diseases (grizzly bears in the northwest have been exposed or infected with several diseases including plague and Q Fever among others). They are also not a threat to humans as they live primarily in the back country of our most popular national parks, such as Glacier National Park and Yellowstone National Park. Human deaths from grizzly attacks have occurred in these locations when hikers accidently surprise bears that are protecting their offspring or their food source (a carcass) and all back country hikers accept this possibility and know they should be prepared with bear spray. The only reason for man to kill grizzlies is for trophies, an extremely poor and unacceptable reason to decimate a species.

2. Grizzly numbers are already low and their home territories are under greater environmental threats than the rest of the country. Recent research concluded that temperatures in Glacier and Yellowstone Parks are increasing at twice the rate of parks and lands at lower elevations, challenging the grizzly to survive and adapt to changes that may be beyond their genetic capacity. Species with rapid reproductive rates have the best chance at adaptation to new environments and the grizzly bear does not meet that criteria.

3. The combined effects of a declining population and climate change exact additional stress on a species currently under EPA protection due to their low numbers and habitat loss. Stress induces the secretion of cortisone from the adrenal glands. Cortisone suppresses the immune system, making the host animal more susceptible to disease. As the population decreases, locating a mate becomes more difficult and the potential for inbreeding increases. Inbreeding is associated with a severe drop in fertility. Taken together, a grizzly hunt could dramatically weaken the remaining grizzly population through increased stress, subsequent disease, and inbreeding-induced infertility.

4. Hunts in neighboring states could affect grizzlies in all states, as they don't recognize state lines.

I hope you will consider these points seriously as your decision will affect this magnificent animal forever. There is no logic to a grizzly bear hunt. Rather it would bring shame to any state that fails to recognize their value as an important part of nature's plan and a symbol of strength and power.

Sincerely yours,

Linda L. Perry Turner, Ph.D., D.V.M.

631 Bowman Rd., Hamilton, MT

From: Eric Olson
To: FWP Wildlife
Subject: ** Email from fwp.mt.gov **
Date: Wednesday, September 26, 2018 11:27:48 AM

Name: Eric Olson
Phone Number:
Email: eolson290@gmail.com

Hello,
I lived in Montana for many years and I moved because humans are ruining the place so I was part of the problem and moving was being part of the solution to make Montana a better place. The decision to allow Grizzly hunting is disgusting. They have more right to be there than the any human. I'd rather have Grizzly Bears than ranchers and subdivisions. There are so few Grizzlies living in small pockets of marginal habitat. There are around 1000 bears but almost 1 million humans in Montana. The humans are the problem not the bears.
Maybe we need a private militia to hunt cattle and sheep to put ranchers out business. Maybe we need to destroy the developers earth moving equipment they use to destroy the land and maybe we should rip up their survey stakes to make it less profitable and less desirable to destroy the land with unneeded subdivisions and trophy homes.
The most valuable asset Montana has is large fragments of habitat that animals thrive in. In a world with less and less wild places and far too many people places like Montana will be valued for being wild. Humanity needs wild places almost as much as the native animals do.
It might be a good thing to boycott anything from Montana. Put people on notice to not buy from Mystery Ranch or West Paw or Simms or Strong Frames or Girlzilla or Elixiter or Audience Awards or Big Sky Brewing. Tell people to ask their grocery stores, "Is this Montana beef, if so I don't want it." Tell people don't go to Montana to ski fly fish or backpack because they don't even have respect for their own native species. Tell foreigners to avoid Montana because the people want to make the state a giant industrial ranch with scattered subdivisions for those that are selfish enough to move there. Tell foreigners to request their local business and governments to boycott Montana goods.
Cheers,
Eric Olson

From: WildEarth Guardians on behalf of Alan Binnie
To: FWP GRIZZLY BEAR ARM,
Subject: Conservation "Strategy" is a Sham and a Shame
Date: Monday, October 22, 2018 5:14:16 PM

Oct 22, 2018

Montana Fish, Wildlife, and Parks

Dear Wildlife, and Parks,

I'm writing to comment on proposed grizzly bear Administrative Rule Making regarding Chapter 2 of the Conservation Strategy for the NCDE grizzly population.

Montana should not sign the Conservation Strategy, but should instead embrace the opportunity to conserve this apex predator for the nation.

There is especially no reason to enact trophy hunting.

Thanks for your consideration.

Sincerely,

Alan Binnie
15883 N. Roadrunner Ridge Lane
Tucson, AZ 85739
(520) 575-9286
albinnie@yahoo.com

From:	Dawn Wolfson
To:	FWP GRIZZLY BEAR ARM,
Subject:	De-listing/hunting of grizzlies
Date:	Thursday, September 27, 2018 12:30:08 PM

This article says it pretty well. We need a much larger population, not a smaller one, for the grizzly population to be sustainable. Please do not allow them to be hunted.

https://www.counterpunch.org/2018/09/27/why-most-of-montanas-grizzlies-remain-on-the-chopping-block/

Thank you,

Dawn Wolfson

From: Jeffrey J. Smith
To: FWP GRIZZLY BEAR ARM,
Subject: Grizzlies!
Date: Friday, September 21, 2018 9:03:09 AM

September 21, 2018

Grizzly Bear ARM
P.O. Box 200701
Helena, MT 59620

Dear Montana Department of Fish, Wildlife, and Parks,

I am a Montana hunter, fisherman, and parks user who believes now is not the time to re-start grizzly bear trophy hunting in our state. I know the bears are expanding their population and they are sometimes not compliant with the rules we humans lay down for them.

I have encountered grizzlies several times while hunting. I carry bear spray, and I am awake when I'm hunting these days, and I don't leave a carcass in the wild overnight if I can help it. I don't want you to take care of me or make it safer. I have lived in Montana for 42 years because of these experiences with the wild. Don't sanitize or domesticate Montana.

They are fierce protectors of their young and their sources of food, and that sometimes makes them difficult to manage when there are ubiquitous humans hiking, biking, bird hunting, big game hunting, or just lollygagging in bear habitat.

This is a test of our humility, a test of John Muir's central thesis, that we are a part of, not in dominion over the natural world. It's not our role to subdue the Earth! We must find ways to share and restore this world to ensure the long term viability of other critters, especially those, like us, at the top of the food chain.

It appears your target, maintaining 800 bears in the Northern Continental Divide Ecosystem core, is inadequate. It appears you are asking the wrong question. It's not, how many bears can we manage on our budget? It's not, how do we give cheap thrills to grizzly trophy hunters? It's how many bears and how much habitat is needed for a single, connected, genetically viable population in the Yellowstone, NCDE, Cabinet-Yaak, Selkirks, and Selway-Bitterroot ecosystems?

Lower 48 grizzly bears are threatened with extinction because they are in separate, isolated populations. Why aren't MDFWP and U.S. Fish and Wildlife Service trying to connect and recover these ecosystems?

Grizzly bears are currently confined to about 2 percent of their former range and numbers. Go back to the drawing board. This is not bear recovery.

Grizzly bears are expanding territory to build connected ecosystems so they can integrate genetics from near and far. Hunting would kill bears needed for population expansion and ecosystem connectivity.

Thank you for taking my comment.

Jeff Smith
105 Channel Drive
Missoula, MT 59804

From: Charlotte Heldstab
To: FWP GRIZZLY BEAR ARM,
Subject: Grizzly Bear ARM Comments - Wildlife Division
Date: Thursday, October 25, 2018 2:31:09 PM

I simply want MT FWP to fully understand how much the American public loves grizzlies. I know that MT FWP has control over the wildlife in the state of Montana, but I hope you consider the strong admiration that the people from all states in the U. S. have for this bear.

I spend 2 1/2 months each fall on the east side of Glacier National Park and interact on a daily basis with people from all over the U. S. These people love grizzlies, they want them protected and they never want them hunted.

Thank you for considering my comments.

Charlotte Heldstab
Whitefish, MT

From: Michael Flaherty
To: FWP GRIZZLY BEAR ARM,
Subject: Grizzly Hunting
Date: Friday, October 26, 2018 11:24:41 AM

I oppose any kind of hunting of Grizzlies in or around Glacier National Park.

Michael P. Flaherty
3 Trail Creek Ranches
Ennis Montana

435 901 2710

From: Jan Lord
To: FWP GRIZZLY BEAR ARM,
Subject: Help!!
Date: Tuesday, September 25, 2018 3:16:25 PM

I am opposed to any hunting of grizzly bears in the Glacier Park region… I've been hearing how desperately they need help to increase their numbers… so much human activity in their roaming habitats… Could you please consider letting bears be bears!!??? Jan Lord… Montana hiker and lover of wildlife living near Bigfork… not a tourist or a part timer...

From: carol edwards
To: FWP GRIZZLY BEAR ARM,
Subject: I want far more than 800 grizzly bears in the Northern Continental Divide Ecosystem
Date: Monday, October 01, 2018 2:16:30 PM

Dear MDFWP and Everyone Else in Montana State and Federal Governments,

As a resident of Montana, I am outraged by the idea that we somehow need to limit the population and narrow the range of a heritage, top of the food chain creatures which have been threatened by virtual extinction and brought back from the brink of that condition just recently.

Our Montana wildlife, especially those that are in the top predator sector, are invaluable remnants of our history and that of the lands we all love, icons of the North American Territories which they inhabit. We need to secure and insure the safety and survivability of those grand creatures from our past and the very special land areas that they need to survive in their natural conditions for future generations to appreciate and understand.

Is anyone who cares, really willing to bet that just 800 bears will do the trick? I don't believe that, and I speak with lots of folks around Montana. Only those who resent giving any space up for wildlife, or those that would like to keep bears in a zoo-like theme park, or mounted on their walls, are satisfied with that number. How many bears and how much habitat is needed for a single, connected population in the Yellowstone, NCDE, Cabinet-Yaak, Selkirks, and Selway-Bitterroot ecosystems? Grizzly bears are currently confined to about 2% of their former range and numbers. MDFWP should be ashamed to try and write into Montana law that this constitutes bear "recovery."

The "lower 48" grizzly bears were listed under the ESA as "threatened" with extinction. Why are MDFWP and U.S. Fish and Wildlife Service trying to "divide and conquer" rather than "connect and recover" these ecosystems and their wildlife species? The economic value of maintaining viable bear, wolf, cougar, lynx and wolverine populations throughout an interconnected series of suitable areas would help guarantee that all the states included in this connectivity would be assured of the great economic benefits that far outweigh and outlast the economies of extraction or the limited and dwindling support of the hunting community.

Grizzly bear hunting would kill the very bears needed for genetic diversity, population expansion and ecosystem connectivity. If you want to write a law, make grizzly bear trophy hunting illegal in Montana forever. I am appalled that an organization with your name, should act principally against the interests of wildlife, and I request that you do an about face, and head in the direction that your official title would indicate and should intend....Wildlife Service, and get busy helping to reconnect with Yellowstone and other isolated ecosystems!

Sincerely,

Carol Edwards
10641 North Fork Rd.
Polebridge, MT 59928

From:	Denise Boggs
To:	FWP GRIZZLY BEAR ARM,
Subject:	NCDE Grizzly Bear Proposal
Date:	Thursday, October 25, 2018 10:59:39 AM

On behalf of Conservation Congress I am submitting comments on the proposal to maintain only 800 grizzly bears in the NCDE/Glacier-Bob Marshall area. As with the attempt to delist grizzlies in the GYE this proposal is scientifically flawed and likely illegal under the ESA.

Maintaining 800 grizzly bears in the NCDE/Glacier-Bob Marshall area is less than the 1,000 thought to exist today and far fewer than the 5,000 bears population viability experts say are needed to exist in an interconnected ecosystem in order to maintain genetic diversity.

MDFWP should consider and analyze the following points prior to making a final decision:

1. A 90% probability of maintaining 800 bears in the NCDE core is an inadequate target. How many bears and how much habitat is needed for a single, connected population in the Yellowstone, NCDE, Cabinet-Yaak, Selkirks, and Selway-Bitterroot ecosystems?

2. The "lower 48" grizzly bears were listed under the ESA as "threatened" with extinction. Why are MDFWP and U.S. Fish and Wildlife Service trying to "divide and conquer" rather than "connect and recover" these ecosystems?

3. Grizzly bears are currently confined to about 2% of their former range and numbers. MDFWP should be ashamed to try and write into Montana law that this constitutes bear "recovery."

4. Grizzly bear hunting would kill bears needed for population expansion and ecosystem connectivity. If you want to write a law, make grizzly bear trophy hunting illegal in Montana forever.

Thank you for considering these comments.

Denise Boggs
2234 Sierra Vista Circle
Billings, MT 59105
Conservation Congress
www.conservationcongress-ca.org

From:	Cate Campbell
To:	FWP GRIZZLY BEAR ARM,
Subject:	NCDE Grizzly delisting.
Date:	Friday, September 14, 2018 4:39:59 PM

Greetings,

Fortunately the grizzly hunt has been called off for a while. Hunts in WY and ID are now being held up to court scrutiny due to the critical nature of their status. There are too few bears and inadequate connectivity between Yellowstone, NCDE, Cabinet Yaak, Selkirks, and Selway Bitterroot ecosystems.

Conscientious biological studies have not shown a robust recovery of grizzly populations. They are still threatened by loss of habitat and death by mistaken identity and road kills. They continue to need our help to thrive.

Grizzly bear hunting should be illegal for the foreseeable future.

Cate

From: Kyle Haines
To: FWP GRIZZLY BEAR ARM,
Subject: Please STOP/DO NOT ALLOW the hunting of Grizzly Bears!!
Date: Friday, September 21, 2018 9:45:54 AM

Hi,

We need more than 800 grizzly bears in the Northern Continental Divide Ecosystem to connect with Yellowstone.

A 90% probability of maintaining 800 bears in the NCDE core is an inadequate target. How many bears and how much habitat is needed for a single, connected population in the Yellowstone, NCDE, Cabinet-Yaak, Selkirks, and Selway-Bitterroot ecosystems?

Grizzly bears are currently confined to about 2% of their former range and numbers. MDFWP should be ashamed to try and write into Montana law that this constitutes bear "recovery."

Grizzly bear hunting would kill bears needed for population expansion and ecosystem connectivity. If you want to write a law, make grizzly bear trophy hunting illegal in Montana forever.

Thank you,

Kyle Haines
2685 Swyers Drive
Hood River, Oregon 97031

From:	Leea Pittenger
To:	FWP GRIZZLY BEAR ARM,
Subject:	Protect & Link 5 grizzly bear populations Northern Rockies
Date:	Tuesday, October 02, 2018 7:26:48 AM

I don't agree with the hunting of grizzlies, period. Please link the areas in the Northern Rockies in order to protect and ensure health survival of grizzly bears.
Leea Pittenger

From:	oldstuff227@yahoo.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Thursday, October 25, 2018 5:21:31 PM

Do NOT allow the killing of any bears! Leave bears and other natural predators alone to live their lives.

Find something productive to do with your lives instead of the sadistic and narcissistic desire to hang so-called 'trophies' on your walls.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	jveghts@yahoo.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Tuesday, September 25, 2018 10:29:56 AM

A hunting season grizzlies is not needed. To many are killed each year already by hunters mistaking them for black bears , by motor vehicles collisions, and by poachers.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	susan59870@gmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Wednesday, September 19, 2018 3:13:34 PM

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montana will make more enemys in this country by allowing the grizzly bear hunt. grizzly bears are loved by many and they dont need to be hunted...do you think china would have a panda bear hunt?????? susan mattei

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This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	vcarbia@hotmail.xom
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Friday, September 14, 2018 1:27:07 PM

Please do not support any killing of bears, or any other wildlife for that matter.
Live and let live; humans cannot exist without a living planet.
Thank you.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	hogs123@comcast.net
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Tuesday, September 11, 2018 10:11:28 PM

No trophy grizzly bear hunting should be allowed. The grizzly is not a sustainable "game" species for a host of reasons, especially lack of just common sense. The Tri State Trophy Grizzly Hunting portion if "state management" is an abomination.

Once the feds delisted and handed over grizzly management to the three states, the unbridled state special interest groups zeal to once again destroy our iconic national grizzly is shameful.

MT, WY and ID already proved total inability to manage the grizzly. Under "state management" regulations and policies, the grizzly was once again by the early 1970's nearly eradicated. MT (along with WY & ID) failed miserably before. Why should MT be trusted now? It is absolutely an outrage for special interests to proclaim that an approximate 650-700 population of any species, much less the grizzly bear is "recovered" to be delisted from ESA, therefore should be legally hunted solely for vanity big money trophy special interest groups. Killing the fragile and highly debated bear population already facing enormous human and natural threats/hazards is not "management." Rather MT, take the high road and better manage your hunting crowd (legal and poachers), grizzly habitat protection and non biased political statistics. The federal government unquestionably saved the grizzly bear from near extinction under state management. Then in 2017. the Dept of Interior let the fox back into the hen house by unwisely delisting grizzlies from ESA protection, swinging the door wide open for state sponsored vanity trophy grizzly killing for rugs on the floor, not meat in the freezer,for "sportsman." You are better than this Montana!

Just say "NO" to all trophy grizzly killing.Manage yours and our nations valued irreplaceable resource. Killing the bear off via poor state management and "hunting?".....The Tri States already demonstrated the ability to do so. Stand taller than the irresponsible WY & ID special interests....You are better than this Montana! Killing off grizzlies for rugs isn't reserved as a local or state issue. That bear is a national treasure in many ways. MT is blessed to have them. If MT winds up with control by state mgmt., then by all means do so, but remove trophy hunting from the ill advised Tri State Agreement.

Respectfully submitted

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	mary.sarumi@gmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Friday, October 26, 2018 11:10:23 AM

I would like to include my comment concerning the proposed adoption of an administrative rule pertaining to grizzly bear demographic objectives for the Northern Continental Divide Ecosystem.

MDFWP should be ashamed to try and write into Montana law when only 2% of Grizzly bears former range and numbers is considered "recovery."

Grizzly bear hunting would kill bears needed for population expansion and ecosystem connectivity. If you want to write a law, make grizzly bear trophy hunting illegal in Montana forever.

MDFWP needs to write a law to forever protect the Grizzly bears from hunting rather then allow the hunting. This would effect would needed for population expansion and ecosystem connectivity.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From: steve kelly
To: FWP GRIZZLY BEAR ARM,
Subject: Why license murder by status-seeking sociopaths?
Date: Friday, September 21, 2018 10:08:10 AM

September 21, 2018

Dear FWP:

It's time to reevaluate your entire existence as a state agency. Blood-thirsty killers are funding your salaries and infrastructure, which obviously biases your attitudes toward the wildlife you are purportedly "managing." FWP licenses for a fee (tax) the indiscriminate murder of wildlife and fish as its primary mission. The more a particular species is "worth" in dollars, the more FWP dedicates to the "management" of that capital (property).

There is no ethical or moral foundation to any of FWP's programs. That needs to change. Here are a few ways FWP might consider phasing out, and ultimately ending, once and for all, its commitment to indiscriminate murder of lifeforms in its charge.

First, stop repeating the lie that "other" sentient beings are property, dispensable objects, valued only in dollars (money). In its place, begin telling the truth about the moral imperative, and long overdue, universal ethic that promotes reverence for all life. The moral principle goes like this: It good to cherish life; it is evil to wantonly destroy life."

Stop rewarding the love of feeling of being "the predator." Research on human behavior has identified domination and predation in criminal cases involving torturers and sexual predators and various other forms of oppression. Why would FWP want to license (condone) this kind of anti-social, predatory behavior as its primary policy and funding mechanism? Isn't this what begins the cycle of violence that our vast "law enforcement" community is trying to control?

In order to end the predator-for-fees syndrome, FWP must also stop demonizing "the other," whether it is another person, or and animal. This indefensible prejudice is arbitrary, capricious, and always runs in opposition to creating a peaceful environment. Simply put, stop preaching war (licensed mass murder) for fees.

FWP's program encourages and spreads violence, ruthlessness and mastery throughout society like a cancer. These values harden the soul of humans and create disassociation with the oneness of all life on Earth.

The ends never justify the means; stop rationalizing bad agency behavior. As hunters, one-by-one lay down their weapons, or trade them in on a digital camera, FWP should take a long, hard look in the mirror. Will FWP be the last to finally stand up and refuse to promote and profit from indiscriminate killing? Or, will the agency fight to the last breath, pander to its waning cohort of dedicated practitioners "malignant extermination ideology," -- trophy-hunter sociopaths -- as it watches the house of cards fall one former hunter at a time.

I urge FWP to abort the hunt for grizzlies, wolves and other species hunted by the soulless, trophy-status seekers that kill for the thrill of killing. Murder grizzlies is a bad decision FWP

will never recover from. The world is watching. The choice is yours, choose wisely.

Sincerely,

steve kelly
P.O. Box 4641
Bozeman, MT 59772

Snyder, Jessica

From:	George Wuerthner <gwuerthner@gmail.com>
Sent:	Monday, September 10, 2018 11:24 AM
To:	FWP GRIZZLY BEAR ARM,
Subject:	Comments
Follow Up Flag:	Follow up
Flag Status:	Completed

Dear MDFWP

I am strongly opposed to the hunting of grizzly bears under any circumstances. The idea that this is "sport" is disgusting, and just because some men, (and it is mostly men) are uncertain of their masculinity and feel that killing a large predator somehow boosts their self-esteem is no reason to kill these animals.

