Montana Fish, Wildlife and Parks Public Comment Grizzly Bear ARM 12.9.1403 Amendment

From: <u>John Harrison</u>

To: <u>FWP GRIZZLY BEAR ARM,</u>

Subject: [EXTERNAL] Grizzly Bear ARM comments - CSKT Date: Tuesday, February 15, 2022 11:45:35 AM

Attachments: Gizzly Bear AMR Amendment CSKT Comments (2-15-22).pdf

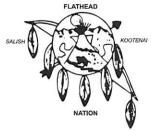
Good Morning Madam Chair and Commissioners,

Please find attached the comments of the Confederated Salish and Kootenai Tribes of the Flathead Reservation regarding the Notice of Proposed Amendment of ARM 12.9.1403 Regarding NCDE Grizzly Bear Demographic Objectives.

If you have any questions, please feel free to contact us.

Thank you.

John Harrison, Staff Attorney Confederated Salish and Kootenai Tribes Pablo, Montana 406-675-2700 ext. 1185 John.Harrison@cskt.org



A Confederation of the Salish, Pend d' Oreille and Kootenai Tribes

February 15, 2022

P.O. BOX 278
Pablo, Montana 59855
(406) 275-2700
FAX (406) 275-2806

www.cskt.org

THE CONFEDERATED SALISH AND KOOTENAI TRIBES OF THE FLATHEAD NATION



A People of Vision

TRIBAL COUNCIL MEMBERS:

Tom McDonald - Chairman Len Twoteeth - Vice Chair Martin Charlo - Secretary Ellie Bundy - Treasurer Carole Lankford Anita Matt James "Bing" Matt Jim Malatare Mike Dolson Jennifer Finley

Montana Fish and Wildlife Commission Grizzly Bear ARM PO Box 200701 Helena, Montana 59620-0701

RE: In the matter of the amendment of ARM 12.9.1403 pertaining to grizzly bear demographic objective for the Northern Continental Divide Ecosystem

Dear Chair Robinson, and Commissioners,

This letter is a comment from the Confederated Salish and Kootenai Tribes of the Flathead Reservation (CSKT or Tribes) on the proposed changes to Administrative Rules of Montana (ARM) 12.9.1403 in regard to grizzly bears in the Northern Continental Divide Ecosystem (NCDE). We appreciate the opportunity to provide comments on these proposed changes.

The grizzly bear is a species of great spiritual, cultural and ecological significance to the people of the Confederated Salish, Kootenai and Pend d'Oreille Tribes. Grizzly bears have been revered by our people since time immemorial, and they continue to be so honored today, both here on the Flathead Indian Reservation and elsewhere throughout their geographical range and our aboriginal territory. As a result, we view these changes as well as the potential delisting with a great deal of interest and concern as much of the Northern Continental Divide Ecosystem overlays our current reservation boundaries and/or our aboriginal territory. We manage our land and resources within the Flathead Reservation, including the wildlife. We also reserved the right to hunt, fish, and gather off-reservation pursuant to the 1855 Hellgate Treaty, 12 Stat. 975.

Our tribal biologists have worked diligently with inter-agency groups to ensure the protection of grizzly bears in the NCDE, while also ensuring human safety. We understand that the proposed modifications to the ARM rule will be implemented should the species be de-listed. We also understand that any potential delisting of grizzly bears in the NCDE would not necessarily mean hunting would be utilized as a management tool, however, we want to express our strong opposition to any plans for sport and/or recreational hunting of grizzly bears. Recent hunting law changes regarding the extended seasons, baiting, hound hunting for black bears in spring, and the use of snares for wolf trapping have already raised concern for CSKT due to the possibility of by-catch of grizzly bears. Injured or non-target captured bears in wolf traps / snares could endanger members of the public as well as require bear managers to remove bears from traps. These hound hunting and wolf trapping changes could also increase bear mortality through direct conflict with non-target grizzly bears.

Specific to the proposed modification of ARM 12.9.1403, the Tribes concur with comments expressed during the rule change hearing held February 8, 2022. The language of proposed subsection (5) should be amended to read:

(5) Hunting will not be allowed in a year if mortality thresholds as described in (3)(b)(ii) and or (iii) were exceeded reached in the previous year. (Strikethrough is deletion of proposed language, italics is amendment to proposed language).

The Tribes believe this amended language would better reflect the intent of the proposed rule change, while doing more to ensure the continued viability of the NCDE grizzly bear population.

As noted above, grizzly bears are a species of high reverence for tribal people, including our people and those of other tribes. For centuries, our people have lived in harmony with grizzly bears and have come to revere their power and strength in the natural world. Because of that reverence, we did not hunt them for food or for sport and we did not infringe on their natural movements.

We also want to emphasize that we support natural genetic connectivity of grizzly bears across the landscape between recovery zones and distinct populations. While we understand that human assisted movement or augmentation of grizzly bears between ecosystems are used to increase genetic variability within populations currently and proposed within the Conservation Strategy, we believe that natural movements and migrations should be paramount to augmentation and remain the continued goal of gene flow between populations.

In conclusion, we would like to again emphasize strong opposition to the potential of hunting grizzly bears near our Reservation in aboriginal territories. We also encourage means of safe, natural movements and migrations by grizzly bears between populations in regards to genetic connectivity.

Sincerely,

Confederated Salish and Kootenai Tribes

Tom McDonald, Chairman

Tribal Council

From: **Ellary TuckerWilliams** FWP GRIZZLY BEAR ARM, To:

Subject: [EXTERNAL] NCDE Grizzly Bear Demographic Objectives - Support

Date: Thursday, February 17, 2022 9:34:29 AM

Attachments: image001.png image002.png

image003.png image004.png

CSF Comments - MT Grizzly Bear Demographic Objectives Final.pdf

Good morning,

On behalf of the Congressional Sportsmen's Foundation, I write in support of the proposed amendments to the Northern Continental Divide Ecosystem (NCDE) Grizzly Bear Demographic Objectives and the intent to provide management objectives that would ensure the continued recovered status of the grizzly bear upon delisting and subsequent transfer of management authority to the State of Montana. Attached you will find our formal comment letter.

Please feel free to reach out with any questions.

Best,

Ellary



Ellary TuckerWilliams

Senior Coordinator, Rocky Mountain States and Internal MARCOM Liaison Congressional Sportsmen's Foundation

Phone 202-543-6850, ext. 35 Mobile 202-573-6079 Web http://www.congressionalsportsmen.org [congressionalsportsmen.org] Email etuckerwilliams@congressionalsportsmen.org 110 North Carolina Ave. SE, Washington, DC 20003





[instagram.com] (twitter.com)



February 16, 2022

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

Montana – Rule Amendment Regarding NCDE Grizzly Bear Demographic Objectives - Support

Dear Montana Fish and Wildlife Commissioners,

On behalf of the Congressional Sportsmen's Foundation (CSF), I write in support of the proposed amendments to the Northern Continental Divide Ecosystem (NCDE) Grizzly Bear Demographic Objectives and the intent to provide management objectives that would ensure the continued recovered status of grizzly bear upon delisting and subsequent transfer of management authority to the State of Montana.