Furthermore, grizzlies are starting to recolonize suitable habitat outside of the core Northern Continental Divide. Hunting will tend to remove the animals that are exploring new habitat and recolonizing these lands.

Finally, it is questionable whether there are sufficient grizzlies to permit a hunt. Too many bears are already being killed unnecessarily. Most reputable scientists believe we need several thousand bears to preclude genetic losses and inbreeding depression.

MDFWP has a responsibility to manage grizzlies for all Americans, not just the segment that wants to kill them.

Sincerely:

George Wuerthner

Office 365

Your message to FWPGRIZZLYARM@mt.gov couldn't be delivered.

FWPGRIZZLYARM wasn't found at mt.gov.

gwuerthner	**Office 365**	**FWPGRIZZLYARM**
Action Required		Recipient
Unknown To address		

Public Comment Received re: MAR 12-505
331

From: richard Michelotti
To: FWP GRIZZLY BEAR ARM,
Subject: Grizzly Bears
Date: Monday, September 03, 2018 5:09:10 PM

Montana does not need a season to hunt the grizzlies. I was a avid hunter till my health no longer allows me.
With the number of bears which include the grizzlies that end up as road kill we don't need a season on the grizzlies.
Sincerely
Richard J Michelotti
200 23 ave NE unit 6
Great Falls, Mt. 59404

Sent from my iPhone

From:	composted@gmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Tuesday, September 11, 2018 2:58:38 PM

Hello, I believe that grizzly bears should be afforded protection and that efforts and funding should be extended towards supporting a grizzly population that can be sustained by the ecosystem. I do not believe that Grizzly bears should be hunted nor de-listed at this time.

Thank you for your consideration,
Angela Harris

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From: spam@intercoastal.com
To: FWP GRIZZLY BEAR ARM,
Subject: Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date: Friday, September 07, 2018 9:50:49 AM

Protecting wildlife is a responsibility and commitment that falls to the people who are the guardians of these animals. It is irresponsible for the American people to negate a law that has protected the Grizzly Bear for centuries.
Trophies are meant to signify achievement and expertise in some activity. Senseless slaughter of a rare and beautify animal is not a trophy it is barbarism and inhumanity.
Please protect the Grizzlies from being hunted which will be an act of compassion, concern and character.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	sarahbetheapdx@gmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Tuesday, September 04, 2018 12:00:03 PM

One of the most special things about Montana is how wild it is. I think of it as one of the last unspoiled areas left in the country. The wildlife here, especially the iconic grizzly bear, is what makes this so. People come to see these amazing animals, and there is something special about hiking through territory inhabited by them. The bears have so much value, and play such an important role as an apex predator in the ecosystem. I would like to voice my opposition to allowing grizzly hunting. I firmly believe it would do more harm than good for the state.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	xzarri@aol.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Tuesday, September 04, 2018 6:34:00 AM

There is no reason to hold a hunt other than to appease trophy hunters.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	pammygamherst@hotmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Monday, September 03, 2018 10:05:15 AM

I'm sorry, WHAT.THE.FUCK.IS.WRONG.WITH.THIS."ADMINISTRATION".
these magnificent creatures who occupy such an important niche in the ecosystem.....NO.HUNTING!

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	ktnoz@aol.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Sunday, September 02, 2018 10:12:10 PM

Please do NOT allow shooting of these precious animals.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	skadoo3@bellsouth.net
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Sunday, September 02, 2018 8:23:12 PM

Do not allow hunting of grizzlies on federal lands.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	martinez.lisa.a@gmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Sunday, September 02, 2018 7:56:06 PM

No hunting! Keep the ban in place. Grizzly bears are still a threatened species and still need protecting.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	cyberboojum@hotmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Sunday, September 02, 2018 7:55:28 PM

Bears are critical elements of a healthy ecosystem. Take pics not trophies.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	coedv9@aol.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Sunday, September 02, 2018 7:46:48 PM

No Grizzly Bear hunting, AT ALL!!!!!!!!!!!!!

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	took4ever@aol.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Saturday, September 01, 2018 3:18:23 PM

Leave our Montana Wildlife and Montana World/Environment alone. There is ALWAYS pressure from those who have no other interest than killing something in Montana. Trophy Hunters (AKA KILLERS) who only want to "BLAST SOMETHING". I have numerous individuals just like this arrested on my private property and have no respect for them.
This is not our land ... it belongs to the animals who have lived here for centuries ... millennium before we ever thought of going here.
They are not a threat. They are what naturally lives here. If you want to hunt someone, hunt whomever it is that is supporting these hunts.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	Loriabaker59@gmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Saturday, September 01, 2018 3:15:12 PM

Why do you have to kill the Bears why can't you neuter the males birth control the females there are other ways once you kill them they're gone for good

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This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	kimballl810@gmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Saturday, September 01, 2018 12:25:26 PM

1. The core grizzly population should be increased to 1,000 from 800 to ensure the survival of a breeding population that can increase the population year to year.

2. Hunting by the general public should not be allowed. If the grizzly population requires reduction and/or if 'problem' bears require intervention, trained FWP personnel should trap and transfer bears.

3. All captured bears should be relocated to their opposite range to ensure genetic diversity among a population. For example, grizzlies captured in the Greater Glacier Ecosystem (GGE) should be introduced to the Greater Yellowstone Ecosystem (GYC) population, and vice-versa.

4. An unbroken grizzly bear travel corridor should be established between the GGE and the GYC to enhance the likelihood of a healthy and sustainable grizzly population for future generations to enjoy and by which they can measure the overall health of the habitat on which they and grizzlies coexist.

Respectfully,
Kimball Leighton, Livingston MT

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	Lgough2012@gmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Thursday, August 30, 2018 8:32:35 AM

Please do not allow hunting of the Grizzly Bear. Surely more money could be raised by allowing tourists to photograph and buy merchandise rather than the senseless killing of a beautiful animal for fun.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	toledojohn@hotmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Wednesday, August 29, 2018 7:14:42 AM

Sirs:
Please do not allow culling or hunting of grizzly bears in our beautiful Montana. These animals are far from being lost to our progeny and they add to our varied ecosystem. They also are huge tourist draws to our state and mean a significant amount of money to our economy. Please let them live in peace.
Respectfully,
John Orr
430 Gordon Rd.
Vaughn, MT 59487

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	bloominbiz1@gmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Wednesday, August 29, 2018 12:10:06 AM

We have become so foreign to living with animals that it has become the norm to minimize their #'s if they start to affect our daily living bubble. We humans are the most overpopulated, most damaging animal on the planet. Who controls our numbers? I was just reading the other day that a raccoon climbed over 20 stories to take a nap. Of course it was "removed", and all I could think of was that this poor animal was probably just looking to rest in a safe spot & was probably chased off from wherever it went. Now that it climbed over 20 stories you think we could just allow it to rest right? No..immediately we had to "remove" it. This poor animal could not even climb over 20 stories for a simple nap since it was still considered in our "space". We forget that all living animals deserve the right to live just as much as we do. Each animal has its own individual life and relationships. Yet unfortunately we continue to see them each as part of a whole group & as long as there are a certain # of them we consider it okay to kill or hunt them. One may use the justification that they are killed for meat. Yet everyday...we have so much meat thrown out of stores because we cannot keep up with our mass production. Why kill another animals on top of this? We as humans have allowed ourselves to evolve since the beginning of our time. We tend to freeze animals in time, preventing them from evolving and growing as well. It is time we learn to live together. And yes, at times there will be conflict, just like there is conflict between humans. This is called REAL LIFE. Last, there is NO integrity in trophy hunting. A human finding pleasure in killing an animal to only have them stuffed or have their head hung on a wall is barbaric. With all of our technology and education you think we would be beyond this. We are ONE EARTH, ONE PLANET & ALL OF US need to start living together like ONE. After all...we all come from the same beginning...Star Dust. Yet..that might blow one's mind as I do not think we have evolved enough yet to understand this.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From: dusty299@midrivers.com
To: FWP GRIZZLY BEAR ARM,
Subject: Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date: Monday, August 27, 2018 8:04:17 AM

As a 67 year old life long conservationist, packer, wildlife biologist, back country horsemen and Hunter Education Instructor # 171, in Montana I offer the following;

The slow and low reproductive rates in the grizzly make killing a sow become actually the end of a lineage of bears. Far and away the vast majority of hunters who will go to the field to hunt grizzly are doing it to boost their macho. The vast majority of them lack the skill sets to ensure that a sow is not in the cross hairs. The problem with the so called increase in grizzly encounters is the result of several major factors. First, greed driven development of grizzly habitat. Next, more people with poor skills going jogging, hiking, biking, camping and to a lesser extent hunting. Next, the disregard for the behavior that alerts bears and discourages bears when they are in the wild. Add to that the issues with the white pine bark, millers, poor managed grazing permits and the simple hard reality that there are more and more people coming in from the east and it is clear that there will be seemingly logical arguments made to hunt the bears. The hardest reality is, that only the experienced back country folks that realize that the bears are the reason for what is wild who realize it is us entering their domain will understand how hollow the arguments for hunting are. In the end, this will damage the future of the grizzly for money.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From: Chick Magnet
To: FWP GRIZZLY BEAR ARM,
Subject: Bears
Date: Monday, October 08, 2018 9:18:33 PM

Please don't hurt the animals!! Please put them under any act to save them and do it for other animals too!!

From: Peggy
To: FWP GRIZZLY BEAR ARM,
Subject: grizzly bears
Date: Friday, September 21, 2018 12:40:05 PM

You need to do more to PROTECT more grizzly lives!
Grizzly bears are currently confined to about 2% of their former range and numbers.
MDFWP should be **ashamed** to try and write into Montana
law that this constitutes bear "recovery."

Grizzly bear hunting would kill bears needed for population expansion and ecosystem connectivity. If you want to write a law, make grizzly

bear trophy hunting illegal in Montana forever. We need more than 800 grizzly bears!

There are more and more people coming to these areas and crowding out the wildlife!
There has been higher numbers of collisions with bears and

there is going to be more collisions with cars (and trains) killing grizzlies. This is especially bad when it involves mothers with cubs!

Things are just going to get worse so you need to PROTECT them NOW!

We need their ecoysystems connected and protected.

Please do what is RIGHT.

Thank you.

Peggy Brewer

Bigfork, MT

From: Bonnie
To: FWP GRIZZLY BEAR ARM,
Subject: Protect grizzly bears!
Date: Thursday, September 27, 2018 2:10:16 PM

PROTECT OUR GRIZZLY BEARS! They are beautiful animals, and part of our heritage. We need a plan that protects and links all five of the grizzly bear populations in the Northern Rockies region so they can live and reproduce in peace.

MAKE IT HAPPEN!

From: Tom and Becky Sutton
To: FWP GRIZZLY BEAR ARM,
Subject: Protect Grizzly Bears
Date: Tuesday, October 16, 2018 8:28:25 AM

Simply, protect grizzly bears! Do not remove them from the endangered species list and certainly do not allow trophy hunting of them.

Sincerely,
Becky Sutton

Sent from my iPad

From: WildEarth Guardians on behalf of Patricia Martin
To: FWP GRIZZLY BEAR ARM,
Subject: Protection and management of grizzly bears
Date: Tuesday, October 23, 2018 9:15:33 AM

Oct 23, 2018

Montana Fish, Wildlife, and Parks

Dear Wildlife, and Parks,

Re: Public comment on the proposed grizzly bear Administrative Rule Making (ARM) adopting Chapter 2 of the Conservation Strategy for the Northern Continental Divide Ecosystem (NCDE) population of grizzly bears.

Please focus on the following...
- A broader state grizzly bear management plan is essential, not one based on a small isolated population. It needs to guarantee connectivity and genetic exchange amongst the isolated populations.
- Agree to a plan that ensures connectivity between the still isolated populations within Montana.
- Use current information to make decisions and push for a new public review process; the science on grizzly bears and their food sources have advanced, and climate change impacts are increasing.
- Protect the grizzlies! Unprecedented mortality is unacceptable... Implement more stringent regulations regarding use of bear spray, lower speed limits in areas where bears are known to cross roads, create uniform food storage orders throughout the state - tactics that will safeguard grizzlies and people alike.
- NO trophy hunting seasons! Grizzlies need protection! They are an iconic species and a huge draw for locals and out of state tourists like me.

Please do the right thing and embrace and manage grizzlies for THEIR benefit.

Sincerely,

Patricia Martin
79 Bonus Gulch Way
Jefferson, CO 80456
(719) 836-4470
caswallmartin@aol.com

From:	juliestahnke@hotmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Friday, August 31, 2018 2:59:20 AM

The grizzlies definitely need to be protected.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	wrharrisII@gmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Tuesday, August 28, 2018 11:58:47 PM

Please protect the bears. Please allow their population numbers to increase. Thank you.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	cjford0923@yahoo.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Sunday, September 23, 2018 6:11:52 PM

Is anything scared anymore??? When God created this world he put man over the care and protection of the animals not to harm or kill them!! Man has and is destroying everything that is beautiful in this world for the sake of their own selfishness and greed! If we keep allowing the killing of these intelligent and beautiful animals, what is going to be left for our children to see and admire in our National Parks!! I AM BEGGING YOU TO PLEASE PROTECT THESE BEAUTIFUL ANIMALS!

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

RECEIVED
SEP 05 2018
FISH, WILDLIFE & PARKS
WILDLIFE DIVISION

Removing the Grizzly Bear from the endangered species list is crazy. For years, 1974 through today, caring and dedicated people such as Chuck Jonkel and the Craigheads along with many others since then have given all of their careers to save the Grizzly from extenction.

My sister, Patsy Martin, received her degree in Wildlife Biology from the University of Montana and she spent her summers and spare time working on the Grizzly bear program with Jonkel & Craigheads. She talked about the Collaring of bears so that they could keep track of their movement and their way of life and what makes them tick

My sister left Montana in 1980 and went to work on their Grizzly bear program where she spent 20 years working to keep the Grizzly from extenstion by following and studying their way of life and habits. She worked with Harry Reynolds in and around the areas of Bentley, McGrath, Fairbank, and the North Slope etc. Most of these areas they had to fly into as its the only way to get there.

SEP 05 2018
FISH, WILDLIFE & PARKS
WILDLIFE DIVISION

She once told a story about the Fish and Wildlife service when they developed a bear proof trash can. They put it out in the Grizzly habitat and put a camera on it. She said the grizzly came by, looked at the trash can gave it a swat with its paw and destroyed it. She said, 'Oh well, back to the drawing board.' My sister would still be there but she had to leave for family reason.

My take on this project is to protect the grizzleys and for Montana not to do what Wyoming and I don't want to do to allow for a hunting season. The people that complain the most about the grizzlys are the some people who built in the middle of their habitat and go wandering off of the trails they should follow. We need to protect the animal for years to come or we won't have them.

Michael E East
222 Fairview Ave
Missoula, MT 59801

BEAR HEARING- CONRAD, MT 9/19/18

Jim Morren, PO Box 714 Conrad, MT 59425

A common problem in so many things seems to be - determining how far to go.

Did we go too far or not far enough?

Obviously there are differing opinions on most everything.

It appears a significant portion of this report is concerned with how many bears in how big of an area a~~nd how many areas should there be~~?

I suggest this plan does not go far enough. If you could expand your plans farther to include more bears in a larger area than proposed, the establishment of viable populations wouldn't have to take so many years to accomplish the real goal, whatever that may be.

Instead of the current proposed boundaries I suggest the western boundary be moved to the Pacific coast and the eastern boundary zone 3 get expanded to the Atlantic coast of the US. While that may not be totally accepted at first- a compromise could possibly be east to the Mississippi River.

That would still allow for further expansion eastward almost immediately as I believe there are accounts of Daniel Boone fighting off bears in Kentucky not too long ago which would provide the proof needed that bears had been there before and therefore need to be allowed to be there once more.

Think of the efficiencies that could be gained! While locals now are offering to help reduce the risk of bear attractants by hauling dead animal carcasses away from their rural ranches as apparently bears shouldn't be encouraged to wander around the country side and residents in town and are being encouraged to pick up the apples that fall to the ground in their yards so as not to attract bears into town, the confused bears will be able to be relocated in their shiny new brushed aluminum bear traps (remember when they were actually real galvanized culverts?) and moved to a much larger territory!

I believe it is a win / win for all!

More bears, much faster.

A much larger area for them to live AS they used to. Obviously nothing has changed.

More people can have the grizzly bear experience - up close and personal.

Employment opportunities as more dead animal carcasses will need hauling and apple trees cut down.

Seriously, I encourage you to think much larger than what you are, and I don't mean territory or bear numbers.

Tunnel vision usually causes missing the big picture.

Thank you for your time.

Population Goal Grossly Inadequate

800-1,000 bears will not ensure long-term viability. From 2,500-5,000 grizzly bears are needed for survival and genetic variation. Since the NCDE isn't large enough to support this many bears, it must be linked with the other 4 grizzly bear sub-populations in the Northern Rockies.

Error in the Original 2004 Point Estimate (Kendall)

Extrapolated from more productive, secure area northern 1/3 including Glacier National Park, to the rest of the NCDE

Cherry Picked Study Area

Mace, et al. selected a study area with the most productive and secure habitat to derive vital rates and ***extrapolated these values*** across the entire NCDE.

Errors in the Estimated Population Growth Rate

The Conservation Strategy is based upon the Incorrect calculation that from 2004-2014 there was only a 5% chance the population was in decline. Harris (2013) concluded Mace et al. could not say with standard statistical certainty that the population was increasing.

According to a personal communication with Dr. Lee Metzgar there is something on the order of a **25% chance that the population actually declined over the period of the study, not the 5% reported.**

Exclusions and Inclusions of Mortalities

Bears That Die Outside the Core Areas Are Not Included for Growth rates

Counted when born, but not when they die

FWP using **"ghost bears"** to achieve the parameters for distribution of females with cubs across BMUs.

For example, this year two females with 3 cub groups were removed by vehicle collisions. They are included in the calculations for distribution in BMUs (Costello,

email 8//2018). If either or both of these groups crossed from one BMU into another in 2018, distribution could be counted in up to four different BMUs even though these eight bears are dead.

Accepted a higher value for male survival than the midpoint or mean of their results.

Can't separate habitat from demographics and survivability. Roads and road-related effects are taking a large toll on the breeding population.

FOLLOWING THE COURT RULING YOU HAVE AN OPPORTUNITY TO PULL BACK THIS DOCUMENT AND START OVER AGAIN IN A WAY THAT IS SCIENTIFICALLY AND LEGALLY SUFFICIENT

September 27, 2018

Dear FWP Commission Members,

Thank you for the opportunity to comment on elements of the Final NCDE Conservation Strategy.

The Proposed Rule contains the following "demographic objectives":

* Maintain females with offspring in at least 21 of 23 Bear Management Units;

* Maintain at least a 90% probability of 800 or more bears;

* Maintain an Independent Female survival rate of at least 90%;

* Maintain an Independent Male survival rate of at least 85%.

Here's your problem with putting all your eggs in those baskets – It rubber stamps the flawed NCDE Conservation Strategy, and it's demonstrably illegal. In 1997, 21 years ago, the federal court told the U.S. Fish and Wildlife Service that it could Not base claims of "recovery" on population numbers, trend, or occupancy of BMU's – Period – Full Stop.

If FWP continues to head off this Population and Occupancy cliff with the Fish & Wildlife Service – the same one FWS just ran off in Yellowstone - it won't lead to recovery; it won't lead to delisting; and it won't lead to Montana regaining State control.

So, what needs to change, and how can FWP get the U.S. Fish and Wildlife Service to make those changes? You have tremendous unused leverage here because without your signature, there is no Final Conservation Strategy. You can use that leverage to ensure that the Conservation Strategy Follows the Science, Obeys the Law, and actually leads to recovery.

(1) Grizzly bear populations cannot be delisted one isolated Distinct Population Segment (DPS) at a time. The impacts to the entire lower 48 population must be considered. Common sense says so, and the District Court in Missoula just said so. Focusing only on the NCDE and on

maintaining 800 grizzlies there doesn't recover grizzlies, doesn't solve the Fish & Wildlife Service's problem – and it doesn't solve yours.

(2) Back in that same 1997 court case, the Fish & Wildlife Service was ordered to develop Habitat Based Recovery Criteria (HBRC) before proposing delisting in any ecosystem. These were to detail the actual Quality and Quantity of habitat necessary to achieve and maintain a recovered population. FWS has refused, instead proposing Fake criteria around motorized route density, developed recreation sites, grazing allotments, vegetation management, and oil, gas, and mining activities. These deal with Habitat Security – NOT the actual Quality and Quantity of habitat on the landscape.

FWP biologists are habitat experts and could work with FWS to correct this fatal error in the Conservation Strategy. It's imperative that you push the Fish & Wildlife Service to do this if recovery, delisting, and a return of State management is ever going to happen. The proposed rule under consideration does nothing to develop these critical Habitat Based Recovery Criteria – and until that is done, an FWP commitment to 800 bears – or 1000 – will make Zero difference.

(3) If the required "Metapopulation" is going to happen, landscape level Linkages must be established and protected within and between all 6 recovery ecosystems, and be based on documented grizzly bear needs for habitat quality and security. The current Demographic Connectivity Areas are a sham, based on land manager preferences and political correctness.

The only document that solves this problem is Amendment 19 to the Flathead Forest Plan dealing with bears, roads, and habitat security, and must be the standard for determining viable linkage zones or demographic connectivity areas.

Brian Peck
96 trap Lane
Columbia Falls, Mt. 59912
glcrbear@centurytel.net

Recently, the Northern Continental Divide Ecosystem (NCDE) subcommittee of the Interagency Grizzly Bear Committee (IGBC) released its Conservation Strategy for the grizzly bear within the NCDE. The IGBC was formed 35 years ago to aid the cause of maintaining and ensuring a viable grizzly bear population within the lower 48 states. This effort is through the interagency coordination of state, federal and tribal management agencies employing the best management, research and regulatory policy.

The Conservation Strategy (CS) goal for this ecosystem summarizes the commitments and efforts by those agencies to manage and monitor the NCDE grizzly bear population and its habitat. I understand that the CS will be reviewed by those same agencies every five years, or perhaps sooner if necessary. And I want to thank the IGBC to subject these Conservation Strategies to public review and comment.

An important principal and functionality of the CS is the establishment of the demographic monitoring area or otherwise known as the DMA. The DMA is relegated to defining the core population of grizzly bears in the NCDE. According to the press release from Montana Fish, Wildlife and Parks,

"The DMA is comprised of the primary conservation area (which includes Glacier National Park and parts of five national forests including the Bob Marshall Wilderness Complex), and an area identified as zone 1, which is a buffer zone outside the primary conservation area. The objective in this area, as detailed in the conservation strategy, is continual occupancy by grizzly bears, which will require maintaining good habitat conditions and adhering to population criteria."

While I understand the importance of establishing the DMA, I also don't want to forget about the need to set a strategy for those bears which fall outside of the DMA.

Connectivity:

I was glad to see that the CS discusses the need of genetically diverse population throughout the range of the NCDE. The need to establish wildlife corridors between multiple populations of bears and other species is imperative. On page 15 in the Executive Summary, the following is stated.

"the goal of the Conservation Strategy is to maintain a recovered, genetically diverse grizzly bear population throughout the DMA while maintaining demographic and genetic connections with Canadian populations and providing the opportunity for demographic and/or genetic connectivity with other ecosystems. This will be achieved by the meeting the following objectives:

- *Objective 1: Maintain a well-distributed grizzly bear population within the DMA;*

• Objective 2: Manage independent female survival and independent male and female mortalities from all sources to support a 90% or greater estimated probability that the grizzly bear population within the DMA remains above 800 bears, considering the uncertainty associated with all of the demographic parameters; and

• Objective 3: Monitor demographic and genetic connectivity among populations."

Being I live in Bozeman and try to involve myself in the future policies of the Greater Yellowstone Ecosystem (GYE), I have great concern over the welfare of grizzly bears within the GYE. One of our goals, those of us who are actively engaged in this issue, is to try to reconnect the population of these bears to those populations to the north including the NCDE. While the quote above states the need for connectivity to other ecosystems as well as those in Canada, there doesn't seem to be a specific management policy as to how this would be accomplished. I would like to see more policy or detail in how this goal is to be achieved. On page 59, it states the following:

"Therefore, this Conservation Strategy is also designed to support demographic connectivity with the small grizzly bear population in the CYE and a potential future population in the BE, and to allow for genetic connectivity to the GYE."

My question is how is this going to be accomplished? I'm suspicious that there seems to be this thinking that grizzlies will accomplish enough "sufficient" connectivity without any positive management effort on our part. Is this true? That there is this idea that this will happen while we continue with administrative removals and probably some hunting. If this is true, we need to rethink our strategy. I did find this encouraging note on page 27, but this still leaves me with some questions.

"Based on analyses of movements made by NCDE and GYE bears fitted with GPS collars, Peck et al. (2017) delineated potential movement paths that would provide the opportunity for male-mediated gene flow between the NCDE and GYE. Model predictions indicated that male grizzly bear movement between the ecosystems could involve a variety of routes, and verified observations of grizzly bears outside occupied range supported this finding. Peck at al. (2017) reported that the closest proximity between the estimated occupied range for these two populations was about 68 mi in 2014 and similar analysis indicated the distance decreased to 56 mi by 2016. This distance is within the range of maximum dispersal distances (42–109 mi) documented for populations in the Rocky Mountain region (Blanchard and Knight 1991, McLellan and Hovey 2001, Proctor et al. 2004), indicating that male dispersal between the populations is plausible. In addition, six of the 14 reported observations of grizzly bears outside of occupied range occurred at least 37–71 mi from the distribution of either population, indicating that movements of this magnitude have already occurred (Peck et al. 2017). In fact, in the absence of DNA, it is impossible to ascertain the population of origin for several of these long-distance movements, given that they were roughly equidistant from the ranges of the two populations."

This is well and good but the CS is mainly emphasizing male movements between populations which makes sense and is what we would expect as bears begin to expand their territory. But this totally neglects mitochondrial DNA that is transmitted only by females which has a lot to do with energy metabolism and more. The diversity of mitochondrial DNA, as it seems to me, is likely to gradually decline in the GYE population without female connectivity. The CS needs to address this issue. From what I can tell, all the encouraging rhetoric about bears from the GYE and the NCDE population being seen at locations in proximity with one another (within the 37 miles stated of expected movement of individuals) are for bears seen apart in BOTH space and time. We really don't know how well these observations represent established populations, or how many years apart they have been. It makes one suspicious that the data is not being reviewed objectively.

Population Capacity:

It is stated several times within the press release and in the CS, the following quote. On page 9, in the preface, the following claim is made.

"In the revised Conservation Strategy, Objective 2 is to "manage mortalities from all sources to support a 90% or greater estimated probability that the grizzly bear population within the DMA remains above 800 bears, considering the uncertainty associated with all of the demographic parameters." Importantly, given the commitment to incorporate all forms of uncertainty into the population modeling, this objective necessitates maintaining an actual population size that is likely closer to 1,000 bears, and an even higher population size should uncertainty increase."

It is true that precise population estimates are difficult to obtain. But I'm wondering if even the number of 800 is scientifically too low. I find it interesting that the population of grizzly bears within the GYE is stated to be around 700-750 bears, just slightly under what is suspected to be within the NCDE. In an article by Jessianne Wright dated Dec. 11, 2017 she states the following.

"Frank van Manen, an IGBST (Interagency Grizzly Bear Research Study Team) research wildlife biologist who prepared the population report, said the estimate is meant to be conservative. "When we say 718, that number is probably closer to 1,000," van Manen said."

If this is true, saying something different from what we think there really is leads to confusion. There is a big difference between 718 and 1,000 bears. I believe the science needs to be better than this in order for us to understand what the ecosystem can truly hold. Perhaps this is why the number within the GYE is estimated (by some) to be lower than what the Greater Yellowstone Ecosystem can provide. With the mortality of bears deriving mostly from man-made causes, it is hard to tell what nature itself

would be willing to permit. I find it interesting the term "carrying capacity" was not used within the CS. I only found it mentioned once and that was found within a question in the public comments. Perhaps carrying capacity is an unknown quantity as it relates to grizzly bears, but an explanation would be helpful.

Livestock Operations:

I find it interesting the following comment which is found on page 43.

"Livestock operations can benefit grizzly bears through the maintenance of large blocks of open rangeland and habitats that support a variety of wildlife species (Dood et al. 2006). However, when grizzly bears were listed in 1975, the USFWS identified "...livestock use of surrounding national forests" as detrimental to grizzly bears "...unless management measures favoring the species are enacted." (40 CFR 31734, p. 31734)."

I have often found that Montana Fish Wildlife and Parks (MFWP) seems to accentuate the positive when it comes to how livestock interest benefits the interest of wildlife. What is the scientific proof of this relationship? Large blocks of open rangeland and habitats do support a variety of wildlife species, but in a natural, untrammeled landscape by man, those blocks of open land occurred based upon fire and other natural conditions, not because of livestock. Otherwise how did the grizzly or other species ever survive before the European white man arrived on the scene?

The paragraph concludes with the following statement.

"Impacts to grizzly bears from livestock operations potentially include:

- *direct mortality from control actions resulting from livestock depredation;*
- *direct mortality due to control actions resulting from grizzly bear habituation and/or learned use of bear attractants such as livestock carcasses and feed;*
- *increased chances of grizzly bear-livestock conflicts;*
- *displacement due to livestock or related management activity;*
- *direct competition for preferred forage species."*

I believe that whatever minimal benefits are to be gained by grizzlies and/or other species as a result of the livestock industry; they are vastly outweighed by the negative impact by that industry. I think the following quote found on page 43 is fairly accurate.

"Approximately 13% of all known human-caused grizzly bear mortalities in the DMA between 1998 and 2017 were due to management removal actions associated with livestock depredations. This human caused mortality is the main impact of livestock on grizzly bears in the NCDE. Most livestock-related grizzly bear mortalities occur on private lands along the Rocky Mountain Front

(RMF) and on the Blackfeet Indian Reservation (BIR), both of which are east of the Continental Divide."

On page 44 under the subtitle of Livestock Allotments, there is this quote.

"In the NCDE, most livestock depredations by grizzly bears occur on sheep or young cattle. While grizzly bears typically coexist with larger livestock without preying on them, when grizzly bears encounter smaller animals such as orphaned or separated calves, domestic sheep, goats, or chickens, they will often kill them (Jonkel 1980, Knight and Judd 1983, Orme and Williams 1986, Anderson et al. 2002). Honeybees, classified as livestock in Montana (MCA 15-24-921), can also be attractants to grizzly bears.

If repeated depredations occur, managers may relocate bears or remove them from the population. As such, areas with domestic livestock have the potential to become population sinks (Knight et al. 1988). Because of the increased risk to grizzly bears posed by actions taken to protect sheep and other small livestock, the IGBC Guidelines (USDA USFS 1986a) emphasized the reduction of these types of allotments within the Recovery Zone."

I believe the key is found within the last sentence in that quote. In order for grizzlies to be able to reach their natural population, whatever that number is, and in order for them to reach the connectivity that they once had, there needs to be a reduction of livestock allotments within the Recovery Zone. The question is: What are the plans going forward to make this become the reality?

Motorized and Non-motorized Use:

There is perhaps no other use of man that has a greater negative impact on grizzly bears than motorized and even non-motorized use. On page 40 under "Secure Core and Motorized Access Management" there is this paragraph.

"The negative impacts of humans on grizzly bear survival and habitat use are well documented (Harding and Nagy 1980, McLellan and Shackleton 1988, Aune and Kasworm 1989, McLellan 1989, McLellan and Shackleton 1989, Mattson 1990, Mattson and Knight 1991, Mattson et al. 1992, Mace et al. 1996, McLellan et al. 1999, White et al. 1999, Woodroffe 2000, Boyce et al. 2001, Johnson et al. 2004, Schwartz et al. 2010, Boulanger and Stenhouse 2014). These effects range from temporary displacement to actual mortality. Grizzly bears were displaced by vehicular traffic, motorized traffic, and at times non-motorized traffic, all in the NCDE (Mace and Waller, 1996, Mace et al. 1996, Graves 2002, Waller and Servheen, 2005) and in other grizzly bear populations (McLellan and Shackleton 1988, 1989, Boulanger and Stenhouse 2014, Ladle et al. 2018). Grizzly bear populations have survived where the frequency of contact with humans was very low (Mattson and Merrill 2002) because the large expanses of relatively secure core (areas without or with low levels of permanent human presence) resulted in lower human-caused mortality. These areas are primarily associated with National Parks, Wilderness Areas, and other large blocks of public lands (IGBC 1998). Maintaining habitat security is a major goal of this Conservation Strategy."

The science is clear as stated above, grizzlies and motorized use don't mix. Habitat security and motorized and even in some cases non-motorized use are not compatible. This scientific fact must be part of any Conservation Strategy. Mitigation measures should be taken when possible to alleviate the threat and pressures placed on grizzlies and other species by intrusions into and across landscapes. This could mean working with other groups such as Montanans for Safe Wildlife Passage who try to find and fund mitigation efforts of roadways and byways as they cut across large landscapes. This also means to try and maintain roadless areas intact. What are the plans to do just that?

As far as non-motorized use, there is a rationale where those areas of high-intensity use should also be considered as having a negative impact on grizzly bear habitat. See the following statement found on page 41.

"Since 1995, NF in the NCDE have considered non-motorized trails meeting this definition of high-intensity-use as the equivalent of an open road."

Even though there is this quote on page 41,

"The approach to subtract high-intensity-use non-motorized trails from core habitat calculations is not clearly supported by the existing scientific literature. Although multiple studies document displacement of individual grizzly bears from non-motorized trails to varying degrees (Schallenberger and Jonkel 1980, Jope 1985, McLellan and Shackleton 1989, Kasworm and Manley 1990, Mace and Waller 1996, White et al. 1999), none of these studies documented increased mortality risk or population-level impacts as a result of displacement."

There is this statement also found on page 41.

"While growing human populations ensure that human use of non-motorized trails in the NCDE will continue to increase, the effects of these future increases will be mitigated through management of motorized access and developed recreation sites, conflict prevention outreach and education, food storage orders, and continued presence of law enforcement and field staff as described in this Conservation Strategy. If research demonstrates that high-intensity-use nonmotorized trails do significantly impact grizzly bear populations or that there are areas of significantly higher mortality risk near high-intensity-use non-motorized trails (as opposed to other trails or roads), this new information will be appropriately considered and incorporated through an adaptive management approach. Revisions to this Conservation Strategy will be made if necessary to conserve the NCDE grizzly bear population."

This whole concept of use in backcountry areas needs to be closely watched, monitored and perhaps researched. We already know that the statement found on page 40 is true. It is a given that grizzlies and man's activities do not mix. It only makes

sense that the more recreational use and high-intensity use that an area gets, it will have a negative impact on these magnificent bears. This issue becomes more critical as there is a push in today's society to allow mountain biking in wilderness areas. This will only allow for more potential of bear to human conflicts.

Climate Change:

My final thought on the CS relates to what I believe is the unknown quantity of climate change. We know that climate change exists and that it will have an impact on our natural world. What we don't know is how much of an impact will there be. I think many scientists already believe climate change has had more of an impact on our climate and natural world at a faster rate than what scientists first predicted. On page 45 under the heading of Climate Change, there is this statement.

"Climate change may result in a number of changes to grizzly bear habitat, including a reduction in snowpack levels, shifts in the abundance and distribution of some natural food sources (Rodriguez et al. 2007), and changes in fire regimes (Nitschke and Innes 2008, McWethy et al. 2010) that could contribute to a shorter denning season (Leung et al. 2004) and shifts in denning times (Craighead and Craighead 1972, Van Daele et al. 1990, Haroldson et al. 2002, Johnson et al. 2018 (black bears))."

But immediately following that sentence; there is this statement.

"Most grizzly bear biologists in the U.S. and Canada do not expect habitat changes predicted under climate change scenarios to directly threaten grizzly bears (Servheen and Cross 2010). These changes may even make habitat more suitable and food sources more abundant."

Then immediately following that statement, there is this.

However, these ecological changes may also affect the timing and frequency of human-grizzly bear interactions and conflicts (Servheen and Cross 2010).

Climate change could create temporal and spatial shifts in grizzly bear food sources (Rodriguez et al. 2007, Roberts et al. 2014). Changes in plant community distributions have already been documented, with species' ranges shifting further north and higher in elevation due to environmental constraints (Walther et al. 2002, Walther 2003, Walther et al. 2005) or outbreaks of insects or disease (Bentz et al. 2010). A net loss in forested areas is anticipated as forest contraction occurs more rapidly than forest expansion, with an expected increase in productivity in montane, subalpine, and alpine areas and a decrease in productivity in lower elevation, warmer, and drier sites (Whitlock et al. 2017).

Changes in vegetative food distributions may also influence other mammal distributions, including potential prey species like ungulates (White et al. 2018). Montana is experiencing a longer growing

season with an earlier spring and extended summer (Whitlock et al. 2017). While the extent and rate to which individual plant species will be impacted is difficult to foresee with any level of confidence (Walther et al. 2002, Fagre et al. 2003, Roberts et al. 2014), most bear biologists agree that grizzly bears are flexible enough in their dietary needs that they will not be impacted directly by ecological constraints such as shifts in food distributions and abundance (Servheen and Cross 2010).

There is a danger in assuming that grizzlies can adapt to climate change because of their dietary habits. At some degree, those habits will be stressed. We need to realize there seems to be an unknown quantity as stated before about what impacts will truly take place on the habitat and behavior of grizzly bears. I could further prove my point by stating excerpts from page 46 as it pertains to how fire regimes and frequency affect grizzly bear habitat. The truth is no one really knows to what extent these changes will take place and to what degree of severity. But we should be prepared for the worse, because climate change has already been proven to be a formidable foe, much earlier and severe than expected. As stated earlier, because of climate change, bears could also have more human/bear conflicts, a thought that rarely is discussed by the populace.

Summation:

There is much more to review and comment as it relates to the Conservation Strategy of the NCDE grizzly bears. I've commented on those actions and issues that I believe have the greatest potential of threats to the future populace of bears and to the future establishment of connectivity corridors. These corridors are essential to the genetic viability of other populations of bears in the Northern Rockies and surrounding recovery zones in the lower 48 states. I do applaud the direction and desire that is stated within the CS as it pertains to conserving these iconic bears in the contiguous states. Grizzly bears will not be truly conserved until they can recover more of their traditional range and habitat. We can do that, but it will take proper land management policies and the will of the American people.

Climate change, motorized and non-motorized use, livestock operations will all have a negative impact on the general population of bears and the connectivity of bears if we don't have a CS that will help manage those issues now. Grizzlies will not and cannot extend their range if they are shot outside the DMA. While I understand the concept of the establishment of the DMA, there must be a plan to address those instances where problems occur outside of this concept. For how else will connectivity occur?

Thank you for allowing public comment. Please take my comments under consideration.

Clinton Nagel
1385 Golden Gate Ave
Bozeman, MT 59718

From: Stephen Roth
To: FWP GRIZZLY BEAR ARM,
Subject: Comments on proposed grizzly bear population administrative rule.
Date: Friday, September 07, 2018 2:17:09 PM

The comments listed below are based on a review of the Conservation Strategy for the Grizzly Bear in the Northern Continental Divide Ecosystem Report, July 2018.

The NCDE report in my opinion is well sourced and represents the best comprehensive analysis of the Grizzly Bear status to date.

As I stated earlier the report represents the best data available on the NCDE Grizzly Bear, therefore my comments will site many of the findings as reported in this document.

There are 6 points that I want to address that give me pause for concern.

First, as reported on page 25, "Grizzly Bears live in relative low population densities, disperse slowly and are vulnerable to human caused mortality"

Second, as reported on page 24, "Grizzly Bears have one of the slowest reproductive rates among terrestrial mammals in North America"

Third, also reported on page 24, "The average first reproductive age for a female Grizzly is between 5-7 years" Based on this, "it may take a female Grizzly 10 years to replace herself"

Forth, as reported on page 30, "Human caused mortality is a limiting factor for nearly all Grizzly Bear populations in the lower 48 states".

Fifth, as reported on page 37, is the most critical for future management of the Grizzly, is that managers, currently do not have the ability to obtain a reliable population estimate on an annual basis. Therefore, managers can not with some sense, accurately determine their yearly status. An example as provided on page 35, reports the 2017 population estimate is between 884 to 1190 bears, that's a difference of 306 bears. To a species that has a slow reproductive rate, that's a huge number.

The sixth and final point, is the list of participants in the report and future management players. As mentioned earlier the report was well sourced and much of that sourcing came from the academic community. My concern is why were there no academic institutions represented in drafting this plan, other than data sourcing. I feel it's critical that a Non Governmental Organization, free from political bias or influence be apart of any current and future decisions.

To sum up my concerns, it became clear to me after reading this report that the Grizzly Bear, although represents strength in stature, is in fact a fragile species in need of continued protection. It took nearly 40 years to bring them back from the brink in the lower 48 states. Considering 40 years of protection, their relatively low population density to start with, slow reproduction status, inaccurate population analysis, decreasing suitable habitat, and losses related to human/bear conflicts (without hunting) all supports the need for continued protection under the law. That protection can be by Federal or State, but currently I don't

believe the State can make a suitable management decision without the influence of politicians that often have a different agenda. Many high level state bureau chiefs are appointed and must bow to the political whims of their state. So, I revert the protection back to the Federal agency assigned to over see the Endangered Species Act. As with Wyoming and Idaho it appears to be a race to hunt the Grizzly since delisting, this mythology doesn't support the facts in this report. The Grizzly is clearly still threatened at best and will require continued protection, maybe long into the distant future in order to maintain a healthy and viable population here in Montana.