Founded in 1989, CSF's mission is to work with Congress, governors, and state legislatures to protect and advance hunting, angling, recreational shooting, and trapping. CSF has a strong track record in Montana, working with the Montana Legislative Sportsmen's Caucus and conservation partners to protect and advance Montana's sporting heritage by supporting pro-sportsmen legislation and state fish and science-based wildlife management objectives. We offer the following comments based on our experience working on conservation policy for more than 30 years.

According to the US Fish and Wildlife Services 2022 report titled "Species Status Assessment for the Grizzly Bear (*Ursus arctos horribilis*) in the Lower-48 States" the grizzly bear population in the NCDE has made significant strides towards recovery. Habitat and demographic factors used to determine ecosystem resiliency were found to be high and the population within the NCDE is estimated to be over 1000 individual bears. In short, the NCDE grizzly bear population is highly resilient and has sufficient viability over the next 30 to 45 years to withstand stochastic events.

The proposed amendments in the NCDE Grizzly Bear Demographic Objectives create regulatory safeguards for when the NDEC grizzly bear is determined to be recovered and delisted by ensuring that the bear population stays above the minimum recovery level, negating the need for a potential relisting effort. By ensuring the grizzly bear is not relisted, Montana Fish, Wildlife and Parks and the Fish and the Fish and Wildlife Commission can work within the guidelines of the Grizzly Bear Policy to provide for recreational opportunities, hunting included, in addition to allowing hunting as 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. The proposed amendments would lead to increased access and opportunity for future grizzly bear hunting opportunities by safeguarding against foreseeable future attempts to relist the species.

In closing, CSF urges the Montana Fish and Wildlife Commission to move forward with the proposed amendments to the NCDE Grizzly Bear Demographic Objectives and support this step towards increased access and opportunity for Montana's sportsmen and women upon grizzly bear delisting.

Sincerely,

Ellary TuckerWilliams

Ellary where illiams

Rocky Mountain States Senior Coordinator

From: Peter Metcalf

To: <u>FWP GRIZZLY BEAR ARM,</u>

Subject: [EXTERNAL] Comments on Proposed Amendment

Date: Friday, February 18, 2022 1:54:27 PM

Attachments: NCDE ARM Proposed Amendment Comments Glacier Two Medicine Alliance.pdf

Comments on proposed amendment to ARM 12.9.1403 are attached. Thank you for taking public comment on this proposed language change.

Sincerely,

Peter

--

Peter Metcalf

Executive Director

Glacier-Two Medicine Alliance

PO Box 181

East Glacier Park, MT 59434

peter@glaciertwomedicine.org

Phone: (406) 531 - 5098

http://www.GlacierTwoMedicine.org [glaciertwomedicine.org]

"Glacier-Two Medicine Alliance is dedicated to the protection, stewardship, and shared enjoyment of the culturally- and ecologically-irreplaceable wild lands of the Badger-Two Medicine and its interconnected ecosystems."



February 18, 2022

Grizzly Bear ARM
Department of Fish, Wildlife and Parks
PO Box 200701
Helena, MT 59620-0701

Submitted via electronic mail to GrizzlyBearARM@mt.gov

Dear Fish, and Wildlife Commission,

Glacier-Two Medicine Alliance (GTMA) appreciates the opportunity to comment on the proposed amendment to ARM 12.9.1403, which pertains to grizzly bear demographic objectives in the Northern Continental Divide Ecosystem (NCDE). GTMA is a grassroots conservation organization based in East Glacier Park that works to protect and steward the lands, waters, and wildlife of the Badger-Two Medicine and surrounding lands in northern Montana. The Badger-Two Medicine provides essential habitat and demographic connectivity for grizzly bears, including some of the most productive spring range on the entire Rocky Mountain Front. GTMA has long been involved in management and policy matters pertaining to the recovery and conservation of grizzly bears.

GTMA generally supports the amended language although we continue to have strong concerns about ARM 12.9.1403. In particular we question the validity of 800 bears as a threshold population size and find the 90% confidence interval too liberal, especially given that many parameters and assumptions of the population estimate model are based largely on DNA sampling work nearly 20 years old. An intensive, NCDE-wide DNA population sample should be conducted to test and update the parameters in the model. In the meantime, the Commission should make clear that it is fully committed to managing for an increasing population even after the population in the NCDE is delisted from the federal Endangered Species Act. An increasing population is necessary to create the density dependent conditions for grizzly bears to disperse or expand their territory sufficiently to connect the NCDE with other recovery zones in the Northern Rockies.

In light of the importance of connectivity as a biological necessity to ensure the sustained recover of grizzly bears, as well as the legal obligation to establish adequate regulatory mechanism to sustain a recovery grizzly bear population, GTMA has some specific suggestions on the amended language in sections (4) and (5).

Regarding Section (4), we appreciate the addition of a quantitatively determined cessation of hunting. However, we believe the 90% confident interval is insufficiently sensitive given the slow reproductive rates of grizzly bears. Hunting and other mortality could push the population substantially below 800 bears – which is too low a threshold population – before the cessation of hunting is triggered. This amendment also needs to clarify at what population hunting would resume. If at 800 grizzly bears (90% CI), the hunt could again suppress the population and have to be ceased. This create a socially untenable yo-yo of on again off again hunts and erode trust in wildlife managers estimates and decisions. For hunting to resume, the grizzly bear population should surpass a number meaningfully higher than 800, say 900 for example, and be estimated with greater confidence, like a minimum 95% CI rather than a 90% CI. These changes are more likely to improve biological outcomes and reduce social conflict over the hunting of the species

Regarding Section (5), we would like to see the word "and" changed to "or" so the section would appear as follows:

(5) Hunting will not be allowed in a year if mortality thresholds described in (3)(b)(ii) or (iii) were exceeded in the previous year.

The requirement that both female and male mortality thresholds be met to prevent a hunt the following year could potentially throw the population into sharp decline or demographic chaos. It is quite conceivable that female mortality could far exceed 10% for multiple years, but male mortality does not, creating an untenable scenario where females are still being killed by hunters. Such a scenario would likely have a lasting, suppressive effect on the entire NCDE given how important, yet difficult, it is to recruit females to the breeding population. Hunting should cease and be suspended for the coming year when either the mortality threshold in (3)(b)(ii) or (3)(b)(iii) is exceeded in any given year.

GTMA appreciates the opportunity to comment on this amendment. We look forward to being a part of the process of shaping grizzly bear management and policy in Montana moving forward in order to ensure a thriving, connected grizzly bear population across the recovery areas and the successful coexistence of people and grizzly bears across the Big Sky state.

Sincerely,

Peter Metcalf

Executive Director

From: <u>Nicholas Arrivo</u>

To: <u>FWP GRIZZLY BEAR ARM,</u>

Subject: [EXTERNAL] Comment on ARM 12.9.1403

Date: Friday, February 18, 2022 3:51:06 PM

Attachments: MT NCDE Reg Comments 021822.pdf

Hello,

Attached please find a comment on the proposed revisions to ARM 12.9.1403 from the Humane Society of the United states.

Nicholas Arrivo

Managing Attorney Animal Protection Litigation

narrivo@humanesociety.org
P 202-676-2339 (currently working from home; email is preferred)
humanesociety.org [humanesociety.org]









This is intended to be a confidential communication only to the person or persons to whom it is addressed, and may contain legally privileged and/or confidential information. If you are not the intended recipient(s), or the employee or agent responsible for delivery of this message to the intended recipient(s), you are hereby notified that any dissemination, distribution or copying of this e-mail message is strictly prohibited. If you have received this message in error, please immediately notify the sender and delete this e-mail message from your computer.



1255 23rd St. NW Suite 450 Washington, DC 20037 P 202-452-1100 F 202-778-6132 humanesociety.org February 18, 2022

Fish and Wildlife Commission Montana Department of Fish, Wildlife and Parks $1420 \to 6^{\text{th}}$ Avenue Helena, MT 59601

Submitted via email to GrizzlyBearARM@mt.gov

Susan Atherton Co-Chair

Thomas J. Sabatino, Jr. Co-Chair

Kitty Block President and Chief Executive Officer

William H. Hall Treasurer and Chief Financial Officer

Alison Corcoran Chief Development and Marketing Officer

Katherine L. Karl General Counsel and Chief Legal Officer

Erin Frackleton Chief Operating Officer

Nicole Paquette Chief Programs and Policy Officer

Alexa Herndon Chief People Officer

Miguel Abi-Hassan Chief Animal Rescue, Care and Sanctuary Officer

Johanie V. Parra Secretary

DIRECTORS

Susan Atherton Yolanda Berkowitz Georgina Bloomberg J. Elizabeth Bradham Marcus East Carolyn N. Everson Caren M. Fleit Robert A. Greenspon Brad Jakeman Cathy Kangas Sylvia T. Kaser, Esq. Adi Kumar Charles A. Laue Kathleen M. Linehan, Esq. C. Thomas McMillen David S. Niekerk Marsha R. Perelman Thomas J. Sabatino, Jr. Suzy Welch Steven G. White

Re: Proposed Amendment of ARM 12.9.1403 Regarding NCDE Grizzly Bear Demographic Objectives

Dear Chair Robinson, Vice Chair Tabor, and members of the Fish and Wildlife Commission,

On behalf of the Humane Society of the United States and our supporters in Montana, we are writing regarding the proposed amendments to ARM 12.9.1403, which pertain to grizzly bear (*Ursus arctos*) management objectives in the Northern Continental Divide Ecosystem ("NCDE"). The HSUS believes that delisting grizzly bears in the NCDE is premature at this time, and vigorously opposes the trophy hunting of grizzly bears in the event that they are federally delisted. We offer the comments below not as an endorsement of post-delisting trophy hunting, but only to bring to the Commission's attention a number of deficiencies in the proposed regulation that could jeopardize NCDE grizzly bears if not addressed.

1. Hunting Should Not be Allowed if *Any* Mortality Threshold is Exceeded in the Previous Year

Subsection (5) of the proposed rule specifies that "[h]unting will not be allowed in a year if mortality thresholds as described in [subsections] (3)(b)(ii) **and** (iii) were exceeded in the previous year" (emphasis added). The use of "and" in this provision is either a typographical error or a serous oversight, and should be replaced with "or." Hunting mortality must not be allowed to continue if *any* of the NCDE Conservation Strategy's ("Strategy") thresholds are met. As drafted, however, hunting will only cease if *both* the independent female *and* independent male mortality thresholds are exceeded. Rectifying this error is critical to ensuring that each mortality threshold is given meaningful effect, as contemplated in Chapter 2 of the Strategy.



2. Mortality Thresholds Must be Recalibrated if Population Estimator Methodologies Change

The proposed rule specifies an overarching demographic objective of 90% probability that the total population within the Demographic Monitoring Area ("DMA") is above 800 grizzly bears. This target was developed with reference to a specific stochastic population modeling methodology. Should the Montana Fish, Wildlife, and Parks or the Interagency Grizzly Bear Study Team replace or otherwise change the model used to annually estimate the NCDE bear population, this threshold must be recalibrated commensurate with the new model. Failing to do so would risk allowing excessive mortality to continue unabated if the new estimator results in more "paper bears" than the existing estimator. *See Crow Indian Tribe v. United States*, 343 F.Supp.3d 999, 1016-18 (D. Mont. 2018) (Recognizing importance of recalibration where "if a new model estimates 1000 bears where [the existing model] found 700, the states will be able to treat the jump in population as they would treat it on paper—as if 300 new individuals had moved into the [ecosystem]."), *aff'd in relevant part* at 965 F.3d 662 (9th Cir. 2020).

3. The Proposed Amendment Will Result in Population Overestimates and Excessive Hunting Mortality

a. Use of six-year running average for population estimates will result in a lag time that threatens bears .

FWP proposes to measure each of its three principal demographic objectives and mortality thresholds for grizzly bears in the NCDE (survival rate of independent females, mortality of independent females, and mortality of independent males) using a six-year running average. We are concerned that the use of a six-year average will result in a lag time that hinders FWP's capacity to detect and respond to significant short-term population changes, undermining the agency's ability to maintain the population above the thresholds identified in the rule. In particular, we are concerned that the use of a six-year running average will cause in distorted results during the years immediately following delisting, when NCDE bears are newly exposed to substantial new sources of human-caused mortality - in particular, trophy hunting. Commingling pre-delisting population estimates with postdelisting population estimates in a six-year running average will dilute the weight of newer estimates that reflect those new sources of mortality, resulting in a less accurate average. Even if hunting and other new mortality sources are driving the population below thresholds, this effect may cause that trend to go undetected and will very likely cause that trend to go unaddressed since mandatory hunting closures are only triggered if the six-year average falls below the rule's thresholds.

b. Trophy hunting grizzly bears causes super-additive mortality.