Thank you,

Respectfully
Stephen Roth
Certified Wildlife Biologist (The Wildlife Society)
Kalispell, Mt

From: WildEarth Guardians on behalf of _____
To: FWP GRIZZLY BEAR ARM,
Subject: Do Not Sign the Flawed Conservation Strategy
Date: Tuesday, October 30, 2018 5:27:05 PM

Oct 22, 2018

Montana Fish, Wildlife, and Parks

Dear Wildlife, and Parks,

Thank you for the opportunity to comment on the proposed grizzly bear Administrative Rule Making (ARM) adopting Chapter 2 of the Conservation Strategy for the Northern Continental Divide Ecosystem (NCDE) population of grizzly bears. However, the State's decision to only accept comment on a single isolated chapter, and only on a single still-isolated population of grizzlies undermines the effectiveness and potential of the ARM. I urge you to develop and provide a public comment opportunity on a broader state grizzly bear management plan, including efforts the state can and should undertake to ensure connectivity between the still isolated populations within Montana. Rather than managing for a bare minimum of bears, Montana can embrace this icon of the West, adopt common sense management practices and ensure a vibrant grizzly population well into the future.

First, Montana should not sign the Conservation Strategy until the full revised document undergoes a full notice and comment public process. The draft Conservation Strategy that did undergo public comment is over five years old and circumstances have changed significantly as has the Strategy: populations have changed, unprecedented mortality is occurring in both the NCDE and Greater Yellowstone Ecosystem (GYE) populations, the legal status of the GYE population has changed twice, the science on grizzly bears and their food sources have advanced, climate change impacts are increasing, land management agencies have significantly altered their plans, and more. Just the summary of the changes to the Conservation Strategy demonstrates the need for a new public review process. The federal government's failure to undertake a public comment process is also a legal vulnerability which could cost Montana valuable staff time and public money. Montana should insist through the IGBC that the Conservation Strategy go out for public comment before the state signs the document. The state should also provide the full range of issues contained in the Conservation Strategy for public comment through the state process. Limiting the comment to Chapter 2 significantly narrows the scope and provides for an incomplete and indeed misleading glimpse of the future management plan.

Second, Montana should not rely on a flawed population target as a management goal. Eight hundred bears is far too few to guarantee connectivity and genetic exchange amongst the isolated populations. Moreover, basing the measurement on the total population instead of the effective population is scientifically unsound. The reproducing members of the population are those that truly can measure the security of the population. Montana's grizzly bear biologist Cecily Costello admitted at the public hearings that the model does not account for dispersing

bears: that flaw should be fixed well before the Conservation Strategy is signed, let alone implemented. Given that the NCDE bears are still not achieving natural connectivity with the other isolated populations, the current population is clearly not large enough. Therefore, it makes absolutely no sense to allow for any reduction in the NCDE population in the future.

Third, Montana should do more than adopt the bare minimum approach outlined in the Conservation Strategy. The Commission and the Department should immediately implement basic bear safety practices, including requiring all hunters to carry bear spray. FWP should work with the Department of Transportation to lower speed limits in areas where bears are known to cross roads (and where bears have been killed), especially at night, both to facilitate bear dispersal and keep bears and motorists safe. FWP should also work to identify additional locations for wildlife crossings and seek state and federal funds to implement them. FWP should look for additional ways to safeguard connectivity corridors between the still isolated populations. FWP should implement uniform food storage orders throughout the state to safeguard grizzlies and people alike. These are just some of the basic steps FWP could take to make Montana safer for grizzlies.

Finally, I urge FWP and the Commission to abandon and reject any plans to establish grizzly trophy hunting seasons. Put simply, grizzlies are worth far more to Montana alive than dead. This is true ecologically as well as economically. Grizzlies are a huge draw for Montanans and out of state tourists alike. As a very slow reproducing animal, one that is not eaten and that is a natural regulator of ungulate populations, Montana should embrace grizzlies as a non-game species and manage them accordingly. Far too many bears are already dying in preventable hunter conflicts and road kill incidents. Montana should follow the example of British Columbia and reject grizzly trophy hunting. Any and all references to trophy hunting of grizzlies as a "management tool" should be removed from existing ARMs.

I look forward to Montana managing grizzlies for the invaluable
resource that they are.

Sincerely,

[Each letter contained the name and contact information for the person who submitted letter.]

From:	lancolsn@gmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Friday, August 24, 2018 1:10:42 PM

It would be arbitrary and capricious to assume that any specified number of grizzly bears could be maintained without habitat sufficient to support that number of bears. And, importantly to all wildlife in Montana, and possible especially so for grizzlies, habitat is expose to change of more kind than one.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	pbaxter289@aol.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Sunday, September 16, 2018 9:48:48 AM

Population objectives that are required to be established should reflect the best estimate of normally, unencumbered numbers expected to exist in the area. Management should be geared toward maintaining and improving their habitat and public education for coexistence, not culling.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From: _____
To: FWP GRIZZLY BEAR ARM,
Subject: Make the strongest plan possible for the future of all Montanaâ€™s grizzly bears
Date: Thursday, October 11, 2018 9:55:46 PM

Dear Wildlife and Parks,

Dear Director Williams,

Make a stronger plan that focuses on connectivity, recovery, and conflict management for your proposed management of Northern Continental Divide grizzly bears.

The importance of grizzly bears in the Northern Continental Divide Ecosystem (NCDE) as a source population for broader recovery of grizzly bears in the lower 48 states, including the critically-imperiled Cabinet-Yaak populations and restoration of grizzlies to the Bitterroot ecosystem, cannot be overstated. Additionally, establishing genetic and demographic connectivity between the NCDE and Greater Yellowstone populations is critical to full recovery of grizzly bears, FWP should explicitly commit to establishing demographic connectivity, as well as genetic connectivity, between the NCDE and Greater Yellowstone grizzly populations.

You must explicitly commit to maintaining a stable-to-increasing population of 1,000+ grizzly bears in the NCDE and allowing bears to expand their range. Research shows that a population of several thousand grizzly bears in the lower 48 is necessary for full recovery. Additionally, there is no discussion in the proposed regulation of population estimation methodology and whether the current methodology will be used in the future. This is an important issue and must be addressed in the regulation.

Survival rates and mortality thresholds specified in Section 3 of the proposed regulation, based on Chapter 2 of the NCDE Grizzly Bear Final Conservation Strategy, exceed female survival rates and independent female/male mortality thresholds as per FWP's own research to ensure long-term sustainability of the NCDE grizzly bear population. Additional research is needed by independent scientists to adequately discern appropriate survival rates and mortality thresholds.

The public raised numerous issues regarding grizzly bear habitat and conflict management, critical factors in achieving full recovery of the NCDE grizzly bear population, that were not adequately addressed or accounted for in the NCDE Grizzly Bear Final Conservation Strategy. In addition to population factors/Chapter 2 of the Conservation Strategy, MT FWP must also invite and consider public comment on Chapters 3 and 4 of the Conservation Strategy regarding habitat and conflict management.

All or part of four of the six grizzly bear recovery areas in the lower 48 are in Montana; thus Montana is absolutely key to broader grizzly recovery and the state must get it right.

Sincerely,

Sincerely,

[Each letter contained the name and contact information for the person who submitted letter.]

This message was sent by KnowWho, as a service provider only, on behalf of the individual noted in the sender information.

From:	Pieske, Shawna on behalf of FWP General
To:	Williams, Martha; McDonald, Ken; Daniel Vermillion - FWP (dan@sweetwatertravel.com); Logan Brower; Rich Stuker; Shane Colton; Tim Aldrich (Cartim8@gmail.com)
Cc:	Speeg, Karen
Subject:	FW: grizzly bears
Date:	Friday, October 26, 2018 8:29:21 AM

Grizzly Comment.

From: Libby Schecher [mailto:libbyrs@mineql.com]
Sent: Friday, October 26, 2018 8:26 AM
To: FWP General <fwpgen@mt.gov>
Subject: grizzly bears

Dear Director Williams,

Make a stronger plan that focuses on connectivity, recovery, and conflict management for your proposed management of Northern Continental Divide grizzly bears.

The importance of grizzly bears in the Northern Continental Divide Ecosystem (NCDE) as a source population for broader recovery of grizzly bears in the lower 48 states, including the critically-imperiled Cabinet-Yaak populations and restoration of grizzlies to the Bitterroot ecosystem, cannot be overstated. I lived in northwestern Montana for six years and regularly hiked in the Cabinet Wilderness area, outside Libby. Being in an ecosystem that included grizzly bears was one of the highlights of my life.

Additionally, establishing genetic and demographic connectivity between the NCDE and Greater Yellowstone populations is critical to full recovery of grizzly bears, FWP should explicitly commit to establishing demographic connectivity, as well as genetic connectivity, between the NCDE and Greater Yellowstone grizzly populations.

You must explicitly commit to maintaining a stable-to-increasing population of 1,000+ grizzly bears in the NCDE and allowing bears to expand their range. Research shows that a population of several thousand grizzly bears in the lower 48 is necessary for full recovery. Additionally, there is no discussion in the proposed regulation of population estimation methodology and whether the current methodology will be used in the future. This is an important issue and must be addressed in the regulation.

Survival rates and mortality thresholds specified in Section 3 of the proposed regulation, based on Chapter 2 of the NCDE Grizzly Bear Final Conservation Strategy, exceed female survival rates and independent female/male mortality thresholds as per FWP's own research to ensure long-term sustainability of the NCDE grizzly bear population. Additional research is needed by independent scientists to adequately discern appropriate survival rates and mortality thresholds.

The public raised numerous issues regarding grizzly bear habitat and conflict management, critical factors in achieving full recovery of the NCDE grizzly bear population, that were not adequately addressed or accounted for in the NCDE Grizzly

Bear Final Conservation Strategy. In addition to population factors/Chapter 2 of the Conservation Strategy, MT FWP must also invite and consider public comment on Chapters 3 and 4 of the Conservation Strategy regarding habitat and conflict management.

All or part of four of the six grizzly bear recovery areas in the lower 48 are in Montana; thus Montana is absolutely key to broader grizzly recovery and the state must get it right.

Sincerely,
Elizabeth R. Schecher

From:	Pieske, Shawna on behalf of FWP Commission
To:	McDonald, Ken; Daniel Vermillion - FWP (dan@sweetwatertravel.com); Logan Brower; Rich Stuker; Shane Colton; Tim Aldrich (Cartim8@gmail.com)
Cc:	Speeg, Karen
Subject:	FW: encountering problems submitting my comments on grizzly bear management plan
Date:	Friday, October 26, 2018 9:50:24 AM

Grizzly comment.

From: Chris Lish [mailto:lishchris@yahoo.com]
Sent: Friday, October 26, 2018 9:04 AM
To: FWP General <fwpgen@mt.gov>; FWP Commission <FWComm@mt.gov>
Subject: encountering problems submitting my comments on grizzly bear management plan

Friday, October 26, 2018

To whom it may concern:

Over the past 48 hours, I have attempted numerous times in three different browsers (Internet Explorer 11, Google Chrome, and Mozilla Firefox) to submit the comments included below through the public comment form on http://fwp.mt.gov/news/publicNotices/rules/pn_0265.html . Every time after clicking on the "Submit Comments" button, I have received a message indicating that "The requested URL was rejected. Please consult with your administrator. Your support ID is: 17691500984467796005 [or some other number was provided]." Given that the deadline for comment is tonight and I am unlikely to have other opportunities to try to submit the comments again, I am sending them to the fwpgen@mt.gov and fwcomm@mt.gov email addresses, hoping that my comments will be accepted and forwarded on to the appropriate officials.

I suspect that I am not the only individual encountering this problem and would encourage the commission to ensure that the bug in the comment form is fixed and to extend the public comment deadline.

Thank you for your attention to this issue.

Sincerely,
Christopher Lish
San Rafael, CA 94903

Wednesday, October 24, 2018

Montana Fish & Wildlife Commission
1420 East Sixth Avenue
P.O. Box 200701
Helena, MT 59620-0701

Subject: Make the strongest plan possible for the future of all Montana's grizzly bears -- Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem

Dear Montana Fish & Wildlife Commission Chairman Dan Vermillion, Commissioners, and Fish, Wildlife and Parks Department Director Williams,

I strongly urge the Montana Fish & Wildlife Commission to approve a strong plan that focuses on connectivity, recovery, and non-lethal conflict management for the state's proposed management of Northern Continental Divide grizzly bears.

> *"Our duty to the whole, including to the unborn generations, bids us to restrain an unprincipled present-day minority from wasting the heritage of these unborn generations. The movement for the conservation of wildlife and the larger movement for the conservation of all our natural resources are essentially democratic in spirit, purpose and method."*
> *-- Theodore Roosevelt*

The importance of grizzly bears in the Northern Continental Divide Ecosystem (NCDE) as a source population for broader recovery of grizzly bears in the lower 48 states--including the critically-imperiled Cabinet-Yaak populations and restoration of grizzlies to the Bitterroot ecosystem--cannot be overstated. Additionally, establishing genetic and demographic connectivity between the NCDE and Greater Yellowstone populations is critical to full recovery of grizzly bears. The Fish, Wildlife and Parks Department (FWP) should explicitly commit to establishing demographic connectivity, as well as genetic connectivity, between the NCDE and Greater Yellowstone grizzly populations.

> *"Nothing is more priceless and more worthy of preservation than the rich array of animal life with which our country has been blessed."*
> *-- Richard Nixon, on signing the Endangered Species Act on December 28, 1973*

You must explicitly commit to maintaining a stable-to-increasing population of one thousand or more grizzly bears in the NCDE and allowing bears to expand their range. Research shows that a population of several thousand grizzly bears in the lower forty-eight is necessary for full recovery. I am concerned that there is no discussion in the proposed regulation of population estimation methodology and whether the current methodology will be used in the future. This is an important issue and must be addressed in the regulation.

> *"Every form of life is unique, warranting respect regardless of its worth to man, and, to accord other organisms such recognition, man must be guided by a moral code of action."*
> *-- The World Charter of Nature, adopted by the United Nations General Assembly in 1982*

Survival rates and mortality thresholds specified in Section 3 of the proposed regulation, based on Chapter 2 of the NCDE Grizzly Bear Final Conservation

Strategy, exceed female survival rates and independent female/male mortality thresholds as per FWP's own research to ensure long-term sustainability of the NCDE grizzly bear population. Additional research is needed by independent scientists to adequately discern appropriate survival rates and mortality thresholds.

> *"Every man who appreciates the majesty and beauty of the wilderness and of wild life, should strike hands with the farsighted men who wish to preserve our material resources, in the effort to keep our forests and our game beasts, game-birds, and game-fish--indeed, all the living creatures of prairie and woodland and seashore--from wanton destruction. Above all, we should realize that the effort toward this end is essentially a democratic movement."*
> *-- Theodore Roosevelt*

The public raised numerous issues regarding grizzly bear habitat and conflict management, critical factors in achieving full recovery of the NCDE grizzly bear population that were not adequately addressed or accounted for in the NCDE Grizzly Bear Final Conservation Strategy. In addition to population factors/Chapter 2 of the Conservation Strategy, MT FWP must also invite and consider public comment on Chapters 3 and 4 of the Conservation Strategy regarding habitat and conflict management.

> *"A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise."*
> *-- Aldo Leopold*

All or part of four of the six grizzly bear recovery areas in the lower forty-eight are in Montana; thus Montana is absolutely key to broader grizzly recovery and the state must get it right.

Thank you for your consideration of my comments. Please do NOT add my name to your mailing list. I will learn about future developments on this issue from other sources.

Sincerely,
Christopher Lish
San Rafael, CA

RECEIVED
OCT 26 2018
FISH, WILDLIFE & PARKS
WILDLIFE DIVISION

Grizzly Demographic Objectives in the NCDE ARM 12-505
Written Comment

Name: Jack Greenwood
Address: PO Box 400 Seeley Lake MT 59868
E-mail: jgreenwood@seeleylake.net

We live one mile west of Placid lake. We have a few cows, horses + chickens. Since 2010, we have seen an increasing number of grizzly bears. Currently, the only loss we have experienced are a few chickens. I reported the incident to FWP and Jamie Jonkel tried to live trap the bear, with no success. In the last year - fall of 2017 - fall of 2018, I have had 4 separate grizzly bears in my yard - 30 yards or less from my house, in daylight hours. We have visually seen these bears. Our dogs bark at them, yet they seem to show no fear. I have shot these bears with bird shot. I have also told this to Scott Eggerman, local FWP biologist. The bears are too close, show little to no fear and we are concerned for our safety. We are not leaving or changing our lifestyle - cattle, horses, chickens, just to accomodate grizzly bears. The last bear literally walked right under the swing set that my grandkids love to play on. The day is coming when I will have to shoot + kill one of these 'protected' bears just to protect my family + property.

- The animal activists scream for more bears, yet they are not the ones who have to deal with them. More bears on the landscape puts more pressure on everything else, wild life, livestock, + people.

① We do not need more grizzly bears.
② We need a better way to manage - de listing.
③ to be criminlized for protecting family + property - livestock - is fundamently wrong.

- I understand the position MT FWP is in. Held hostage by US FWS and threatened by lawsuits from animal right activists. Some where are the local landowners, who make a living here, raise families + won't leave. Our rights need to be heard just as much as everyone else.

Jack Greenwood

All comments must be received by 10/26/18 at 11:59 pm, and can be sent to:
Grizzly Bear ARM Comments – Wildlife Division,
PO Box 200701, Helena, MT 59620-0701
or emailed to FWPGRIZZLYBEARARM@mt.gov
Thank you for your comment.

From:	tylerandkim@peoplepc.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Friday, October 26, 2018 3:03:03 PM

To whom it may concern,

I'm in favor of delisting the Grizzly Bear.

Not only for the sake of livestock producers, but also for the safety of adults and children living in rural and urban communities. If delisted, populations can be managed through a hunting permit process similar to the wolf program.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	kariandkaleblewis@gmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Friday, October 26, 2018 5:07:46 PM

Thank you for the opportunity to comment. I strongly support the delisting of the grizzly bear in our region. Sound science has shown that the population is at sustainable levels. There have been so many Facebook pictures and stories of bears in our area, in large groups even, that clearly they are not in danger of extinction.

Beyond that, we in rural Montana need the ability to manage the bears. Yes, we will be living with grizzly bears in our backyard. However, we should not have to fear the bears. They should have a healthy fear and respect of humans, not the other way around. By delisting the bear and allowing us to manage the bears, we can help prevent the problem bears that have no respect for human life. These problems would not be tolerated in the city. Rural Montana should not have to tolerate them either. Our lives matter as well.

Again, I strongly urge you to delist the grizzly bear. The science clearly shows the population is stable.

Thank you,
Kari Lewis
Cut Bank, MT

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From: Julie Bemer
To: FWP GRIZZLY BEAR ARM,
Subject: Grizzly bear de-listing
Date: Friday, October 26, 2018 5:50:58 AM

I am in favor of de-listing grizzly bears. There are increasing man-grizzly encounters occurring. Too many.

Sent from my iPhone

From: Zach G
To: FWP GRIZZLY BEAR ARM,
Subject: Bear Population MT
Date: Monday, August 27, 2018 10:45:40 PM

Hello,
I believe their should be a temporary lifting of the endangered species act to allow hunting them to better control the population. There has been an increase in activity and then roaming into places they haven't been for years. I feel they are becoming a threat to the public safety of humans as they are becoming more prone to accessing human occupied areas.
Respectfully,
Zach Gilman
Gilmzack@gmail.com

From: Tari Heppe
To: FWP GRIZZLY BEAR ARM,
Subject: Comment on NCDE administrative rule, delisting grizzly bears
Date: Tuesday, August 28, 2018 8:18:41 AM

Dear FWP,
I have been waiting for the opportunity to comment on the buildup and eventual delisting of grizzly bears in NW MT. I have lived in MT for 35 years, 32 years at my current residence outside Plains, MT. In all those years I have never seen or had reason to fear running into a grizzly bear in my "neighborhood", a group of residences along a country road.
Spring of 2018, when the forests were lush with runoff and growth from a great winter's snowfall a grizzly bear was caught on a game camera less than a half mile from my home. This was confirmed by FWP. It was near a home across the road from us. Hunters, recreationalists, and families have to be wary of this great predator in places they have never had to worry about before. Our children and grandchildren cannot play in the yard without being concerned that a once unheard-of animal in these parts may suddenly appear.
I am a person who knew when I moved to Montana that there are wild animals! One of the things I love about living here is the abundance of game. There was always a place for the great grizzly bear in Montana and it seemed to be important that they not be where people lived. Although more and more people are moving into grizzly bear habitat, it is not the case in this area that has been populated by people and homes for many decades. The bear has moved into this neighborhood, not the other way around.

I do not see any provisions for actions that could be taken if the grizzly bear becomes more adapted to being near homes and around people. I would like for consideration to be given to Montana residents who may experience intrusion by grizzly bears. In places where sightings have traditionally been common there should not be a problem. However, for those of us who have not lived in grizzly bear habitat before their presence is shocking and most unwelcome.

For this reason I am very happy the griz is set to be delisted! They need to have respect for people. Please do not fail to recognize the increased presence of this great animal in areas previously "not habitat" for them. If we want to go back to the 1800's then people must be ready to defend themselves from all manner of wild animals, without laws that regulate or forbid it. I do not think that's what we want at all. I am not sure that grizzly bear roamed these parts in the 1800's either?

Thank you for the opportunity to respond to the upcoming delisting of the grizzly bear and the rules that will guide their future in the state of Montana.

Sincerely,
Tari Heppe
Plains, MT

Sent from my iPad

From: Sam
To: FWP GRIZZLY BEAR ARM,
Subject: Delisting Grizzly Bears
Date: Tuesday, August 28, 2018 11:47:35 AM

Hello,

I fully support the delisting of the NCDE grizzly bear. These animals should be managed by the State of Montana and MTFWP through the use of science and the North American model of conservation. The NCDE grizzly bear has recovered and exceeded the goals set out by its original listing. The time has come to delist these animals, celebrate their successful recovery, and return their management to local control and the State of Montana.

Although I do not live in Montana, my father is from Montana and my grandparents still live in Montana. Our family has a cabin and acreage near Lincoln on Flescher Pass. I remember as a boy playing in the creek that runs through our property or hiking the hills with relatively little concern about Grizzly Bears. Although my grandpa taught me to be bear aware and I lived by this motto in the woods, only black bears had been seen on our or neighboring properties. Grizzlies were present in my mind, but I was not likely to encounter one. Now when I take my young boys to our family cabin we hear stories from our neighboring cabins and homes that grizzly bears are being seen fairly routinely. While this expansion of grizzly bear range definitely changes some things, it is not necessarily a bad thing.

I am an avid outdoorsman, hunter, and conservationist. I fished the Blackfoot River this summer and I am returning to my cabin this fall to hunt deer as a successful non-resident applicant. I am not against grizzly bears. I am not against grizzly bears being on my property or living in the same mountains that I roam. In fact, I think it is kind of cool and I envision a grizzly bear encounter to be an incredible experience (as well as potentially extremely dangerous). I am however concerned, that if grizzly bears are not quickly managed by those who know best (Montanans), that grizzly bear/human conflict will increase sharply. If you read MT newspapers or even your own publication “Montana Outdoors” it is no secret that grizzly bears have been showing up in places where they have not been present in decades and in some cases, probably a century. Some of these places are no longer suitable for grizzly bears. Grizzly bears need to be more closely managed to ensure that they continue to expand their range and population only in areas and ways that are acceptable to a modern Montana, not the Montana of 1800. Montanans and MTFWP are uniquely situated to make these decisions using science and the North American model of conservation. I hope you will move in the direction of conservation and delist the NCDE grizzly bear.

Thank you for your time,
-Sam Oliver

From: Andy Boryan
To: FWP GRIZZLY BEAR ARM,
Subject: Delisting NCDE Grizzlies
Date: Friday, August 31, 2018 7:46:29 AM

My name is Andrew Boryan. I'm an anesthesiologist who resides in Pennsylvania but have considerable ties to Montana and specifically the NW section of Montana. My father was born in Butte; his family moved east while he was still young. Until recently, we still had living relatives in Anaconda whom we visited often. In recent years we have spent every summer in the Kootenai River area staying around Libby to fish. I intend to elk hunt district 101 or 103 next fall. I am strongly in favor of delisting the NCDE Grizzly population. I'm not certain that I myself would ever purchase a grizzly tag, however I strongly believe that the state wildlife management agency should be in charge of managing the population as their data sees fit. I'm very thankful Grizzlies are back in the ecosystem and I hope to see one in person from a safe distance someday. I'm glad the ESA plan worked well, and from what I have read the populations are at a sustainable level. As with all other game species which MT has been managing well, I would like to see money coming in to the agency in the form of fees and the injection of money into the vital sporting economy of Montana. Thank you for your hard work on behalf of sportsmen and women everywhere.

Sincerely

Dr. Andrew Boryan

From: T. Miller
To: FWP GRIZZLY BEAR ARM,
Subject: De-Listing NCDE Grizzly Bears
Date: Tuesday, August 28, 2018 10:29:08 AM

It has recently come to my attention through the RMEF that public input is being sought regarding delisting Grizzly Bears in the Northern Continental Divide Ecosystem.

https://elknetwork.com/public-input-sought-on-delisting-ncde-grizzlies/

I support the delisting of Grizzly Bears in this region. Additionally, I feel very strongly that Montana FWP is the agency that can best manage wildlife populations in Montana.

Thank you for your consideration.

Sincerely,
Todd Miller

From: DJ Rankosky
To: FWP GRIZZLY BEAR ARM,
Subject: Delisting
Date: Tuesday, August 28, 2018 10:28:55 AM

I absolutely support delisting grizzly bears in the NCDE.

DJ Rankosky, Kalispell

Sent from my Galaxy Tab® A

From: Judy Cornell
To: FWP GRIZZLY BEAR ARM,
Subject: Fwd: Comment re: grizzly management
Date: Sunday, September 30, 2018 10:01:56 AM

Hello,
My husband and I have hunted along the Front for 20-plus years. More than half of the places where we hunted for birds and big game, we no longer go to because of the strong possibility of running into a grizzly. And that's okay with us. We've shifted farther east looking for new places to hunt.

Grizzlies will eventually find the shelter belts we've planted 8 miles northeast of Choteau. So, we're more careful working around the farm, watching for rattlesnakes AND bears. That's okay too.

But mutual fear and respect would be healthy for both humans and bears. Delisting will be benefit our long-term relationship. We appreciate that FWP is trying to accomplish this. ASAP. Meanwhile, the community hotline can help prevent surprise encounters.

Regarding the recent killing of two grizzlies at Blackleaf, archery hunters need to use some common sense. Basically, can someone walk into a bear den and not expect to be attacked? Does that qualify as self-defense? Tip-toeing around in the creek bottom willows at Blackleaf in September is just about the same thing.

We think that Waldner's quote at the end of the 9/26 Acantha article expresses our feelings about bears in our communities: "...It is wrong to kill a grizzly bear just to kill it, and it is equally wrong to become a prisoner to a grizzly bear on your own property."

That said, we're glad the bears are part of the neighborhood.

Thank you,
Judy & Jeff Cornell
P.O. Box 82, Choteau, MT 59422
406-466-3690

From: Cole Tiemann
To: FWP GRIZZLY BEAR ARM,
Subject: Grizzly bear comment
Date: Tuesday, August 28, 2018 12:39:45 PM

Hello,

My name is Cole Tiemann, and I am studying wildlife management at Unity College. I think that the management of delisted grizzly bears should be handed over to the FWP of Montana. If the population of grizzly bears in the NCD Ecosystem are at population management objectives, then they should be delisted. When they are delisted, the management ability should be handed over to Montana FWP.

Thanks,

Cole Tiemann
CTiemann16@unity.edu

From: Michelle Ekwall
To: FWP GRIZZLY BEAR ARM,
Subject: Grizzly Bear De-listing in NCDE
Date: Monday, October 22, 2018 9:44:34 PM

Dear Sir or Madam,

As a resident of Southwest Montana, I am writing to comment on the FWP's consideration of grizzly population objectives and the possibility of removing the grizzly's status as Threatened under the Endangered Species Act.

Though I was unable to attend the various public hearings this fall, I am writing to express my full support of the removal of the grizzly bear's endangered status in the Northern Continental Divide Ecosystem. It is my understanding that the bear population has met and exceeded the proposed recovery criteria.

As a Montana resident, hiker, camper, and most importantly, parent of small children, I believe it is time to reassess the bear population. I want my family and others to be able to recreate in our beautiful region without an out of control grizzly population threatening that reality. As bear populations continue to rise, encounters with humans will only increase. I myself have seen bears while hiking in Glacier and Yellowstone, far too close to heavily used and populated areas. These trail experiences underscore the importance of this issue. I believe bringing the population under control is vital for the safety of all Montanans and those visitors who come here to experience the majesty of Yellowstone, Glacier, and the rest of the region.

Thank you for your time.

Sincerely,

Michelle Ekwall
Sheridan, Montana

From: kchurch@ups.com
To: FWP GRIZZLY BEAR ARM,
Subject: Grizzly Bear Delisting
Date: Friday, August 31, 2018 8:21:58 PM

The science says Bears should be managed like all other game species. We need to take the emotion out of the equation. I favor the delisting of the bears and install an effective hunting season to control the population.

Thank you for taking public input.

Kevin Church

From: davidwalrod@bresnan.net
To: FWP GRIZZLY BEAR ARM,
Subject: GRIZZLY BEAR DE-LISTING: NORTHERN ECOSYSTEM
Date: Thursday, September 27, 2018 12:38:03 PM

On September 26, 2018 I attended the Conservation Strategy meeting in Missoula to discuss the possible de-listing of the NCDE Grizzly bears. I thought the meeting was very well ran so that it did not get out of control.

1. I believe the facts and science behind the numbers that were presented and the extreme amount of study and work that has gone into this proposal. We should extremely proud that the recovery of these magnificent animals has gone as well as it is and I am happy to have them on our landscape. Montana FWP and the other organizations that made this happen need to be highly commended for their efforts.

2. I feel that it is time for the de-listing of the grizzly bear. I also strongly feel that very limited and controlled hunting needs to be at the fore-front as a management tool to help control population numbers.

3. I heard about connectivity in the meeting and lack of it with the Yellowstone ecosystem bears. That seemed to be one of the reasons that is behind the Judges decision that was made on the Yellowstone Ecosystem bears just recently. I do not know or have all the facts about the grizzly bears and the connectivity issues between these to management areas, but from what I do know, I believe that the bears having populated the NCDE and the Yellowstone regions to beyond their carrying capacity have shown by their movements that they are broadening their travels and inhabiting new areas outside of the normal locations. This I know.

a.) I have friends in the Thompson Falls area who have sent me pictures and video's from people in the area who have observed Grizzly Bears within 10 miles of Thompson Falls to the north east, and bears north west of Thompson Falls.

b.) I have a personal friend who lives in the Nine Mile valley northwest of Frenchtown who has documented Grizzly Bears near his home which is located close to the Nine Mile Forest Service Office.

c.) Within the last 3 years, I do not recall the exact year, there was a documented and photographed Grizzly Bear that was seen in the Rock Creek drainage east of Missoula. This bear wandered up into the Welcome Creek Wilderness area and over into the Ambrose Creek area just a few miles north east of Stevensville. Within the last 3 years there is also a documented incident of a Grizzly Bear just over Highway 12 from Lolo into the Lochsa Idaho area. Unfortunately that bear was killed by a black bear hunter. These are just the bears that we KNOW ABOUT, and hopefully there have been more that are following.

d.) The Selway-Bitterroot Mountains is one of the areas where Grizzly bears hopefully soon will be a part of this habitat once again and it certainly seems that they are trying to get established there. It's also quite possible that the bears are making inroads to the Sapphire Mountains and the Anaconda Pintler Wilderness as sightings of bears have been documented as I noted in the Rock Creek area and bears have also been seen just north of

Interstate 90 in the Drummond area. There have also been Grizzly Bear sightings in the Wisdom and Jackson Hole Montana area. It's not that far down the Sapphires or the Bitterroots to these bears in the Big Hole Valley to make a connection and start to exchange DNA with each other. I certainly hope that it happens.

e.) The Grizzly Bears do need to have their populations monitored and controlled in these other locations once they become established. Hunting needs to be on the top of the list as far as controlling populations once they are established and the numbers of bears are such that they need to be controlled at sustainable levels.

I hope that the NCDE bears are de-listed and management is put into the hands of the local Fish & Wildlife agencies.

Thank you for your time!

Sincerely,
David Walrod

David Walrod
111 Hillcrest Loop
Missoula, MT. 59803

davidwalrod@bresnan.net

From: janet thomason
To: FWP GRIZZLY BEAR ARM,
Subject: Grizzly bears
Date: Tuesday, August 28, 2018 11:31:47 AM

Please delist grizzly bears.
Sent from my iPhone

From: Brad Sisson
To: FWP GRIZZLY BEAR ARM,
Subject: Grizzly Management
Date: Tuesday, August 28, 2018 5:28:58 PM

Hi,
I am in favor of delisting the Grizzly Bear. They should be managed by state fish and wildlife. Thanks. Brad Sisson

Sent from my iPhone

From:	sskorupa@usa.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Sunday, September 30, 2018 10:03:40 AM

Grizzly bears in the Northern Continental Divide Ecosystem must be delisted NOW. The FWP has been conservative with their population estimates and the goal post cannot keep moving. The state has done enough meaningful studies and has the tools to manage populations so they will never be endangered again. Populations in Canada add even more potential for gene pool diversity without creating another population in the Selway Bitterroot Wilderness which does not have the salmon runs it had up until the 1970's. Non-ranchers and farmers who watch PBS programs showing cattle grazing peacefully near grizzlies think this is always the case. More local input needs to be given over big money environmental groups who benefit financially from fighting delisting. We need to start hunting grizzlies to bring back some fear of humans or the sentiment of locals will become more and more negative of the animal. Grizzlies may have feelings and family structures but so do elk and deer. The wolf became smarter and even more elusive after hunting them became legal again and not many people are successful with these type of hunts. Native Americans didn't NOT kill grizzlies. It is past time to get them off the endangered species list.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	clazyh15@gmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Wednesday, September 19, 2018 4:10:05 PM

We are ranchers in Zone 1. We have raised cattle, horses and even our children around grizzly bears for two generations. The grizzly bear population has steadily gotten stronger and continues to flourish along the front. On Dupuyer creek where we ranch is probably the best grizzly bear habitat anywhere, so we have excelled at co-habituating and tolerance. It should be considered a success story for MFWP grizzly bear bioligist. Therefore we are excited for the delisting of the grizzly bears in NCDE. The grizzly bears will continue to thrive along the Rocky Mountain Front. We are also glad Zones 2 & 3 do not dictate what happens in Zone 1.
Chad Hitchcock & Family

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	jimdarr@bresnan.net
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Friday, September 14, 2018 10:59:05 AM

It's way past time to delist and begin managing (hunting) grizzly bears in MT. Not just the NCDE bears but the Yellowstone bears as well. There are way too many of them and they do not have any fear of man, a situation that endangers human health and life more and more every year. Quit cow towing to the green groups and start taking care of Montana's rural citizens!

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	jerrymuething@gmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Thursday, September 06, 2018 12:42:12 PM

Dear FWP Commission:
I am writing this comment in support of delisting the Grizzly Bear in the NCDE. I am a proponent of using sound science to manage wildlife vs. emotion & litigation. The ESA is an important piece of legislation; I fear that ESA litigation abuse by NGO's is eroding the publics confidence in this act. Finally, I believe that the concerns/values of the states and localities that have Grizzly Bear populations be heavily considered in this decision.

Sincerely,
Jerry Muething
Belgrade, MT

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From: mtandy1975@gmail.com
To: FWP GRIZZLY BEAR ARM,
Subject: Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date: Thursday, September 06, 2018 8:32:11 AM

Grizzly bear conflicts seem to be an every day event these days. I am pleased this is finally happening. The data shows the bears have been in a recovered state for some time and the delisting of Grizzly bears should happen as soon as possible to allow Fish, Wildlife, and Parks to do their job before more humans are injured. No one else is going to help manage this growing population and I feel our State Game Wardens and Biologists will do a great job of protecting humans and their interests while maintaining a healthy population of Grizzly bears.

Andy Soldano

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	erinkleist1@gmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Saturday, September 01, 2018 1:35:47 PM

I support removing the grizzly bear demographic from the endangered species list. They have fully recovered and have become a threatening presence to the many homes and families living in bear-populated areas. Please consider our comments and thoughts!

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	t_wanken@hotmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Saturday, September 01, 2018 1:32:56 PM

I believe that the grizzly bear population is fully recovered and stable and it is time to work on de listing the grizzly bear from the endangered species list.
Thanks

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	rcurtis2258@gmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Saturday, September 01, 2018 6:53:48 AM

While fishing or simply going for a hike, a person has to constantly look over your shoulder in fear of an attack from a grizzly. They are coming into urbanized areas and being seen from roadways. Why don't we stand up and fight these Federal Judges on their decision to never take the Grizzly off the endangered list. It is past time to be removed as the count is likely higher than what is told to the general public. The officials may re-think thier decision if tied to a tree for a week.
Powerful organizations have lost all ability to reason with reality. We now have Grizzlies being hit by cars and killing domestic animals on farms and ranches. Delist them yesterday.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From: Michael Boryan
To: Andy Boryan
Cc: FWP GRIZZLY BEAR ARM,
Subject: Re: Delisting NCDE Grizzlies
Date: Friday, August 31, 2018 6:21:32 PM

Very nice!

On Fri, Aug 31, 2018 at 9:46 AM Andy Boryan <ajb109@gmail.com> wrote:

> My name is Andrew Boryan. I'm an anesthesiologist who resides in Pennsylvania but have considerable ties to Montana and specifically the NW section of Montana. My father was born in Butte; his family moved east while he was still young. Until recently, we still had living relatives in Anaconda whom we visited often. In recent years we have spent every summer in the Kootenai River area staying around Libby to fish. I intend to elk hunt district 101 or 103 next fall. I am strongly in favor of delisting the NCDE Grizzly population. I'm not certain that I myself would ever purchase a grizzly tag, however I strongly believe that the state wildlife management agency should be in charge of managing the population as their data sees fit. I'm very thankful Grizzlies are back in the ecosystem and I hope to see one in person from a safe distance someday. I'm glad the ESA plan worked well, and from what I have read the populations are at a sustainable level. As with all other game species which MT has been managing well, I would like to see money coming in to the agency in the form of fees and the injection of money into the vital sporting economy of Montana. Thank you for your hard work on behalf of sportsmen and women everywhere.
>
> Sincerely
>
> Dr. Andrew Boryan

From: erlundberg@linctel.net
To: FWP GRIZZLY BEAR ARM,
Subject: Grizzly Bear
Date: Sunday, August 26, 2018 8:46:09 AM

To whom it may concern:
The grizzly bear population has recovered and they should be delisted. The USFWS and MFWP have done a good job of managing the bear populations. Full management should be controlled by the MFWP. The recovery of this bear species has to be viewed as a success and all the management agencies should be congratulated on their great work.
Sincerely,
Renee Lundberg

From:	bjwe49@hotmail.con
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Monday, August 27, 2018 7:32:30 PM

Please regulate grizzly bear population. There are too many grizzly bears. It?s not safe for hunters, hikers, camping, or anyone using the great outdoors!
Thanks
B Evans

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	bigskyhal@excite.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Sunday, August 26, 2018 9:23:02 AM

Grizzly Bears are recovered! Get them off the list!

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	erlundberg@linctel.net
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Saturday, August 25, 2018 9:24:43 PM

The USFWS and MFWP have done a great job of managing the Grizzly Bear populations and they should be delisted and management be give to the MFWP. The MFWP has done a very good job managing he Wolf populations. Given this track record I believe they can also do a very good job with management of the Grizzly Bear. The recovery of this bear species has to be viewed as a success and all the management agencies should be congratulated on their great work.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From: teknibbla@hotmail.com
To: FWP GRIZZLY BEAR ARM,
Subject: Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date: Friday, August 24, 2018 9:55:59 AM

I think the delisting is a smart move and managing the bears with a science based approach is the only way to kove forward. Thanks to everyone who has brought them to objective and I very much look forward to the future of the conservation and hunting of grizzlies in Montana

---

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From: Justin Ekwall
To: FWP GRIZZLY BEAR ARM,
Subject: Grizzly Bear de-listing
Date: Monday, October 22, 2018 10:07:19 PM

To Whom it May Concern:

I am writing in support of de-listing grizzly bears in the NCDE. While I do not pretend to be an expert on the topic, I understand from newspaper accounts that they have met the population criteria to no longer qualify as threatened. Frankly, if they must still be listed as threatened now, I see little point to having population criteria at all. Many people and organizations struggle to admit their failures, and it seems that only regulatory agencies struggle to admit a success. If the real goal of some interested parties is to return grizzlies to a pre-Lewis & Clark range and population, then they should be up front about that and have a real conversation about whether this is desirable or even possible instead of moving the goalposts whenever things start to look good. If the goal is to have a population where there is no realistic medium-term danger of extinction, then it seems to me that we are basically there.

The population of the West is expanding rapidly, and the number of visitors to the region's national parks is growing as well. Grizzly bears are magnificent animals and an important part of the ecosystem, but they are not animals that can coexist with humans well in populated areas. They're dangerous to livestock and potentially dangerous to children or even adults. It's important to support a stable population within the national parks and forests, but it's possible to do this without getting into a situation where it's prudent to carry bear spray to walk to the post office at night.

Within Yellowstone it's gotten to the point that bears are frequenting VERY highly trafficked areas which shows that they are starting to lose their fear of humans. I'm aware that there isn't going to be hunting in a national park, but if there is no population management allowed in surrounding areas then bear encounters are going to continue to become more frequent as they seem to have in recent years, and more encounters will mean more encounters that end badly for the person and/or the bear.