The risks of relying on a six-year average will be compounded by several mechanisms, well-established in the best available science, that render trophy hunting mortality super-



additive in grizzly bear populations. Based upon their 30-year study of grizzly bears, biologists found that hunting them causes immense disturbance to bears including on individual survival, ability to reproduce and bodily traits as a result of trophy hunting with its direct consequence of harming animals' fitness.¹ Hunting affects a populations' age and sex structure, social structure; hunting also changes individual bears' behaviors and their body types (as a result of human selection via trophy hunting).² Hunting removes the oldest animals from the population, which reduces population growth rates because older females are the most successful breeders.³ Hunting also removes the oldest and largest male bears, which can reduce successful reproduction as females chose their mates.⁴ Although not shown in large carnivores, grizzly bear biologists speculate that the removal of large male will reduce lower-quality cubs; that is, those with less ability to survive because of a lack of fitness; those less fit cubs will have a decreased ability to reproduce when they are adults.⁵ The loss of older, male bears, the ones preferred by trophy hunters, could "artificially select for smaller and less reproductively successful phenotypes."6

For cubs of the year, the removal of adult males through hunting causes sexually-selected infanticide⁷ on them, and for two-year-old cubs, death due to hunting could be a direct factor.⁸ Because of sexually-selected infanticide due to hunting, it limits both population growth and increases juvenile mortalities.⁹ Breeding females actively implement strategies to avoid sexually-selected infanticide by engaging in aggression with males, avoiding infanticidal males including by restricting their foraging behaviors, all of which have individual and population-level costs because of a loss of reproduction.¹⁰

Hunting harms individuals' ability to disperse and thus decreases population growth. 11

¹ R. Bischof et al., "Regulated Hunting Re-Shapes the Life History of Brown Bears," *Nature Ecology & Evolution* 2, no. 1 (2018).

² S. C. Frank et al., "Indirect Effects of Bear Hunting: A Review from Scandinavia," *Ursus* 28, no. 2 (2017); J. Van de Walle et al., "Hunting Regulation Favors Slow Life Histories in a Large Carnivore," *Nature Communications* 9 (2018).

³ Frank et al., "Indirect Effects of Bear Hunting: A Review from Scandinavia."

⁴ Ibid.

⁵ Ibid.

⁶ Ibid., 156.

⁷ Sexually selected infanticide, contrary to assertions made by Brian Nesvik, is when males kill the offspring of another male in order to breed with the victimized mother, and it generally occurs in hunted populations of grizzly bears and mountain lions. See e.g., Frank et al. (2017). It is not a carrying capacity-induced phenomena as Mr. Nesvik has asserted.

⁸ Bischof et al., "Regulated Hunting Re-Shapes the Life History of Brown Bears."; Frank et al., "Indirect Effects of Bear Hunting: A Review from Scandinavia."

⁹ "Indirect Effects of Bear Hunting: A Review from Scandinavia." citing Swenson et al. (1997); Swenson (2003); Gosselin et al. (2015, 2017).

¹⁰ Ibid. (Frank et al. (2017) also cite Wielgus and Bunnell (1994, 2000) and Wielgus et al. (2001a).

¹¹ Ibid.



Hunting bears makes them more vigilant, so they become more nocturnal and lose foraging opportunities during hunting seasons which coincide with their need to put on enough calories to survive wintertime; some bears cannot afford to forego foraging in places which makes them more vulnerable to hunters. ¹² In Europe, on a heavily-hunted bear population, females evolved to retain their cubs for an extra year, making non-reproductive females and male more vulnerable to hunters and the population effects because of this behavior are unknown. ¹³

Winter severity (decreased temperature and or increased snow fall) can contribute to the protection of bears from hunters as they either enter the den earlier or emerge later. ¹⁴ This factor is important because of a warming climate, which will expose more bears to hunters. ¹⁵

Older females had better spring survival rates, produced larger litters and their cubs had a better chance of surviving their first spring than younger mothers. ¹⁶ Females with cubs are more protected from hunters than solitary individuals, and in Europe, where brown bears are hunted has caused cubs to stay with their mothers another year, limiting reproduction. ¹⁷

Male bears were more exposed to mortality because of hunting and other causes during their entire lifetime, and death for them was more pronounced at the subadult and early adult stages as they are dispersing and more prone to risk.¹⁸

4. Conclusion

The HSUS urges the Commission to amend the proposed rule in order to address the significant and population-threatening deficiencies identified above.

¹² Ibid.; A. Ordiz et al., "Do Bears Know They Are Being Hunted?," *Biological Conservation* 152 (2012); Smjg Steyaert et al., "Ecological Implications from Spatial Patterns in Human-Caused Brown Bear Mortality," *Wildlife Biology* 22, no. 4 (2016); A. G. Hertel, J. E. Swenson, and R. Bischof, "A Case for Considering Individual Variation in Diel Activity Patterns," *Behavioral Ecology* 28, no. 6 (2017).

¹³ Van de Walle et al., "Hunting Regulation Favors Slow Life Histories in a Large Carnivore."

¹⁴ Bischof et al., "Regulated Hunting Re-Shapes the Life History of Brown Bears."

¹⁵ Ibid.

¹⁶ Ibid.

¹⁷ Ibid.

¹⁸ Ibid.



Sincerely,

Nicholas Arrivo Managing Attorney, Wildlife The Humane Society of the United States narrivo@humanesociety.org

Wendy Keefover Senior Strategist, Native Carnivore Protection The Humane Society of the United States wkeefover@humanesociety.org

Literature Cited

- Bischof, R., C. Bonenfant, I. M. Rivrud, A. Zedrosser, A. Friebe, T. Coulson, A. Mysterud, and J. E. Swenson. "Regulated Hunting Re-Shapes the Life History of Brown Bears." [In English]. *Nature Ecology & Evolution* 2, no. 1 (Jan 2018): 116-23.
- Frank, S. C., A. Ordiz, J. Gosselin, A. Hertel, J. Kindberg, M. Leclerc, F. Pelletier, *et al.* "Indirect Effects of Bear Hunting: A Review from Scandinavia." [In English]. *Ursus* 28, no. 2 (Nov 2017): 150-64.
- Hertel, A. G., J. E. Swenson, and R. Bischof. "A Case for Considering Individual Variation in Diel Activity Patterns." [In English]. *Behavioral Ecology* 28, no. 6 (Nov-Dec 2017): 1524-31.
- Ordiz, A., O. G. Stoen, S. Saebo, J. Kindberg, M. Delibes, and J. E. Swenson. "Do Bears Know They Are Being Hunted?". *Biological Conservation* 152 (Aug 2012): 21-28.
- Steyaert, Smjg, A. Zedrosser, M. Elfstrom, A. Ordiz, M. Leclerc, S. C. Frank, J. Kindberg, *et al.* "Ecological Implications from Spatial Patterns in Human-Caused Brown Bear Mortality." [In English]. *Wildlife Biology* 22, no. 4 (Jul 2016): 144-52.
- Van de Walle, J., G. Pigeon, A. Zedrosser, J. E. Swenson, and F. Pelletier. "Hunting Regulation Favors Slow Life Histories in a Large Carnivore." [In English]. *Nature Communications* 9 (Mar 2018): 10.