We also shouldn't look at this as a choice between keeping threatened status and declaring open season on grizzly bears. The hunts that have been proposed have been limited and responsible relative the the local grizzly population; probably to a greater extent then I've seen with the hunting of any other animal. There's no reason that this would have to change if bears were de-listed.

Thanks for your time and your consideration of this issue.

Justin Ekwall
Sheridan, MT

Cheryl Gjesvold
39 1st Lane SE, Fairfield, MT 59436
gjes@3rivers.net

Congratulations on the systematic data gathering and projected long term monitoring of grizzly bears in the Northern Continental Divide Ecosystem. Now let's start addressing the delisting of grizzly bears and the increasing numbers making the prairie, Zone 3, their expanded habitat territory.

Here are some of my concerns:

- Even with though the Yellowstone grizzly bear numbers were adequate, why didn't Montana allow limited hunting permits? Why does a federal judge have the authority to stop the bear hunting in Wyoming and Idaho? Special interest groups should not have more power than long term data to support hunting.
- Let's start taking back our states' rights and see if Congress can change the way endangered species are listed and delisted. We need to be able to address the grizzlies in our backyards.
- Look at more of a statewide management approach vs small sectors of the state to simplify things. The piece-meal approach appears just to delay action
- Allow hunting in Zone 3. The answer is NOT bear spray.
- Female grizzlies are observed teaching cubs to maim/kill goats, sheep, calves, etc. They are adapting to prairie living at expense to ranchers and small towns, not to mention danger to humans. Ranchers are told that we just have to get used to the bears. Give law abiding, hardworking farmers and ranchers the ability to protect their livelihood.
- Fairfield area residents five to seven miles from my country home are having grizzlies on their porches.
- My daughter's family, which includes my grandchildren, is limited in their outdoor walks and activities due to frequent bear sightings in the Bynum area. Let's not wait until some child is hurt or killed.

From:	Blair and Cheryl Gjesvold
To:	FWP GRIZZLY BEAR ARM,
Subject:	NCDE ARM 12-505 Written Comment
Date:	Monday, October 08, 2018 11:11:54 AM
Attachments:	Grizzly bear letter.docx

Bear track pictures taken one mile from my daughter's place close to Bynum. This is where my daughter's nieces play in their yard. My grandchildren visit their grandparents there.

Sent from Mail for Windows 10

Cheryl Gjesvold
39 1st Lane SE, Fairfield, MT 59436
gjes@3rivers.net

Congratulations on the systematic data gathering and projected long term monitoring of grizzly bears in the Northern Continental Divide Ecosystem. Now let's start addressing the delisting of grizzly bears and the increasing numbers making the prairie, Zone 3, their expanded habitat territory.

Here are some of my concerns:

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- Let's start taking back our states' rights and see if Congress can change the way endangered species are listed and delisted. We need to be able to address the grizzlies in our backyards.
- Look at more of a statewide management approach vs small sectors of the state to simplify things. The piece-meal approach appears just to delay action
- Allow hunting in Zone 3. The answer is NOT bear spray.
- Female grizzlies are observed teaching cubs to maim/kill goats, sheep, calves, etc. They are adapting to prairie living at expense to ranchers and small towns, not to mention danger to humans. Ranchers are told that we just have to get used to the bears. Give law abiding, hardworking farmers and ranchers the ability to protect their livelihood.
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- My daughter's family, which includes my grandchildren, is limited in their outdoor walks and activities due to frequent bear sightings in the Bynum area. Let's not wait until some child is hurt or killed.

Age 10

Grizzly Demographic Objectives in the NCDE ARM 12-505
Written Comment

Name: Eliza Scranton
Address: 83 Lacota Dr. Missoula MT 59803
E-mail: I don't have one

I think that grizzly bears should not be able to be hunted. Really they are endangered there are only about a thousand left! There are 40,000 Asian Elephants left and they are highly endangered, and there are only 1,000 grizzly bears! That is ridiculous. They should not be de-listed, or hunted for that matter. When I am older, I want there to be grizzly bear. I do not want to be able to say "I was alive when the last grizzly bear died"! Bears are not trophys. They need to be protected. They need to be respected. They are the symbol animal in Montana, but if there are none left that won't be the case. Bears should be left alone and undisturbed.

All comments must be received by 10/26/18 at 11:59 pm, and can be sent to:
Grizzly Bear ARM Comments – Wildlife Division,
PO Box 200701, Helena, MT 59620-0701
or emailed to FWPGRIZZLYBEARARM@mt.gov
Thank you for your comment.

Grizzly Demographic Objectives in the NCDE ARM 12-505
Written Comment

Name: Susanna Stanton Age 8
Address: 83 Lacofa Drive Missoula, MT
E-mail: Don't have one

I think Bears should be left alone. I Don't want Grizzlys to Go Extinct in my life time. I want to Be able to Say "I was alive when the last Bear Died"

don't

All comments must be received by 10/26/18 at 11:59 pm, and can be sent to:
Grizzly Bear ARM Comments – Wildlife Division,
PO Box 200701, Helena, MT 59620-0701
or emailed to FWPGRIZZLYBEARARM@mt.gov
Thank you for your comment.

I support ESA protection for grizzly bears in the Glacier-Bob Marshall region.

All five of the grizzly bear populations in the Northern Rockies region need to be protected as one.

Shirley Meade

Public Comment Received re: MAR 12-505
427

From - Tari Marcolina
P.O.B. 2324 / Priest River Idaho
83856

To: USFS & FW&P

I am against the delisting of Grizzly -
I am against Any Kind of hunt against Grizzly -
I live off grid in a somewhat remote area - My properties all up against U.S.F.S. Lands - I have Grizzly, Wolf, Fishers all kinds of wild life -
Idaho has serious issues to consider before any hunting or delisting of Grizzly - Bear Baiting, Sell + Trade of bear Parts & No laws against feeding any kind of Wildlife - ALL LEGAL!! - Nordman (3) Poached Grizzly / Wallace - 1 Grizzly shot At Legal Bait site For Black Bear -
All 5 sub-regions - Need to be protected in the Northern Rockies - NOW! Tari Marcolina

Pady Dusing
Pady Dusing
Sent: Wednesday, September 26, 2018 7:34 PM

I am writing to express my sincere concern re: delisting the GRIZZLY bear in the Northern Continental Divide Ecosystem (NCDE).
Based on the research I have done, reviewing and analyzing the data available from MT. FWP from their Grizzly studies done during 2004-2017; I have come to the conclusion that the GRIZZLY bear population needs continued protection under the ENDANGERED SPECIES ACT for a minimum of 5 yrs. to collect further data and continued monitering.

-Between 2004-2012:
~Approx. 30% of monitered cubs died
~22% of yearlings died

-Mortality Rates: (both male & female)
~2013 - 33
~2014 - 21
~2015 - 22
~2016 - 22
~2017 - 29
~2018 - 27- (thus far, as of this writing)

The other statistic that was startling to me:
- Monitered, documented females w/NO off-spring coming out of hibernation:
~ 2014 - 13.6% ~2015 - 37.8% ~2016 - 48.8% ~2017 - 25%

Back in 1975 - 43 yrs. ago-- we were down to 136 grizzlies-TOTAL! The grizzly bear recovery number for a healthy population was determined to be 800 and that number was set for delisting at that time. We supposedly have reached that number now--which brings us to today.
In 1975---scientists and biologists were NOT dealing w/issues of climate change and how this could affect forest health/food sources and how FIRE will play a role in all of this.

This year alone there has already been 27 grizzly mortalities and we lose an average of 5-10 bears during the hunting season--by either "self defense" or "oops-thought it was a black bear".

This brings the current number of GRIZZLIES to 729. According to research provided by Kendall-2009--it was surmised that we had 756 GRIZZLIES in the NCDE.

Important questions to consider and MONITER:
1). Direct correlation between abundance or LACK of "huckleberries" and the following Spring coming out of hibernation----the number of Females w/NO off-spring?

2). Is there a trend?? Hotter summers/lack of moisture=Climate Change?
3). If so----earlier Springs/hotter summers= decreased berries = decreased fecundity the following year??
4). Moniter cub and yearling mortality rates - long term
5). Correlation of food sources and body fat = adequate fat stores to sustain hibernation and survive longer/hotter summers---i.e.----CLIMATE CHANGE!

By delisting the NCDE grizzlies without analyzing how delisting would affect the remaining members; FWP needs to consider how reduced protections would impact the current GRIZZLY bear numbers.
The bears belong on the ENDANGERED SPECIES LIST and are entitled to protection and conservation efforts.

Sincerely,
Pady Dusing
4018 Whitefish Stage
Kalispell, MT. 59901
406-471-5000

AVG logo

This email has been checked for viruses by AVG antivirus software.

www.avg.com

RECEIVED
OCT 22 2018
FISH, WILDLIFE & PARKS
WILDLIFE DIVISION

Grizzly Demographic Objectives in the NCDE ARM 12-505
Written Comment

Name: Gloria G. Phillip
Address: 605 Benton Avenue, Missoula, MT 59801
E-mail: gloria.phillip@mso.umt.edu

I support a population of over 900 grizzly bears instead of the proposed 800. The 900 bears need a corridor so that they can expand and mate with each other without their DNA being limited to one area. The 900 grizzly bears should be allowed to roam and occupy suitable habitat wherever it exists as grizzly bears are a part of Montana's native wildlife heritage and are our state animal and the mascot for the University of Montana. I believe that a grizzly bear should only be killed as a last resort or when human life is in danger. I am totally against sports-trophy hunting of grizzlies and expect FWP to develop a statewide healthy grizzly bear conservation plan so that these magnificent animals do not lose ground, become endangered again or extinct.

All comments must be received by 10/26/18 at 11:59 pm, and can be sent to:
Grizzly Bear ARM Comments – Wildlife Division,
PO Box 200701, Helena, MT 59620-0701
or emailed to FWPGRIZZLYBEARARM@mt.gov
Thank you for your comment.

RECEIVED
OCT 18 2018
FISH, WILDLIFE & PARKS
WILDLIFE DIVISION

Grizzly Demographic Objectives in the NCDE ARM 12-505
Written Comment

Name: CHARLES OVERCAST
Address: 124 SOMERS AVE. WHITEFISH MT.
E-mail: OVERCAST 124 @ HOTMAIL.COM

ON REFLECTING FORWARD W/ WHAT KNOWLEDGE & VALUES I POSSESS I HAVE COME TO MY CONCLUSION FOR THE GRIZZLY THAT RESIDE IN ZONE 1.
THE GRIZZLY IS THE ONE ROAD BLOCK THAT KEEPS THE GREEDY CORPORATIONS FROM INTRUDING ON ALL LANDS OUTSIDE OUR PROTECTED WILDERNESS & PARK LANDS.
TO PUT A LIMIT ON THE CONSERVATION OF THIS MAJESTIC ANIMAL WOULD NOT SATISFY THE NEED FOR MORE HABITAT & REDUCE OR ELIMINATE THE NEED FOR MORE GRIZZLY.
THE FWP SHOULD NOT ATTEMPT TO REGULATE OR MANAGE A SPIRIT THAT IS SO VALUABLE AN ~~ASSET~~ ASSET TO THE PEOPLE OF THIS NATION.

All comments must be received by 10/26/18 at 11:59 pm, and can be sent to:
Grizzly Bear ARM Comments – Wildlife Division,
PO Box 200701, Helena, MT 59620-0701
or emailed to FWPGRIZZLYBEARARM@mt.gov
Thank you for your comment.

Grizzly Demographic Objectives in the NCDE ARM 12-505
Written Comment

Name: Annette Schreiner
Address: 826 2nd Ave E Kalispell Montana 59901
E-mail: michael.schreiner@frontier.com

In reference to the meeting held at FVCC on September 27th 2018. I listened to endless data and statistical analysis and viewed graph after graph. I had to laugh when the gentleman behind me commented it looked like his electrical circuitry, obviously an electrician. Most of it was incomprehensible to the general public.

Most beneficial and informative were the public accounts of living with grizzlies especially the woman from the North Fork Polebridge area.

Most disturbing was the young man's question "Whats the difference between a rat and a grizzly bear?" Its pretty scary to suppose this person might also be in possession of a firearm. And ~~the~~ how this person aligned himself with the big game hunter with his african trophies who saw an economic opportunity with the delisting of the grizzly.

For me the grizzly bear holds both fascination and terror. I worked in GNP in 1967 and 1968. Michelle Koons was one of my housemates at Garden Court Lake McD Lodge. The memory of that night still brings such sorrow.

I look back fifty one years ago and am shocked at the urbanization of the park. Sadly so many will never know it in any other way. All the wildlife not just the bears are impacted by the vast numbers of people invading their natural space ... habitat destruction. Too many people ... where are the bears supposed to forage and when? Maybe the radio collars should be put on people so the bears could monitor us and know when its safe to feed or bring their young out to play.

GNP is but a part of the NCDE and the grizzly population is supposed to be protected there. It should be a prototype for the management of all the rest of it.

Annette Schreiner

All comments must be received by 10/26/18 at 11:59 pm, and can be sent to:
Grizzly Bear ARM Comments – Wildlife Division,
PO Box 200701, Helena, MT 59620-0701
or emailed to FWPGRIZZLYBEARARM@mt.gov
Thank you for your comment.

From: Jeff Meide
To: FWP GRIZZLY BEAR ARM,
Subject: ARM
Date: Friday, October 26, 2018 9:38:48 AM

Thank you for taking my comments on the ARM issue. Because plans to delist the N grizzlies and the Yellowstone grizzlies have been separate issues is perhaps the strongest implication that these two populations are isolated from one another supporting the judge's ruling back in September.

I am in strong support of monitoring behavior as well as habitat and how human encroachment continues to place pressure on existing rangeland. Animals are adaptive creatures that will cohabitate within developed areas when pushed. One does not need to be a scientist to observe how deer, raptors, coyotes, bears and mountain lions now occupy territory in and around settled areas. We must not begin to try to cull our way out of an issue dealing with human-bear encounters but look instead toward strengthening ecosystems to better support bears along the corridor between our two parks. This includes restoring native food sources like white pine and cutthroat trout. It calls for better ways to monitor migratory movements, coordinate hunting in bear country, removing food sources in settled areas, etc. Louisa Willcox's opinion in the Saturday, October 20th, Billings Gazette offers a more reasoned and thoughtful perspective on the topic of living in bear country.

Delisting the bears at this time is not a plan I support. To the contrary, I believe that habitat and wild lands that support a healthy, diverse ecosystem should be increased and set aside for our wild life.

Thanks.

J. Meide

419 Burlington Ave.

Billings, MT 59101

Virus-free. www.avg.com

From: David Bailey
To: FWP GRIZZLY BEAR ARM,
Subject: Bears
Date: Friday, October 26, 2018 6:41:09 PM

Please don't delist

Sent from my iPhone

From: Jim Cossitt
To: FWP GRIZZLY BEAR ARM,
Subject: Comments on NCDE Administrative Rule
Date: Thursday, September 27, 2018 6:45:11 PM

Don't remove Endangered Species Act protections from grizzly bears one sub-ecosystem at a time in the lower 48 States. These bears were listed as threatened because they had been reduced to only 2% of their former numbers and driven off all but 2% of their range. State and federal agencies want to declare grizzly bears "recovered" in the Yellowstone and Glacier sub-ecosystems even though the bears are still confined to about 2% of their former numbers and range. Yellowstone remains genetically isolated.

Computer models have failed 20,000 times to get a bear from Glacier to Yellowstone in a single season, meaning bears need to set up home ranges in between to maintain genetic diversity. Rather than working to unite these two sub-ecosystems, agencies are instead working to designate each a "distinct population segment." Research, however, shows that 5,000 bears are necessary to maintain genetic viability, requiring that these sub-ecosystems be reunited.

Managing for 800 bears in the Glacier area and even fewer in the Yellowstone area, while killing off "excess" bears via sport trophy hunting, will not reconnect these areas. It will not recover bears to significantly more than the 2% of their former habitat, let alone reconnect with the Bitterroot, Cabinet-Yaak, Selkirk, and North Cascades subecosystems. There are now some 400,000 people in the twelve counties surrounding Glacier. Flathead County is growing at 3% annually. It is not time to remove ESA protection from the 800-plus bears thought to be growing there at only 2% annually and to begin hunting them to keep them from expanding further. It is time to show some compassion, adjust how we live and work in bear habitat, and to recover and reconnect the lower 48 ecosystem before removing ESA protections.

- Section 3 of the Proposed Rule should explicitly state that FWP will maintain a stable to increasing population of 1,000+ grizzly bears in the NCDE.
- Section 3 of the Proposed Rule should incorporate the following recommendations for independent female survival, and independent female and male mortality thresholds from the Costello et al. "Grizzly Bear Demographics in the Northern Continental Divide Ecosystem 2004-2014" report in order to ensure a sustainable population over the long term:
    - Independent female survival rate >= 0.93 (rather than >= 0.90, which Costello et al. stated is "not sustainable in the long term");
    - Independent female mortality threshold of 6% (rather than <= 10% in the

Proposed Rule);
    - Independent male mortality threshold of 11% (rather than <= 15% as in the Proposed Rule).
- The Proposed Rule should explicitly state what methodology will be used to develop independent female survival rates and mortality thresholds.
- The Proposed Rule should commit to continue the monitoring methods that are the underpinning of the Costello et al. Demographics report.
- The Proposed Rule should encourage demographic as well as genetic connectivity to the Greater Yellowstone Ecosystem.

Jim Cossitt, **1231 6th Street W, Kalispell MT 59901-4238 USA**
Cell: 406-260-6969 | Work: 406-752-5616 | www.cossittlaw.com

"Integrity is doing the right thing, even when no one is watching." CS Lewis

"The last and greatest human freedom: the ability to choose one's own attitude in any given situation." Elie Wiesel

From: Connie Maley
To: FWP GRIZZLY BEAR ARM,
Subject: Don"t delis grizzlies!
Date: Friday, October 26, 2018 9:27:26 AM

Dear representatives of the State of Montana, please understand that in order to not drive grizzlies to extinction we meet far more than 800 grizzly bears in the Northern Continental Divide Ecosystem so it can reconnect with Yellowstone and other isolated ecosystems! Come on! Follow the SCIENCE! DO THE RIGHT THING, DON'T DELIST!
#DontDelistGrizzlies
http://www.swanview.org/articles/blog/action_alert_grizzly_bears_need_your_help_now/258

From: Mary Langenderfer
To: FWP GRIZZLY BEAR ARM,
Subject: Gizzly Bear recovery and designation
Date: Friday, October 26, 2018 9:35:46 AM

Hello!

Fifty grizzlies have died this year in the Northern Rockies. In light of this, I think cancelling their Endangered Species designation is unwise. We need more years of protection while more data is collected, and attempts to link habitat and ensure the genetic pool viability is accomplished. Why threaten the final outcome when you have been so successful to this point???

Thank you for your wonderful efforts in the last many years in rebuilding this iconic species. I love living here in Montana with more wild things as my companions on this life's journey. Wilderness and wild things reminds me again and again of man's insignificance and how we are all interconnected.

Sincerely,
Mary Langenderfer
3125 Pattee canyon Rd
Missoula, mt
406 721 7034

From: John Sevores
To: FWP GRIZZLY BEAR ARM,
Subject: Griz
Date: Friday, October 26, 2018 12:04:53 AM

Please consider my comments for leaving the Grizzly Bear on the endangered species list. Almost everything on the planet may be endangered due to global warming and the nuclear arms race. Could you imagine a world where bureaucrats might become endangered? Show some foresight and compassion,please.
Johnny

From: nancy yario
To: FWP GRIZZLY BEAR ARM,
Subject: Grizzlies.
Date: Thursday, September 27, 2018 10:08:03 PM

I read the research in the grizzlies population. I believe that for a genetically diverse and strong grizzlie population to flourish they need federal protection

Sent from my iPhone

From: Ronald Jordan
To: FWP GRIZZLY BEAR ARM,
Subject: Grizzlies
Date: Friday, October 26, 2018 3:28:31 PM

Deny delisting, PERIOD!

Ron Jordan
Grass Range, MT

From: carolwthne
To: FWP GRIZZLY BEAR ARM,
Subject: grizzly bear arm comment
Date: Friday, October 26, 2018 9:28:45 PM

I am writing this email because I strongly am against delisting of NCDE grizzly bears.

Currently, there is approximately 800 bears in NCDE although this might seem like a lot of bears it is insufficient to maintain a healthy habitat. These grizzly bears have not expanded to Yellowstone or the Cabinet-Yaak, Selkirds or the Bitterroot, which it impermeable that they connect. The bear recovery plan states that this is a main part of recovery that must happen in order to consider them recovered. According to the ESA we need these bears to connect.

Grizzly bears should not be considered recovered when they currently confined to 2% of the land in the lower 48 states. If they were delisted Montana it is sure that a hunting season would be the next step. This would decrease the population expansion. Trophy hunting is not an acceptable management 90% of Americans do not agree with trophy hunting. If Montana wants to consider delisting grizzly bears they should consider a permanent ban to hunting them.

At the moment delisting should not even be consider with the recent return of Yellowstone grizzly bears to the Endangered Species list.