From: <u>Sarah Lundstrum</u>

To: <u>FWP GRIZZLY BEAR ARM,</u>

Subject: [EXTERNAL] Grizzly Bear ARM comments

Date: Thursday, February 17, 2022 9:52:41 AM

Attachments: image001.png

NCDE ARM Amendment Comments Final.pdf

NCDE ARM Comments Final.pdf

Please find attached.

Thank you, Sarah



Sarah Lundstrum (she/her) *Glacier Program Manager*

National Parks Conservation Association

C: 406-250-5346 | slundstrum@npca.org | npca.org [mcas-proxyweb.mcas.ms]

Preserving Our Past. Protecting Our Future.



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

February 17, 2022

Dear Montana Fish Wildlife & Parks Commission:

Thank you for the opportunity to comment on the proposed amendment to ARM 12.9.1403, pertaining to grizzly bear demographic objectives for the Northern Continental Divide Ecosystem (Amendment)(NCDE). On behalf of the National Parks Conservation Association (NPCA) and our 8,800 members and supporters across Montana, I offer the following comments.

Formed in 1919, the NPCA's mission is to protect and enhance America's National Park system now and for future generations. We continue to fulfill this mission by working to connect our national parks with the broader landscape and maintain population and habitat connectivity that is important for the long-term health of wide-ranging wildlife species. Therefore, the management of grizzly bears in and around Glacier National Park is of high importance to us.

Overall, we are supportive of the amendment, though we continue to have concerns about ARM 12.9.1403 and whether the Commission is committed to managing for an increasing grizzly bear population. We would reiterate our concerns as outlined in our original letter on the ARM proposal in 2018 (attached). As well we have some specific concerns around the amendment.

(3)(a) and (b)(i)(ii) and (iii) are presumably designed to manage for a stable population of grizzly bears in the NCDE. However, if the NCDE is expected to act as a source population for other recovery zones, as this amendment hints at "(3)(b) manage mortalities from all sources, including hunting and loss of grizzly bears through translocation out of the NCDE", then a commitment to demographic objectives that allow for an increasing population is key. This could be through more conservative management of grizzly bears, by ensuring a 92% likelihood of a population over 800 bears, and an 92% survival rate of independent females. Or perhaps a commitment to only allowing increased discretionary mortality through a potential hunt if certain criteria are met (that 92% likelihood or independent female survival rate of 92%).

For section (4), we appreciate that the amendment includes direction for when hunting would cease, but we would like to see greater consideration for when it would then resume. If the point is to manage bears to have a 90% likelihood of a population of 800 grizzly bears, then resuming hunting at that threshold would simply push the population past that likelihood again.

Instead (4) should state that hunting cannot resume until the likelihood of a population of 800 bears is 95% or greater, thereby ensuring that mortality the following year wouldn't immediately cross the 90% threshold again.

On section (5), we would like clarity around whether mortality standards (3)(b)(ii) **AND** (iii) need to be exceeded to disallow hunting the following year, or if (3)(b)(ii) **OR** (iii) need to be exceeded to disallow hunting the following year. We are concerned with how section (5) is currently written that both are required to be exceeded before disallowing hunting the following year. If that is true, then the NCDE population could be impaired to a degree that is damaging to the continued existence of the NCDE population.

We believe that section (5) should read "hunting will not be allowed in a year if mortality thresholds as described in (3)(b)(ii) OR (iii) were reached in the previous year".

Again, thank you for the opportunity to comment on this amendment. We look forward to continuing the conversation around grizzly bear management in the NCDE in the future, to allow for a thriving NCDE population and a connected bear population across ecosystems.

Sincerely,

Sarah Lundstrum

Glacier Program Manager, National Parks Conservation Association

Whitefish, MT



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

Dear Montana Fish Wildlife & Parks Commission;

Thank you for the opportunity to comment on the Advance Rule Making for Northern Continental Divide Ecosystem (NCDE) Grizzly Bears (Rule). Based on the September 2018 District Court ruling pertaining to Greater Yellowstone Ecosystem Grizzly Bears, we urge Montana Fish Wildlife & Parks (MT FWP) to pause this current rule making process and return to the drawing board with the United States Fish and Wildlife Service (USFWS) to reevaluate the decision to move forward with a proposed delisting based on the 2013 Northern Continental Divide Ecosystem Conservation Strategy (Conservation Strategy).

Formed in 1919, the National Parks Conservation Association's (NPCA) mission is to protect and enhance America's National Park system now and for future generations. Our more than 1.3 million members and supporters nationwide continue to fulfill this mission by working to connect our national parks with the broader landscape and maintain population and habitat connectivity that is important for the long-term health of wide-ranging wildlife species.

While we appreciate the opportunity to comment on the Rule, we do have concerns that MT FWP is getting too far in front of the USFWS with this rule-making process. While we understand MT FWP's desire to codify the Conservation Strategy, and the need to do so in advance of any Endangered Species Act delisting, we believe that the recent District Court ruling on Greater Yellowstone Ecosystem grizzly bears has implications regarding the potential for USFWS to even proceed with the delisting of NCDE grizzly bears, and certainly on the lawfulness to proceed with a delisting based on the 2013 Conservation Strategy. Within his decision, Judge Christensen specifically identified the connection between the ruling and the potential to delist the NCDE population. "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."

NPCA believes that the findings mean the USFWS cannot move ahead with a proposal to delist the NCDE grizzly population without significant evaluation of the impact this delisting will have on the broader species. The Court's decision should render the 2013 Conservation Strategy insufficient and therefore MT FWP should not move ahead with rule-making based on the current conservation strategy.

NPCA urges MT FWP to pause the current rule-making process; however if MT FWP chooses to move ahead with this rule-making process then it needs to make changes to and address concerns around the proposed rule, as we outline below.

Objective 1

One of our main concerns is that while the demographic objective of the documented presence of females with offspring in at least 21 of 23 bear management units (BMU) is a good standard, there should be a threshold for the number of years an individual BMU can remain unoccupied. For instance, while occupancy standards have technically been met since 2010, there has not been documented occupancy in the Big Salmon BMU from 2013-2017 and the Murphy Lake BMU from 2014-2017. MT FWP should be taking a hard look at why these BMU's have not had documented occupancy for multiple years and work to address whatever issues have caused that absence. There are other instances were BMU's did not have documented occupancy for multiple years (Hungry Horse 2011-2014, Continental Divide 2006-2009, Birch Teton 2006-2010 & 2013-2015, Dearborn Elk Creek 2013-2016) most of which occur when, based on the 21 of 23 goal, the occupancy standard was met. These instances need to be investigated to find the root cause; ie. is it due to habitat changes/loss, lack of funding for field surveys, fires, increased human pressure or something else entirely.