Native Americans are against the delisting of grizzly bears and they have not had the proper consultation and should be given a voice.

With the recent court ruling this effort seems to be a waste of tax payer dollars. We have better ways of using this funding to learn to co-exist and assist ranchers, live stock owner to better equip there ranchers. In addition, to aiding hunters and outfitter with bear spray. So much work can be done to improve the lives of humans and bears if the USFWS along with Montana Game and Fish would preach co-existence.

Thank you.
Carol Deech

From: grizzalo@everyactioncustom.com on behalf of Jennifer Nitz
To: FWP GRIZZLY BEAR ARM,
Subject: Grizzly Bear Recovery
Date: Monday, October 22, 2018 7:47:26 AM

Dear Montana Department of Fish, Wildlife and Parks,

I urge you to revoke your proposal for grizzly bears in the Northern Continental Divide Ecosystem. The proposed demographic objectives will not adequately protect the area's grizzlies. The state's plan to limit the minimum population to 800 bears is unsustainable. Montana has not collected accurate population data and estimates show more than 1,000 bears living in the area.

The end goal of this policy is to aid the removal of Endangered Species Act protection from these bears. Doing so would eliminate the potential for Montana's grizzlies to connect with Yellowstone bears and occupy new habitat.

Such a piecemeal approach to recovery was found to be illegal last month in the District Court of Montana. Your department's insistence on moving forward with demographic objectives so quickly, without accurate population data, is unjustified.

Deny these harmful proposals. Focus on continued recovery of these magnificent bears.

Sincerely,
Jennifer Nitz
Missoula, MT 59802
grizzalo@hotmail.com

From: Michael Koeppen
To: FWP GRIZZLY BEAR ARM,
Subject: Grizzly Delisting
Date: Friday, October 26, 2018 8:54:18 AM

Dear FWP,

I have been traveling the Bob Marshall and adjoining wilderness areas since the early 1970s. I had never seen a grizzly for decades in this pristine country. I recall seeing my first grizzly tracks in 1976, which was so exciting!

In the last eight years or so, my wife and I have seen eleven grizzlies in the "Bob" and Scapegoat, and have noticed that grizzly tracks, once rare, can be seen fairly often.

So, that brings us to today, when the first thought of fish and game commissions, when delisting is on the table, is that they they need to open hunting seasons on grizzly bears.

Considering that the bears are arguably recovered, but not yet connected between isolated groups of bears, is this a wise move? I think not.

We disagree with delisting, as we feel it is premature and politically motivated. The question is, is FWP's primary mission to satisfy hunters, or to put wildlife first? My wife and I believe it is the latter.

Considering the current administration in Washington, pressure is being put on USFWS to delist, even though this is not in the best interests of the bears and their long term survival. In addition, many bears are being killed already in numerous hunter incidents and other causes of mortality.

We urge you to refrain from even entertaining the notion of a hunting season should the Federal government delist. There is no reason delisting mandates a hunting season. Please do not do so.

Sincerely,

Michael H Koeppen
300 Bull Run
Florence, MT 59833

From:	Jerry Black
To:	FWP GRIZZLY BEAR ARM,
Subject:	Grizzly Management in NCDE
Date:	Friday, October 26, 2018 7:31:25 AM

Montana FWP,
I am against delisting Grizzlies at this time.
Prior to the State eventually taking over grizzly management, it would be prudent to have safe migration corridors established so that the bears can move freely
from one area to another. This would mean cattle and hunting free zones.
It makes no sense to have the bears under state management without the safe connectivity corridors established.
It's imperative that we have widespread distribution of interconnected populations throughout the Rockies.
Respectfully,
Jerry Black
923 Elm St
Missoula 59802
406-531-4200

From: Carol
To: FWP GRIZZLY BEAR ARM,; Carol
Subject: Keep grizzlies in ESA
Date: Friday, October 26, 2018 2:27:18 PM

Dear Grizzly ARM,
Keep ALL of Montana's grizzly bears ON the ES list. I ask you to extend and connect their geographic areas and to MAINTAIN the numbers of bears allotted protection at

100%. Delisting 95% is premature. Having worked one summer in Glacier and having hiked there, in the Bob Marshall, plus adjacent National Forests out of Libby, Missoula,

Whitefish, and Red Lodge, I can state unequivocally the the grizzly bear needs CORRIDORS to get its food. I see how seasonal the berries and other foods are, and how the

bears roam miles. With snow melt occurring sooner, bears must roam FARTHER.

You in Montana have the crown jewel of North America, and the grizzly ought to be king. We need predators to balance the ungulates: we know that from the Yellowstone

and the elk over-population. Which adds SUSCEPTIBILITY TO DISEASE!

For goodness sake, use accurate numbers to count grizzly bear populations (not DEAD bears). Create contiguous corridors: regard habitat connectivity as natural, essential.

Don't jeopardize the future of grizzlies in Montana. With 13 killed before hunting season this year, 2018, they cannot be delisted from Endangered Species Protection. Keep

what you've got, it's priceless! INCREASE the bears and theirs!

Carol Ellis 2015 E. 36th, Spokane, WA 99203 509 533 0587 carolellisspokane@hotmail.com

From: hinkins@everyactioncustom.com on behalf of Susan Hinkins
To: FWP GRIZZLY BEAR ARM,
Subject: Opposition to the proposal to limit grizzly bear numbers
Date: Monday, October 22, 2018 10:30:38 AM

Dear Montana Department of Fish, Wildlife and Parks,

To my knowledge, Montana hasn't collected accurate population data to estimate the population of grizzly bears living in the Glacier area. The proposal to limit the minimum population to just 800 bears appears arbitrary. Moreover, one cannot help but be suspicious given the current administration's clear goals of gutting the Endangered Species Act and environmental protections in general.

Montana offers unique opportunities to retain these species and the wildness of the west. Therefore, I'm writing to ask you to reconsider your proposal for grizzly bears in the Northern Continental Divide Ecosystem. I support the Endangered Species Act and its protection of these bears. I support adequate science to determine the best practices for retaining these species and I ask you to reject the proposal.

Sincerely,
Susan Hinkins
Bozeman, MT 59715
hinkins@mcn.net

From:	Bruce Haroldson
To:	FWP GRIZZLY BEAR ARM,
Cc:	"varensberg@gmail.com"
Subject:	Plan comment
Date:	Monday, October 01, 2018 10:31:17 AM

Dear Sirs/Madam

I am concerned that in delisting isolated populations of Grizzly Bears we will be hastening their ultimate extinction. If they are not able to move between the current areas they populate to breed they will eventually become genetically inbred. Much more work needs to be done to assure there is desirable habitat for them to move safely between the areas they currently occupy. We all know that highways and fast cars are a deadly barrier; until we have addressed that issue and provided wildlife crossings along all migration routes we will continue to lose bears.

I understand there are more bears and so there are more conflicts with humans but that is exactly the point; how can they connect with other populations? Are they ever going to be truly safe from extinction?

The other issue is our changing climate and the food sources the bears depend upon; with our increasingly hot, dry summers berries are drying up earlier. Bears are having to range farther, and often, into areas that put them into conflict with humans in order to find food sources. I know they are omnivores and are able to adapt, but if this means, they are seeking food near human settlement their chances of being killed greatly increases.

Thank you for taking these comments. I truly hope Grizzly Bears will not be delisted until they are able to move safely between areas they currently occupy.

Virginia Arensberg
414 Eddy Ave
Missoula, Mt. 59801

From:	Jerry Black
To:	FWP GRIZZLY BEAR ARM,
Subject:	Proposed Delisting of grizzlies in Northern Continental Divide Ecosystem
Date:	Thursday, October 25, 2018 11:06:52 AM

Montana Fish Wildlife and Parks,

I wish for the record to show that I am AGAINST the delisting of grizzlies in the Northern Continental Divide Ecosystem
The extirpation of grizzlies and other large carnivores from an ecosystem is a global phenomenon with broad ecological consequences. Grizzlies and other carnivores benefit and shape our North American ecosystems.

The Endangered Species Act calls for restoration of threatened and endangered species to a SIGNIFICANT portion of their HISTORIC
range, The word "historic" doesn't appear in the law, but "historic" is logically and scientifically inseparable from "significant".

When USFWS wrote its first implementing regulation for the E.S.A., it interpreted the law and congressional intent to require restoration to historic ranges. This interpretation remained in place for over thirty years until the Bush Administration ILLEGALLY tried to reinterpret "range" to mean only "currently occupied" range to limit the biologically necessary but politically volatile expansion of such species as the wolf and grizzly bear. This latter day interpretation violates the restorative intent of the E.S.A. and the biological and ecological needs of the previously wide ranging species such as the Grizzly Bear.

The E.S.A. does not envision the restoration of endangered and threatened species to geographical "zoos", especially with such historically wide ranging species as the grizzly. It envisions restoration of species to their historic habitat, NOT CURRENTLY OCCUPIED HABITAT.

Grizzlies didn't evolve in geographic zoos and until their extermination began in the 17th century , they were spread all over the West
That means that their genetic diversity and long term survival depended upon, and depends upon now, adaptations to different environments and INTERCHANGE with other populations throughout the West

The intent of the E.S.A. is to replicate, as much as possible, these evolved natural conditions of the species. In other words, we're talking about a species that has an evolutionary biology and ecology that depends upon its being in lots of places at low densities rather than having large populations in a few places which would create serious biological and ecological problems.

Grizzlies, being at the top of the food chain, are necessarily limited in number in specific areas by food availability.

In short, that means what is natural for grizzlies is low densities in specific areas but widespread distribution of interconnected populations throughout the continent….this is how genetic diversity is maintained……You maintain genetic diversity by having small stable populations spread widely across the landscape with dispersers moving among populations. It's about density and distribution and interconnectedness, not numbers of bears.
I urge you to allow grizzlies to seek out new areas so that the connectedness will continue to spread. This WILL NOT be achieved under state management and under hunting pressure. There is too much political pressure from ranchers and hunting groups and it's time that wildlife NOT be managed by hunters and livestock interests.
In summary…the E.S.A. requires grizzly restoration to the species historic range

I ask you to take this into consideration and allow this dispersal to move forward without taking away the protections these bears need. If left to state management, I fear this will not happen and once again grizzlies will persecuted and annihilated from our lands.

JERRY BLACK
923 Elm St
Missoula...59802
406-531-4200

From: Tom and Becky Sutton
To: FWP GRIZZLY BEAR ARM,
Subject: Protect Grizzly Bears
Date: Tuesday, October 23, 2018 8:19:17 AM

Greetings,
Because around 80 grizzly bears have been killed during the last year, I urge you to keep them on the endangered species list. We certainly do not need to hunt them to keep their population at a consistent number.
Thank you.
Becky and Tom Sutton

Sent from my iPad

From: Josh Diamond
To: FWP GRIZZLY BEAR ARM,
Subject: Protect the Northern Continental Divide grizzly population !
Date: Thursday, September 27, 2018 11:34:30 AM

Hello-

I want to say that as a person whose birth state is Montana (Helena, specifically) and who has family ties to the area still, I'm strongly supportive of protecting the Northern Continental Divide grizzly subpopulation to the fullest extent possible! Advocate against any ESA delisting for this population, which really is inextricably linked to the other Rocky Mtn area populations of grizzlies and should be thought of as a whole, contiguous group. We're already at a small fraction of pre- settler-colonial grizzly numbers as it is, and experts propose hundreds more bears, if not thousands, as a viable, long-term group than FWPs does!

-Josh

From: Talofajt@icloud.com
To: FWP GRIZZLY BEAR ARM,
Subject: Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date: Friday, October 26, 2018 3:10:15 PM

Ecosystem's population of the Grizzly Bear faces THREATS from a lack of genetic diversity. That bear has to face a lot of challenges, as do other animals in this CRAZY WORLD we live in. To think you make a choice to take them off of Endangered Species act as to "Trophy Hunt" them is soooo wrong! FWP, you, feel there are to many bears, I do not trust that judgment. No animal deserves that kind of FATE! You are willing to allow "Trophy Hunting" of this bear for MONEY to the State! There will be cases of abuse of hunting the griz by hunters or idiots who feel they can do what they want to GET THE BIG BOYS for there WALL! If FWP keeps pursuing the delisting, That will fall on FWPs HANDS! Thank you, John Talalotu

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This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From: hawaii50.com@hotmail.com
To: FWP GRIZZLY BEAR ARM,
Subject: Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date: Friday, October 26, 2018 2:40:15 PM

Hats off to Dana Christensen for taking the time to think thru the DELISTING OF THE GRIZZLY BEAR and sided for the iconic animal.Alot of factors came into play: food sources depleting vegetation wise, range areas being encroached, THE BIGGEST FACTOR FOR ME, HUMANS, moving in bears habitat, forcing bears to move out, FOREST FIRES too. Now u want to delist the bear to TROPHY KILL THEM to GENERATE the big bucks to our state! REMEMBER "CECIL THE LION",THAT ANIMAL ALONE SHOULD BE THE REASON TO STOP TROPHY KILLING AND THE ADVOCATE! U STILL TRY TO DELIST THE GRIZ down the road, TRUST ME, this will happen also to the grizzly just like it happened to "CECIL THE LION"! Someone will try to lure 1 of the "BIG BOYS" out of the parks,despite not being allowed to do that, mark my words! Remember it is ALL ABOUT THE "BIG BOYS" FOR TROPHY KILLING!
Sad day for the grizzly if u go forward with this! and u will, because MONEY AND MAN COMES FIRST! IT IS ALL ABOUT US! THANKS, Janie Talalotu (1 FOR THE ANIMALS!) 406-756-1633. please answer me, if u do, not with a formal letter but from your heart as though you did really take the time to read what I wrote, it is crucial to me. I CARE WHAT IS GOING TO HAPPEN TO THIS BEAUTIFUL BEAR AND ALL ANIMALS ACTUALLY! For man is all animals downfall!

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	sannettet@gmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Sunday, October 14, 2018 5:12:57 PM

I feel the Grizzly bears should remain on the Endangered /Protective list. How many of these bears are killed accidentally and deliberately each and every year. Along with them , how many cubs lives are taken. It is humans fault usually when their is a encounter with any bear. It seems by some the bears have no right to life or a place to call their home. I feel if I go into their domain it is the chance I take. They are going to protect their young at all means, as we do our off spring. Why should we kill them because they do what is natural for them and acting on instinct. Humans are not happy unless they are killing some sort of animal and it is always the animals fault. I have noticed since the hunting for the Grizzly was halted, there has been more instances of Grizzly bears killings along with their Cubs. Is this retaliation . Do we really have a accurate count of these bears. Enough get killed without it opening up to hunters who will have a reason why they killed the bear by mistake, my life was threatened. Please do not delist the Grizzly Bears, if we are not careful and they get sick or some other problem, it could be their demise . Thank you

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This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	greywolfmt@gmail.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Thursday, September 27, 2018 7:51:47 AM

Delisting of Grizzle Bears is a big mistake. Political move by the Government to clear the way for their massive logging projects.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From:	rmpolich11@yahoo.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Friday, October 26, 2018 3:19:07 PM

Please do not delist Grizzly bears. They are very vulnerable due to increased human populations and decreased habitat. There have been more grizzly bear deaths this year than in years past.
It is vitally important that we protect these awesome creatures.

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From: Michelle MacKenzie
To: FWP GRIZZLY BEAR ARM,
Subject: Public comments for delisting of NCDE grizzly bears
Date: Friday, October 26, 2018 12:23:53 PM

I write to oppose the delisting of NCDE grizzly bears.

It is not enough to aim for a target of 800 bears in the core NCDE area. As Judge Christensen made clear in his opinion regarding the GYE population, we need to think about the bears as a single, connected population of the Yellowstone, NCDE, Cabinet-Yaak, Selkirks, and Selway-Bitterroot ecosystems. This is explained in the Zinke v HSUS opinion which makes clear that species should not be balkinized for purposes of removal from the protections of the Endangered Species Act's protections. USFWS and MDFWP should "connect and recover" rather than "divide and conquer" this species.

Further, grizzlies are confined to approximately only 2% of the species' historic range and numbers. This hardly constitutes "recovery" under Montana or US law.

Regardless of whether the bears are delisted, MDFWP must commit to making the trophy hunting of grizzly bears illegal permanently under Montana law. Hunting of grizzlies would kill bears necessary for population expansion and ecosystem connectivity.

Thank you for the opportunity to submit public comments.

Michelle Mackenzie, Menlo Park, California

From: Pamela Willison
To: FWP GRIZZLY BEAR ARM,
Subject: response to Kalispell meeting
Date: Wednesday, October 24, 2018 9:32:21 PM

Greetings, I attended the meeting in Kalispell and left feeling like many details were passed over and I was not convinced the grizzly population numbers are not based on strong science. I also believe these population calculations should be based on the need to consider the entire grizzly populations together, rather than divided. The only was to ensure genetic diversity and keep this endangered animal safe and in existence is to have connectivity with the Yellowstone population.

I am opposed to delisting the grizzly bear and am adamantly opposed to hunting of grizzly bears. It seems this agency is proceeding in that directions as if it were assumed to be a reality. That approach will limit the agency's ability to view this without bias, which should be how you function. Hunting grizzly bears has no role in managing their population. Your own statistics will show that the hunting which happened before listing resulted in the death of "good bears" deep in wilderness areas rather than the removal of troublesome bears near human populations - so they will continue to be euthanized.

At the meeting I was able to have a conversation with a staff member after the meeting, and the impression I got is that these bears are expected to generate revenue. Well, the truth is the population of grizzly bears generates large amounts of revenue to the state in the form of tourism. According to the tourism research conducted through the school of forestry at UM, the number one reason people visit Montana is to view wildlife. They don't ask the question, but the reality is the strongest desire our millions of visitors have is to view a grizzly bear. There is your financial value of grizzly bears - and they don't have to be hunted and die in order to bring money to our state.

Grizzly bears face so many human-imposed challenges that threaten their ability to have adequate habitat and food sources. These include: logging, logging roads, and lack of decommissioning of logging roads; 3-6 lane highways to cross, many with railroad tracks beside them, in critical corridors (we've seen steadily increasing deaths as a result of these); hunter/bear encounter resulting in a dead bear, often with a cub that is later killed too; snowmobiling in known grizzly denning areas, even past the time when moms and cubs emerge; people building homes further into the wild areas of grizzly habitat and presenting attractants like livestock, chickens, grain, fruit, pet food and garbage (more and more often resulting in a dead bear); agriculture and other human activity that displace grizzlies from their original habitat, and the people in these areas holding the attitude that the bears can't come back into their habitat because it's inconvenient for the humans; warming climate and diminishing food sources (resulting in more dead bears from increased human/bear conflict); and the list goes on!

The population of grizzlies needs to be an increasing population in order to survive. I didn't hear any plans during your meeting about how you plan to support a growing and expanding population of grizzly bears. It seems like that should be your focus and purpose. These bears work so hard to live, and we shouldn't make it easier for them to die.

Thank you, Pam Willison, 3165 Foothill Road, Kalispell MT. 59901, 406-270-0225.

Sent from my iPad

From:	Vanessa Carbia
To:	FWP GRIZZLY BEAR ARM,
Subject:	ATTENTION: Grizzly Bear ARM, Wildlife Division, Department of Fish, Wildlife and Parks
Date:	Tuesday, August 28, 2018 2:56:17 AM

Please DO NOT remove Endangered Species Act protections from the grizzly population in the Northern Continental Divide Ecosystem.

Please, live and let live; humans cannot exist without a living planet!

Thank you,

Vanessa Carbia

From: becky
To: FWP GRIZZLY BEAR ARM,
Subject: Delisting Grizzly Bears
Date: Sunday, September 23, 2018 9:29:45 AM

Please do not delist the grizzly bear. It is not known what the effects of climate change has on the bears. This year a record amount of grizzly bears have been killed accidentally. Please do further studies to determine if the current population is sustainable during this time of climate change.

Thank you for your time and energy in protecting one of the few places in the US where grizzlies still live.

Becky Petrashek
1241 8th Ave East
Kalispell, MT

Sent from Yahoo Mail for iPhone

From: Francesca Droll
To: FWP GRIZZLY BEAR ARM,
Subject: Do NOT delist Grizzly Bears
Date: Thursday, September 06, 2018 2:30:58 PM

Dear MDFWP and FWP,

The "lower 48" grizzly bears were listed under the ESA as “threatened” with extinction. Why are MDFWP and FWS not trying to reconnect ecosystems that allow the bears to interbreed and ensure their survival? Even though grizzly bears are currently confined to only 2% of their former range, MDFWP and FWP are trying to write that this constitutes grizzly bear recovery. That’s shameful. Also, grizzly bear hunting should be illegal in Montana as that would be another obstacle to their recovery and survival when there are such small numbers of grizzlies in existence.

Please do not delist grizzly bears!