The six-year running tally for occupancy also leaves us with concerns and questions, since it does not give a good idea about annual trends. This causes a risk that the NCDE population could decline rapidly and that those losses would be masked by the six-year average. MT FWP needs to be clear that they will be monitoring on an annual basis and prove that they have a plan to model population trends if there are multiple bad years in a row, as well as show that they have regulatory mechanisms in place to increase and maintain resiliency in the population.

While observations serve as a good baseline they are not as good as the DNA hair snags used in the past; we suggest a spot sampling of BMU's on an annual basis, in order to maintain the best representative sample for population monitoring. The same is true of radio collaring bears—the sample for trend observation is only as good as the diversity of the sample size and location of bears. MT FWP needs to be sure that they have a robust and diverse sample of collared bears in order to maintain the best possible scientific information on the NCDE population.

Objective 2

Our first concern with Objective 2 is the fact that the recovery goal (maintaining 90% likelihood of 800 bears in order to ensure the long-term health of this population) is proposed without providing scientific justification. Without a population viability assessment to show the scientific justification for using this number it appears to be arbitrarily picked. We recommend that prior to setting demographic survival and mortality thresholds, MT FWP should conduct a population viability assessment to determine how many bears we need and for how long to guarantee survival of the NCDE population.

MT FWP also needs to be clear about whether they will be managing for a stable population – what the 90% survival threshold ensures – or if they will manage for an increasing population, which would be necessary for the NCDE population to be a source for other recovery populations in the region and increase the potential for connectivity to the Greater Yellowstone Ecosystem population. We believe that MT FWP should continue to manage for an increasing population of NCDE grizzly bears and that the female survival threshold should more likely be 92%, closer to the level it has been at in recent years.

In order to maintain that higher survival number, the independent female mortality threshold for all types of mortality must be reduced to 8% rather than the proposed 10%; and in order to ensure that both survival and mortality thresholds are met, those numbers should be applied to the lower end of the confidence interval for the population model. This conservative management strategy would ensure that independent female bear thresholds are met, even if bear populations decline some, and even as uncertainty increases. It would also go a long way towards building confidence with the general public about MT FWP's ability to manage NCDE bears in a conservative and sustainable way, in order to avoid potential relisting in the future.

To meet objective 3, which we comment more in depth on below, MT FWP should create a mortality threshold for sub-adult bears as well, since this age class of bear is the most likely to disperse to new territory and create connectivity between the populations. While we realize that there are difficulties in monitoring a threshold such as this, MT FWP has the opportunity right now to show that they are committed to both the survival of grizzlies and the goal of connecting the different recovery populations in the region, and creation of a threshold such as this will make that clear.

As we mentioned above, but bears repeating, MT FWP needs to ensure that they have a representative sampling of bears across the region, which may require that managers fill in the data gaps periodically with stratified/targeted sampling protocols.

In addition to DNA "spot-checks" within BMU's that we mentioned in our comments on objective one, scientifically defensible population monitoring requires setting a hard timeline for repeating the DNA study, thus assuring a more reliable population estimate. We encourage MT FWP to set out this timeline as part of this rule-making process and to include a timeline for repeating the DNA study in the future. This will allow for scientifically robust decision making and minimize uncertainty in the confidence interval into the future.

Objective 3

While we applaud MT FWP for their interest in including a goal on connectivity, the current proposal falls far short of actively securing connectivity. Rather, it is simply a reporting of where bears are currently and studying to see if any can manage to travel from/to other recovery populations. True connectivity goals would commit to creating the pathways necessary for bears to travel between populations, and would lay out a vision for where bears will be in the future and how we will live with and among them for generations to come. MT FWP has an opportunity with this Rule to be truly visionary in how they manage bears into the future and to ensure well-connected recovery populations of grizzly bears across Montana.

We suggest that MT FWP create protective and enforceable requirements for habitat and population management between the NCDE and Greater Yellowstone Ecosystem population of bears. These requirements would include protections for sub-adult bears in Zone 2, as they are the most likely to disperse to new areas, as well as a commitment to creating connectivity through land and population management with other grizzly populations in Montana. This may require setting goals for working with landowners and securing conservation easements; it certainly needs to include education and outreach to local residents and land managers, as well as food storage orders that are enforceable and uniform

across jurisdictions. In addition, MT FWP should work with Montana Department of Transportation and the Federal Department of Transportation to find opportunities to install wildlife crossings along state and federal routes, including Interstate 90, that create fragmentation of connectivity between populations.

MT FWP should also work to ensure that binding and legally enforceable agreements exist between the many state, federal and tribal agencies who have some control over habitat or population management of grizzly bears.

It is also critical that any plans recognize the importance of establishing and providing a secure pathway for recolonization of the Bitterroot Recovery Area. Securing such a pathway seems one of, if not the, only ways US FWP goals for recovery in that area can be satisfied.

Ultimately, MT FWP has the opportunity right now to be creative and forward thinking in their management of NCDE grizzly bears, a chance to ensure connectivity between populations and to make these decisions durable into the future. We encourage MT FWP to pause this rule-making process and spend time creating real connectivity between regional bear populations, and to take the time to do a population viability assessment for NCDE bears, and to base its demographic monitoring and management on that assessment and those connectivity goals.

Thank you again for the opportunity to comment. This is the first step to making real changes to how MT FWP manages NCDE bears. We look forward to being involved in this process into the future. Please feel free to contact me with any questions, slundstrum@npca.org or 406-862-6722.

Sincerely,

Sarah Lundstrum Glacier Program Manager National Parks Conservation Association Whitefish MT From: michele dieterich

To: <u>FWP GRIZZLY BEAR ARM,</u>

Subject:[EXTERNAL] Comments on grizzly armDate:Friday, February 18, 2022 7:56:46 PMAttachments:Feb 18 2022 ARM comments.docx

Please accept the attached comments Michele Dieterich 2099 Silver Ridge Rd Hamilton, MT 59840 406-363-7753

Michele Dieterich

"May your trails be crooked, winding, lonesome, dangerous, leading to the most amazing view."

Edward Abbey

February 18, 2022

Dear Fish Wildlife and Parks,

Comments concerning ARM 12.9.1403

Thanks for the opportunity to comment on the proposed changes to ARM 12.9.1403.

I am disappointed at the lack of explanation concerning these changes. I asked a number of questions in front of the commission during the introduction of the new wording in this ARM and the initiation of the comment period. At that time, we were told that they added hunting and translocation and that they "streamlined" the language. The Chair asked that my specific questions be addressed. The Director of FWP answered that the nuances that I had mentioned would be explained in the comment process.