Thank you for your consideration,
Francesca Droll

_____

Francesca Droll
fd@abacusgraphics.com
Abacus Graphics
Tel: 406-837-5776
www.abacusgraphics.com

Hope more, breathe more, give more, love more, and good things will be yours.—adapted from a Swedish Proverb

From: Hank Brancaccio
To: FWP GRIZZLY BEAR ARM,
Subject: Grizzly Bear Protection
Date: Wednesday, September 26, 2018 2:53:42 PM

To Whom it May Concern:

Please continue to provide protection for the NCDE Grizzly Bears. As a resident of Flathead County and outdoorsman I believe the bears still need as much protection as possible so the species can survive in to the future. In the past year I have read that more than 30 bears have died due to auto accidents, train accident, accidental shootings, or euthanized due to bear behavior.

The "lower 48" grizzly bears were listed under the ESA as "threatened" with extinction. Why are MDFWP and U.S. Fish and Wildlife Service trying to "divide and conquer" rather than "connect and recover" these ecosystems?

Grizzly bears are currently confined to about 2% of their former range and numbers. MDFWP should not try and write into Montana law that this constitutes bear "recovery."

Thank you for your time.

Hank
414-651-3787

From: Noah Rott
To: FWP GRIZZLY BEAR ARM,
Subject: Please oppose Grizzly Bear Delisting in the NCDE
Date: Tuesday, August 28, 2018 3:06:49 PM

Thank you for the opportunity to provide public comment. I grew up recreating, fishing, and hunting in the NCDE and hope to continue enjoying that precious area in the future.

I oppose delisting of the Grizzly Bear in this ecosystem.

My first reason is the precautionary principle. The Grizzly's recovery has been an amazing conservation story, but I fear any jumps that remove protections could have unintended consequences, especially given an increasing number of stresses that could threaten a healthy, genetically diverse population.

Climate change, increased recreation, and a growing population in MT all are concerning to me. Climate change has cascading effects on Grizzly habitat that are driving them towards human conflicts. Rocky Mountain ecosystems are undergoing a lot of change right now -- which means keystone species like the Grizzly need all the protection and management help they can get.

Additional protections on Grizzly's also help maintain ecosystem interconnectedness which benefits wildlife and our shared environment at large.

Finally, the North American Conservation Model has done wonders for non-predatory species, but I don't think hunting is the best way to manage Grizzlies. When I worked in the Clearwater National Forest as a pesticide applicator for noxious weeds during bear season, I met several packers and hunting guides who all had stories of "shoot, shovel, and shut up."

In fact, one told me that his client mistook a wandering Grizzly for a black bear and shot it point blank the summer prior (this was in Idaho, north of the Bitterroots). That's just a plain dumb hunter and an irresponsible guide -- and there are thousands of them out there. I can't tell you how many times I've heard hunters say that they'd rather shoot a bear than spray it.

I worry that we are not ready/educated enough to remove the protection on these animals. There are a lot of people who break the rules, and once the penalty for breaking those rules is lifted -- these people feel enabled. There is too much stigma around predators.

In conclusion, I trust Montana FWP to make the right call. Grizzly Management has no easy answers, and I appreciate IGBC's efforts to protect these wonderful animals. I only ask that long-term human impacts

on Grizzly Ecosystems are seriously considered.

Sincerely,
Noah Rott
Missoula, MT

From: Catherine Nelson
To: FWP GRIZZLY BEAR ARM,
Subject: Protecting bears
Date: Wednesday, September 26, 2018 12:26:12 PM

Hi. I am a 20 year resident of Bozeman and wanted to respond to the request for public comments on the "relisting" of the grizzly bears by the federal court in MT and surrounding states. The federal court decision is a good one for the bears in my opinion. They do need to migrate and move across the wild landscape of the north west into Canada and maybe Alaska. Creating different state policies does not make any sense if we really want them to be able to survive. They are threatened by climate change affecting their sources of food in the mountains. They are threatened by the increasing development of homes, subdivisions, and other people-oriented intrusions. I know they can and do kill domestic animals on ranches and farms and I believe they need to be managed in various ways and sometimes killed. Reducing the number of interactions and the killing of domestic animals can be prevented to some extent with the use of horses guarding ranches as in Ennis, the use of large dogs who are bred to protect, electrical fencing, etc. I do feel the owners of the domestic animals who have been injured and killed should be reimbursed for their loss. My main point is that FWParks educate all of us to be more aware of the impact we have on these bears, teach all of us how to do a better job towards prevention especially when we live near them, and work together to maintain wild space for these ancient animals. And where possible I ask FWP to advocate for the protection of existing wild lands and more wild lands for all the wild ones. Sincerely, Catherine Nelson

near

Hello Fish WIldlife and Parks,
Please accept these comments for the delisting ARMS for Grizzly bears that the state is considering.
FIrst let me state the dated view that the state has for hunting Griz and unlisted species, which are owned by all Montanans, has not evolved in 100 years. EIther animals are listed under the endangered species act, or they are hunted for meat or trophies. Wolves fall under this category.

Sandhill cranes are hunted in Montana.. FWP has a hunting season for this majestic bird, which is absurd.
I do appreciate that FWP did not go down the hunting path for Griz this year.

FWP had a hunting season for Griz until 1991. Griz were listed under the ESA in 1975 and Montana kept on hunting them…….absurd.

Following are reasons that the state should consider before any future hunting is proposed for the Griz:

The scope of this ARM is too narrow as it looks only at lands around Glacier NP and the Bob Marshall Complex. It should look statewide and supply other states Wyoming,Idaho, Washington,Oregon, etc with griz to repopulate to historic ranges.

The 800 griz population threshold under this arm is too small to even help with inbreeding within Montana.

There are too many human caused griz mortalities and this years mortalities are unsustainable.

83 percent of wildlife mammals have been killed on the planet. Instead of wildlife we have domestic livestock and fowl. FWP focuses too much protecting livestock at the expense of wildlife/

Griz inhabit 2 percent of their historical range. This alone should halt any future Griz hunt until Griz populations are recovered throughout their historic range. The population has grown since 1975, which is great, but the state does little to create suitable griz habitat. Look at DNRC timber sales. The DNRC does little to protect griz habitat and instead is on a road building binge to build roads throughout present griz habitat.Roads degrade habitat.

With environmental changes and human decisions,and stresses, stable historic food sources are changing. Griz for eons feasted and counted on Whitebark pine seeds and cutthroat trout surrounding Yellowstone NP. The whitebark pine food source is gone and Cutts around Yellowstone are gone too from introduction of lake trout into lakes in the park, deoraded water quality and the introduction of other trout species.. As these foods are no longer available the

bears are eating more meat from wildlife and domestic stock.This has caused bear human conflicts during hunting seasons. Griz are expanding their range to find food.

Human population growth is occurring in the same places that are vital to the survival of Griz. Remember that people live here due to choices. Griz have nowhere else to live. FWP needs to make this point and train and educate people to accommodate Griz needs, or be asked to move.

FWP looks at the population of griz to be large enough in NW Montana. At the sametime for griz not to become inbred around Yellowstone, there needs to be mapped connectivity corridors that stretch from the Bob Complex to Yellowstone as well as connectivity corridors to the Yaak and west as well as a corridor to the Bitterroots. These corridors must be managed to support griz needs for habitat.

FWP stated at their open house that griz genetics are a problem around Yellowstone. FWP also stated that the griz population around Glacier is not inbred as it is around Yellowstone. FWP said that the reason for good genetics around Glacier is due to connectivity with Canada. One can look at human population and extracive industries north of the border and see that this will be a future problem for griz genetics..\Look at the caribou as an example of US states and Canada not working together and Caribou are pretty much extinct in NW Montana, Idaho and Canada.

The Flathead National Forest is redoing the forest plan. It looks dismal for griz habitat as amendment 19 standards have been removed from the new plan. This is terrible for griz as well as other species.

Trash is a big problem for griz. Fines for people feeding and attracting bears should be increased and used often. Counties should be required to have bear proof trash containes throughout griz habitat.

FWP needs to do better education for problem people living in griz habitat. This includes picking fruit trees, using electric fences around livestock and chickens. FWP has been soft handed on repeat offenders when it comes to creating hostile bear habitat. Remember that we live hear out of choice.

FWP needs to have stable state funding in place for education and manpower to prevent people from creating problem bears. This needs to be in place before these ARMS are considered.

In closing i would like to say that 800 bears are too small of a population for bears to re-inhabit historical ranges. There are too many bottle necks for connectivity between isolated bear populations. Griz cannot make it to the Yaak from the WHitefish Range because of degraded habitat west of HWY 93. Griz die when they head west HWY 93 toward the Yaak.The only way to get there is to be flown in a helicopter. Griz need to cross mostly federal and state lands to

get there. There are really no towns in the way... Griz cannot make it to the Bitteroots or Yellowstone from the Bob and Glacier. The ARM needs to be holistic and not provincial in approaching long term bear survival. Piecemeal does not work.

I see a rush to delist prematurely, with nothing in place to really provide for long term survival. The state actions got the bears listed in the first place. I do not see that this ARM will do anything to keep them from being relisted in the future. The state will fight a relisting and want to still hunt them as was the case in the past.

Thanks for your time and i hope that you drop this ARM proposal now,
Stephen Braun
Po Box 5six14
Whitefish, MT 59937

2015 E. 36th Ave.

Spokane, WA 99203

Oct. 25, 2018

Dear Grizzly ARM,

Keep ALL of the 95% of Montana grizzly bears ON the Endangered Species list! I ask you to extend and connect their geographic areas and to increase the numbers of bears allotted for protection. Having worked one summer in Glacier Park, in which I hiked over 250 miles, and having taken my husband, my sister, my brother, my father, and at least 3 friends at different times to hike, camp, and backpack in the park, I state unequivocally that the grizzly bear needs corridors to get its food. I see how seasonal the berries are, and how the bears roam miles. Having backpacked in the Bob Marshall, the Swans, and in National Forest adjacent to Glacier, out of Libby, Missoula, Whitefish, and Red Lodge, I can say that you in Montana have the crown jewel of North America, and the grizzly ought to be king.

We need predators to balance the ungulates: we know that from Yellowstone and the elk over population. Thank goodness we stopped another paved road being created on the Continental Divide at Gunsight Pass in Glacier. Thank goodness we stopped the Kintla Lake road from being paved. For goodness sake, use accurate numbers to count grizzly bear populations (not dead bears). Create contiguous corridors for them. Regard habitat connectivity as natural and essential. Don't jeopardize the future of grizzlies in Montana. With 13 killed before hunting season in this year, 2018, they are not ready to be delisted from Endangered Species Protection. Keep what you've got, it's priceless. Increase the bears and theirs!

Sincerely,

Carol Ellis

509 533 0587

carolellisspokane@hotmail.com

Rick Bass, Board Chair
Yaak Valley Forest Council
11896 Yaak River Road
Troy, MT 59935

and

Rick Bass, Board
Save the Yellowstone Grizzly
P.O. Box 1026
Emigrant, MT 59027

Grizzly Bear ARM
Wildlife Division, FWP
P.O. Box 200701
Helena, MT 59620-0701

Greetings:

I'm writing on behalf of two organizations, as a board member of Save the Yellowstone Grizzly, and Board Chair of the Yaak Valley Forest Council, regarding the proposed delisting of the Northern Continental Divide Ecosystem subpopulation of grizzly bears. The political characteristics of this delisting are vexing, coupled with the absence of science. I do not agree that mere math, or rather, enumeration, mixed with anecdotes, qualify as science. Why are we seeing bears farther out onto the plains than we have recently? What age and sex are those bears, what are they eating, why are they displacing, what role does global warming have in that shift? Global warming and the collapse of whitebark pine—the most nutritious food for Yellowstone females with cubs, with the least conflict associated with it—is causing a shift to a more dangerous meat-based diet, with dispersal radiating southeast toward livestock areas. There is so much science that has not been completed yet—in some cases not even begun. It is one thing to count grizzly bears and another to protect and connect the isolated subpopulations, each one a distinct and separate population, when it is the intent and law of the Endangered Species Act to reconnect island populations. How would delisting NCDE bears accomplish the desired increase in connectivity between subpopulations? What is the role of highways and rail systems in takings within the NCDE and desired connectivity? Canada, realizing the value of living grizzlies to their tourist infrastructure, has closed all areas to trophy grizzly hunting. What do economic analyses show with regard to potential tourism boycotts of park areas where Montana grizzlies have been delisted without full recovery and connection?

What is our governmental and management opportunity with regard to the international character of this subpopulation, with (how many?) of the NCDE bears

possessing as it were dual citizenship? Having attended many state and federal grizzly hearings, I am constantly discouraged by the way our government pays no attention to Canadian grizzlies, nor to the sovereign nation status of the tribes, and their wishes and reliance upon this flagship species. As the slowest reproducing land mammal in North America, the grizzly needs its own law and own science, not simply habitat modeling or flyover-counting. To propose delisting as well without acknowledging subsequent effects of hunting is irresponsible and disingenuous. It does neither the bears nor hunters nor state or local or deferral governments nor communities any favors.

What would delisting NCDE grizzlies affect the Yaak population of dual-citizenship (and two-state) grizzlies? What is the existing and future effect of the Pacific Northwest thru-hiker trail on grizzlies currently inhabiting Glacier National Park, the Ten Lakes Wilderness Study Area, and the Yaak Valley? What alternates have been analyzed for this large-scale/long-term management activity? What is the effect of open-road densities on these international bear populations? Has stand-replacing wildfire and clearcutting been analyzed recently with regard to providing sufficient hiding cover for bears within these two adjacent populations and the migration from one to the other? Why are NCDE grizzlies not connecting to bears in the Yaak? Why are Yaak bears not connecting with grizzlies in the NCDE? Why are Yaak grizzlies not connecting with grizzlies in the Cabinet Mountains? What has been achieved and effected with regard to migration corridors for grizzlies in and out of the NCDE, to keep it from remaining yet another Montana island population, a genetic sink?—how successful or unsuccessful have they been? What gaps/obstacles yet remain? What genetic variability studies have been conducted for each of these subpoulations and their connectivity (or lack therefof) to each other? What modeling for the effects of existing and projected global warming and wildfire have been conducted in advance of this proposal?

Sincerely,

Rick Bass
Board Chair, Yaak Valley Forest Council
Board Member, Save the Yellowstone Grizzly

Jane Cline, Libby Montana.

I feel that the grizzly bears, there are not enough of them for their well-being and existence. They need more diversity, like the Cheetah, we don't want them to become like the Cheetah, or maybe they already have. They need more habitat. Hunting would be detrimental to getting a better quality animal for the ecosystem. So therefore I don't think hunting is the answer at all. Look how wolves have improved Yellowstone, and everyone was against them. But they have improved the ecosystem in Yellowstone and the bears have their place in nature too. So that's my comment. Thank you very much.

RECEIVED
SEP 25 2018
FISH, WILDLIFE & PARKS
WILDLIFE DIVISION

Grizzly Bear ARM-Wildlife Division
Department of Fish, Wildlife & Parks
P.O. Box 200701
Helena, Montana 59620-0701

September 24, 2018

Enclosed please find the **individual comments from 146 citizens**. These each need to be recorded individually into the public comment record. **They are not one comment.**

Sent by the Flathead-Lolo-Bitterroot Citizen Task Force by Mike Bader, Missoula, MT

I urge you to prevent grizzly bear hunting in Montana. Our State Animal needs increased habitat protection including roadless areas, low road density areas, and habitats that link the NCDE with other grizzly bear populations in the Northern Rockies. It is premature to remove Endangered Species Act protection for the grizzly bear.

The scope of this comment period should be extended to the entire Conservation Strategy, not just Chapter 2. Habitat protection is inextricably linked to the survival of the grizzly bear.

Our wildlife and wild lands make Montana unique among our United States. The health of the grizzly bear and its habitat is a prime indicator of our own quality of life.

Sincerely,

[redacted]

Print Name

[redacted]

Street or P.O. Box City State Zip

Public Comment Received re: MAR 12-505
476

I urge you to prevent grizzly bear hunting in Montana. Our State Animal needs increased habitat protection including roadless areas, low road density areas, and habitats that link the NCDE with other grizzly bear populations in the Northern Rockies. It is premature to remove Endangered Species Act protection for the grizzly bear.

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Sincerely,

Leslie Wolf
Print Name

Please listen to the public. No hunting bears.

434 Edith St Missoula MT 59801
Street or P.O. Box City State Zip

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Sincerely,

The grizzly population is already struggling due to disappearing food sources and slow reproductive cycles

Sarah Anderson
Print Name

333 Knowles St Missoula MT 59801
Street or P.O. Box City State Zip

I urge you to prevent grizzly bear hunting in Montana. Our State Animal needs increased habitat protection including roadless areas, low road density areas, and habitats that link the NCDE with other grizzly bear populations in the Northern Rockies. It is premature to remove Endangered Species Act protection for the grizzly bear.

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Sincerely,

CARYN MISKE
Print Name

Please do not sign conservation strategy until bears are fully protected.

19420 Howle Creek Rd Frenchtown 59834
Street or P.O. Box City State Zip

Public Comment Received re: MAR 12-505
477

I urge you to prevent grizzly bear hunting in Montana. Our State Animal needs increased habitat protection including road less areas, low road density areas, and habitats that link the NCDE with other grizzly bear populations in the Northern Rockies. It is premature to remove Endangered Species Act protection for the grizzly bear.

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Our wildlife and wild lands make Montana unique among our United States. The health of the grizzly bear and its habitat is a prime indicator of our own quality of life.

Sincerely, Grizzlies are the slowest reproducing animal in N. America and only have cubs every 3 years. Removing even one female will impact the population.

Donald Anderson

Print Name

4185 Alta Mesa Ave. Palo Alto, CA 94306

Street or P.O. Box City State Zip

I urge you to prevent grizzly bear hunting in Montana. Our State Animal needs increased habitat protection including road less areas, low road density areas, and habitats that link the NCDE with other grizzly bear populations in the Northern Rockies. It is premature to remove Endangered Species Act protection for the grizzly bear.

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Our wildlife and wild lands make Montana unique among our United States. The health of the grizzly bear and its habitat is a prime indicator of our own quality of life.

Sincerely, Too much has been traded for too little. We can do better. Thank you

Thomas Lemmons

Print Name

P.O. Box 339 Port Townsend WA. 98368

Street or P.O. Box City State Zip

I urge you to prevent grizzly bear hunting in Montana. Our State Animal needs increased habitat protection including roadless areas, low road density areas, and habitats that link the NCDE with other grizzly bear populations in the Northern Rockies. It is premature to remove Endangered Species Act protection for the grizzly bear.

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Sincerely, This is not a matter of Allow it or not. There are larger issues of breeding zones etc that need to be protected. Please delay and study and discuss options rather than just allowing a blanket license

Todd Joyce

Print Name

2174 S. Wannsville Rd
Lebanon OH 45036

Street or P.O. Box City State Zip

Public Comment Received: MAR12-505
478

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Our wildlife and wild lands make Montana unique among our United States. The health of the grizzly bear and its habitat is a prime indicator of our own quality of life.

Sincerely, Too soon after delisting to hunt these bears.

Kathleen Carrings

Print Name

4185 Alta Mesa Ave. Palo Alto, CA

From:	C_roland@yahoo.com
To:	FWP GRIZZLY BEAR ARM,
Subject:	Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date:	Sunday, September 02, 2018 7:52:11 PM

Save the Yellowstone Grizzlies! Please don't allow hunting in the park!

Christina Roland

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From: Bob Keith
To: FWP GRIZZLY BEAR ARM,
Subject: Griz
Date: Friday, August 24, 2018 2:24:41 PM

Hello,

I just have a question. Since the Grizzly Bear has made it back to population numbers that are satisfactory is there any plan for opening some of the road closures that were made for the protection of the bears? I have lived in Montana all of my life and Flathead county for over 45 years and have watched the access to our outdoors become more and more restricted. For a long time we were told that the closure of the road access is to protect Grizzly Bear habitat. It seems like about 90% of the access roads in Flathead county are now closed. I am getting older and would like to be able to go to places that I used to hunt and fish. With the road closed it makes it almost impossible for me to get there anymore. Please consider opening some of the major roads that have been closed in this area. I am sure that the Grizzly Bear won't mind sharing with us. Bob Keith

From: r.bergroos@gmail.com
To: FWP GRIZZLY BEAR ARM,
Subject: Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date: Saturday, August 25, 2018 9:43:57 AM

I am confused about the consequences of the proposed rules: 1. Do the proposed rules affect only Glacier National Park and Flathead County Montana? ; 2. Have County Commissioners participated in their development? 3. Are there more recent committee recommendations than those received in 2015? What do the proposed rules require? 4. What affect do these proposed rules have upon the USFWS Grizzly Bear Restoration project in Lincoln County? 5. Will Lincoln County and Flathead County Commissioners and Lincoln County USFWS officials be signatories of the proposed MOU?

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.

From: klmac80.lm@gmail.com
To: FWP GRIZZLY BEAR ARM,
Subject: Public Comment: Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem
Date: Tuesday, August 28, 2018 1:52:18 PM

Amazing that probably one of the most impacted towns (Choteau) doesn't warrant a public hearing there???????

This e-mail was generated from the 'Notice of Public Hearings on Proposed Administrative Rule Pertaining to Grizzly Bear Demographic Objectives for the Northern Continental Divide Ecosystem' Public Notice Web Page.