Information on the ARM supplied to the public has not changed since that meeting. It only includes the ARM with the changes. There are no explanations to the changes, no explanation of why they are being done or what they mean. I attended another meeting and asked again about these changes and got a brief answer, but not a full explanation. I see no reason to change any wording in the ARM. Just delisting, with the new Montana law allowing the killing of grizzlies if they "threaten" livestock or property, will greatly affect grizzly populations. Hunting should not be considered until the effects of de-listing and the added mortality from the new law are better understood and analyzed.

Why have you taken out the word "specifically" adopts. That seems to allow for a more broad interpretation of how those objectives will be managed. Why have you changed the wording from "using" a six year running average to "against" a six year running average? What is the difference between the two? Why have you added the 6-year running average before all three objectives. Does this mean the 6 year running average of the three objectives or a 6 year running average within each objective? And why have you grouped the different objectives together with the word "and" between the second and third objective. It seems you might be streamlining, but it might also be interpreted as all three thresholds must be met before re-listing would be warranted. As it reads originally, each holds importance and each one uses a 6 year running average. The general public should be able to understand these changes. FWP has the obligation to make clear their intentions with this re-wording and what it means to the public. They have not. Nothing has been added as explanation or changed since I asked my original questions. FWP merely provides the ARM and the changes. I assumed that more information would be made available during the comment process. I was assured that this would happen. It has not.

I have grave concerns about the hunting wording. You have written: (5) Hunting will not be allowed in a year if mortality thresholds as described in (3)(b)(ii) and (iii) were exceeded in the previous year. The word "exceeded" should be changed to "met." A threshold is just that. If it is met, it is time for change.

I also am concerned about the "and". It should be "or". If either threshold is met, hunting must stop. Currently it reads that both thresholds must be "met" before hunting stops.

I also think the hunting thresholds should not be contingent on a 6 year running average. This basically guarantees that hunting will never stop for more than one year. Predators self-regulate. Hunting will disrupt this balance and should be stopped at the first hint that the population is being affected.

Again, I am disappointed in the lack of explanation of these changes. There should be more transparency and more explanation behind changing this wording. I hope that all of my questions make it clear how important it is to be clear and share intentions and reasoning behind changing the language.

I would suggest a more detailed explanation of these changes and a new comment period.

Thanks for considering my comments.

Michele Dieterich

From: <u>Erin Edge</u>

To: <u>FWP GRIZZLY BEAR ARM,</u>

Subject: [EXTERNAL] Defenders of Wildlife Comments Grizzly Bear ARM

Date: Wednesday, February 16, 2022 12:24:00 PM
Attachments: 220216 DOW to MT FWP Commission Griz ARM.pdf

Please accept these comments on the currently proposed grizzly bear ARM changes. Thank you for the opportunity to comment, Erin



Erin Edge

Senior Representative, Rockies and Plains Programs

DEFENDERS OF WILDLIFE [defenders.org]

1130 17th Street NW, Washington, DC 20036 TEL: 406.728.9436 ext. 471 Facebook [facebook.com] | Twitter [twitter.com] | Instagram [instagram.com] | Medium

[medium.com]

[defenders.org]

Visit https://defenders.org [defenders.org]!



Missoula Office P.O. Box 1858 | Missoula, Montana 59806 | tel 406.728.9436 www.defenders.org

Grizzly Bear ARM
Department of Fish, Wildlife and Parks,
PO Box 200701
Helena, MT 59620-0701

Re: Montana Fish, Wildlife and Parks (FWP) amendment to ARM 12.9.1403 pertaining to grizzly bear demographic objective for the Northern Continental Divide Ecosystem Submitted electronically at: GrizzlyBearARM@mt.gov

Dear Montana Fish and Wildlife Commission,

Thank you for the opportunity to comment on Montana Fish, Wildlife and Parks (FWP) amendment to ARM 12.9.1403 pertaining to grizzly bear demographic objective for the Northern Continental Divide Ecosystem. We submit the following comments on behalf of our more than 9000 members and supporters in Montana.

Defenders of Wildlife (Defenders) is a national non-profit conservation organization founded in 1947 focused on conserving and restoring native species and the habitat upon which they depend. Over the last two decades, Defenders has played an important role in the recovery of grizzly bears in the northern Rockies. Recognizing that the largest threat facing long term grizzly bear recovery is human related mortalities, Defenders has focused heavily on minimizing conflicts between bears and people through our on-the-ground coexistence program. Our conflict prevention projects have often been in cooperation with Montana Fish, Wildlife and Parks.

The success of grizzly bear recovery in the Northern Continental Divide Ecosystem (NCDE) is important not only to grizzly bears living within the NCDE but also to a future connected, and resilient meta-population of grizzly bears in the lower 48 states. It is essential that this population continue to increase and expand, to fulfill its potential role as a source population for other areas like the Bitterroot Ecosystem and for future connectivity with the Yellowstone population. To do so, mortality, particularly of female grizzly bears, needs to be minimized.

Defenders recommends the following change to the proposed ARM amendment. On section (5) page 10, please change "and" to "or" and the word "exceeded" to "reached". The sentence would then read, "Hunting will not be allowed in a year if mortality thresholds as described in (3)(b)(ii) or (iii) were reached in the previous year." The way this is currently worded Montana would wait to end hunting the following year if both female and male mortality thresholds were exceeded. This could lead to excessive mortality and undermine the Conservation Strategy goal of having the NCDE serve as a source population (NCDE – CS, p. 29), delay or prevent connectivity between populations and threaten the long-term sustainability of the NCDE.

Thank you for your time and the opportunity to comment.

Erin Edge

Senior Representative, Rockies and Plains Program

eedge@defenders.org

From: Brooke Shifrin

To: <u>FWP GRIZZLY BEAR ARM,</u>

Subject: [EXTERNAL] GYC comments- ARM 12.9.1403 revisions

Date: Friday, February 18, 2022 10:15:30 AM

Attachments: image001.png

GYC comments NCDE ARM Final.pdf

Hello-

Please see attached for comments from the Greater Yellowstone Coalition regarding the proposed amendment to ARM 12.9.1403.

Thank you for the opportunity to comment!

Best, Brooke



Brooke Shifrin | Wildlife Conservation Coordinator | She/Her

Greater Yellowstone Coalition | GreaterYellowstone.org [greateryellowstone.org] | 406.586.1593







HEADQUARTERS 215 South Wallace Avenue Bozeman, Montana 59715 406.586.1593

Grizzly Bear ARM
Montana Department of Fish, Wildlife and Parks
PO Box 200701
Helena, Montana 59620-0701

Via email to GrizzlyBearARM@mt.gov:

Re: Notice of Proposed Amendment of ARM 12.9.1403 Regarding NCDE Grizzly Bear Demographic Objectives

Dear Department of Fish, Wildlife, and Parks,

Thank you for the opportunity to comment on Montana's commitments around management, genetic health, and allocation of discretionary mortality of grizzly bears in the Northern Continental Divide Ecosystem (NCDE) through the proposed amendment of ARM 12.9.1403. With roughly 7,000 supporters in Montana, Greater Yellowstone Coalition (GYC) works to engage the wide range of people who care about the Greater Yellowstone Ecosystem (GYE) to ensure the wildlife that make our region unique thrive for generations to come. Montana is home to an astounding array of wildlife species, including the iconic grizzly bear. With the two largest grizzly bear populations in the lower-48 states and connective lands between, Montana is uniquely positioned to ensure lower-48 grizzly bears persist long into the future.

GYC has engaged in grizzly bear conservation and management issues for over 35 years. We work as a partner and collaborator with federal and state agencies, as well as people in communities living alongside grizzly bears. Through partnerships and projects on the ground, we strive to protect core habitat, promote connectivity between grizzly bear populations, and reduce/prevent conflicts.

Due to Montana's leadership in grizzly bear conservation, interagency efforts, and community support for grizzly bear recovery efforts and expansion into new habitat, grizzly bear conservation has been a tremendous Endangered Species Act (ESA) success story. GYC is committed to ensuring this success story continues and therefore has a strong interest in how grizzly bears will be managed in Montana post-delisting. We appreciate the clarification in the proposed amendment to ARM 12.9.1403 around hunting and translocation of NCDE grizzly bears as sources of discretionary mortality. This clarification is key to ensuring Montana meets commitments to supporting an estimate of 800 bears within the Demographic Monitoring Area (DMA).

We want to flag a concern in the language of the proposed amendment that we believe could have important implications for how grizzly bear mortality is managed. ARM 12.9.1403 objective (3)(b)

describes the intent to manage mortalities from all sources to support an estimated probability of at least 90% that the population within the DMA remains above 800 grizzly bears. Objectives (3)(b)(i-iii) lay out a set of threshold objectives assessed against a 6-year running average that if violated would trigger further management action to limit mortality. Objective (5) implies that disallowing hunting for a year could be one potential action for 'further managing mortality.' However, the use of the word 'and' instead of 'or' in the language of objective (3)(b)(ii) and objective (5) indicates that all threshold objectives must be violated against a 6-year running average before additional management action would be taken to further limit mortality. Given the importance of each individual threshold objective (3)(b)(i-iii) for ensuring a stable grizzly bear population, we urge the Department to commit to additional action (e.g., disallow hunting for a year) if any one of the three threshold objectives is violated. A simple remedy in the language of ARM 12.9.1403 would be to replace the word 'And' with the word 'Or' when listing the threshold objectives.

If the NCDE grizzly bear population is removed from the list of Threatened Species under the Endangered Species Act, the application of the management direction outlined in ARM 12.9.1403 will be crucial to ensuring grizzly bear conservation in the lower-48 is a success long into the future. As previously stated, we are supportive of the Department's intent to clarify that translocation and hunting will be considered sources of discretionary mortality in the NCDE, and would like to highlight two considerations GYC has continuously raised in the context of both issues:

- 1) The importance of functional connectivity: The grizzly bear was listed as a threatened species in the *contiquous* lower 48 states, and therefore should be recovered and managed as a large, well-connected Northern Rockies metapopulation. Historic evidence supports the existence of a meta-population of grizzly bears in the contiguous United States, including connectivity defined by grizzly bear movement and occupancy between the NCDE and GYE, as well as other populations (Craighead and Vyse 1996, Picton 1986, Merriam 1922). Metapopulation theory directs that connectivity is the best long-term strategy to increase the resiliency and probability of persistence of grizzly bear populations in the lower-48 states (Boyce et al. 2001, Boyce 2000). Translocation of grizzly bears from the NCDE to the GYE is a viable management strategy for addressing genetic isolation but does not address the importance of functional connectivity (i.e., grizzly bears naturally moving between populations) for ensuring resilience to environmental shifts over time. Montana Fish, Wildlife and Parks has indeed acknowledged the importance of natural connectivity as part of the Southwest Montana Grizzly Bear Management Plan. Page 41 states Montana will, "Continue to work with Idaho, Wyoming, and the IGBC to address the issue of linkage between grizzly recovery areas and follow the goal set forth in the IGBC work plan to promote linkage between the GYA and the NCDE grizzly populations." And "It is a long-term goal of FWP to allow the grizzly bear populations in southwest and western Montana to reconnect through the maintenance of non-conflict grizzly bears in areas between the ecosystems."
- 2) A post-delisting delay on hunting: Greater Yellowstone Coalition recognizes hunting as an acceptable management tool for many species. Unfortunately, the possibility of future sport hunting of grizzly bears under state management injects controversy into the possibility of delisting bears from the ESA due to the difficulty of managing conflicts with humans. In 2020 alone, 54 grizzly bear mortalities resulting from human conflict were documented in Montana. A 5-year post-delisting moratorium on hunting would allow for further review of hunting in light of other sources of grizzly bear mortality which are likely to increase once ESA protections are removed. Greater Yellowstone Coalition works as a collaborative partner to provide resources and support for conflict prevention and reduction on the ground. We believe improving funding sources and partnerships to prevent conflicts throughout the state should take priority over any

discussion of sport hunting. There is no evidence suggesting hunting grizzly bears will alleviate conflict.

GYC appreciates the opportunity to comment on issues that will impact future management of grizzly bears in Montana.

Sincerely, Brooke Shifrin Wildlife Conservation Coordinator Greater Yellowstone Coalition

Literature Cited:

Boyce, M.S. 2000. Meta-population analysis for the Bitterroot population. Appendix 21C. Pages 6-242 – 6-246 in Grizzly bear recovery in the Bitterroot ecosystem, Final Environmental Impact Statement. U.S. Fish and Wildlife Service, Missoula, MT, USA.

Boyce, M. S., B. M. Blanchard, R. R. Knight, and C. Servheen. 2001. Population viability for grizzly bears: a critical review. *International Association for Bear Research and Management*, Monograph Series 4.

Craighead, F.L., and E. Vyse. 1996. Brown/grizzly bear meta-populations. In: D. McCullough (Ed.) Metapopulations and Wildlife Conservation Management. *Island Press, Washington DC, and Covelo CA. Chapter 14: pp. 325-351*.

Picton, H. D. 1986. A possible link between Yellowstone and Glacier grizzly bear populations. *Int. Conf. Bear Res. and Mamt.* 6:7-10.

Merriam, C.H. 1922. Distribution of grizzly bears in U.S. *Outdoor Life*, 50:405-406.