Good morning Chairman Barrasso, Ranking Member Carper, and members of the Committee. I am Pat Crank, Vice President of the Wyoming Game and Fish Commission. I appreciate the opportunity to be here today to provide some perspectives on grizzly bear management and the need to delist the Greater Yellowstone (GYE) population of grizzly bear under the Endangered Species Act (ESA). The testimony provided herein is based on my experience and knowledge of the GYE population of grizzly bears. I am a lifelong resident of Wyoming and have worked and recreoted all over the state. I previously served as Wyoming’s Attorney General under Governor Dave Freudenthal and have practiced law as a prosecutor and in private practice for over 35 years. I was appointed to the Wyoming Game and Fish Commission by Governor Matt Mead in 2015 and now hold the position of Vice President of the Commission.

In the lower 48 states, there are five identified populations of grizzly bear: The Greater Yellowstone, the Northern Continental Divide, the Bitterroot, the Northern Cascade and the Selkirk/Cabinet-Yaak (see Fig. 1). All of the specific scientific information I will talk about today relate to recovery, management, and the current population status of the GYE population only. My testimony reflects my opinion as to why a delisted and state managed grizzly bear population is the most efficient and effective path forward for grizzly bears and the people who live, work, and recreate in Wyoming and the Greater Yellowstone Ecosystem.

Thoughts regarding Endangered Species Act (“ESA”)

The ESA is an amazing piece of landmark legislation. That being recognized, this historic act no longer fulfills its original altruistic and noble purpose and the ESA is being used for purposes inconsistent with the intent of the legislation.

At its core and in its true intent, the ESA insures that wildlife species that are endangered will be provided federal protection from reductions in number and protection of the habitat necessary for recovery. Once the population has recovered based on the opinion of expert wildlife managers and scientists using the best science available at the time, the species is removed from the ESA list and
managed by state wildlife experts. State wildlife agencies have the resources, on the ground experience, and knowledge of the species, to scientifically and carefully manage recovered species. The ESA provides an amazing framework to protect and recover endangered species if allowed to work as originally crafted and envisioned.

However, the ESA, as it functionally works today is horribly broken. Environmental groups and environmentally minded judges have, via endless litigation on ESA listings or delistings, thwarted and ignored the very purpose of the ESA.

The long and tortured history of the ESA listing and recovery of GYE grizzly bears is a tragic example of the broken ESA.

The United States Fish and Wildlife Service (USFWS) has constantly changed the target population for delisting GYE grizzly bears. In 1982, the USFWS declared that delisting would occur when 300 bears existed in the GYE. By 1993, the USFWS demanded that at least 500 bears needed to occupy the GYE for delisting to occur. In 2017, at least 600 bears needed to exist for delisting to occur. In 2020, pursuant to the “recalibration” concept as discussed herein, the number of bears required for delisting is closer to 1000 bears.

This ever moving target, perpetuated by USFWS and environmental groups, with the enormous power of sympathetic and politically motivated federal judges, completely ignores all concepts of carrying capacity. There is only so much wilderness that exists in the GYE where grizzly bears can exist. Because of the outstanding work of amazing scientists and $50 million dollars of license fees from Wyoming hunters and anglers, grizzly bears now inhabit nearly every square inch of suitable habitat in the GYE. The ever increasing population is spilling over into areas well outside of areas where grizzly bears can exist, causing loss of human life, damage to livestock, and seriously eroding public support for the recovery and existence of this iconic and wonderful creature.

Environmental groups use the ESA, and the ability to obtain favorable rulings from politically motivated federal judges, as a sword to prevent delisting at all costs. In doing so, they ignore the remarkable recovery of GYE grizzlies. They ignore that over 1000 bears exist in the GYE today as compared to 100 to 300 bears in 1972.

Environmental groups use the ESA, and challenges to decisions under the ESA, as incredibly effective fundraising tools for their entities. They challenge any delisting of the GYE grizzly for reasons that ignore the amazing success story of the GYE bear recovery. Every challenge leads to millions of dollars pouring into their coffers.

The intent of the ESA and other federal environmental regulations are centered around the very logical concept that an entity like the USFWS would expertly and honestly analyze decisions under the ESA and reach a sound decision based on the best science available. In other words, the USFWS along with state wildlife managers, are the experts on ESA listing/delisting decisions and their decision should control the outcome. In the ESA world of 2020, environmental groups are allowed to forum shop and file challenges to USFWS ESA decisions in the most favorable judicial district in the country. This allows them to maximize the chance that a judge will ignore the expert conclusions of USFWS and state wildlife experts and substitute the judge’s non expert and
frequently political judgment for that of state and federal wildlife managers who have worked decades to recover a species and who possess intimate scientific knowledge of the species.

The record of listing/delisting decisions regarding GYE grizzlies contains glaring evidence of this misuse of the ESA. The 2007 Rule delisting GYE grizzlies was struck down by a favored U.S. District Judge in Montana for failure to consider global warming and its effect on white bark pine trees. The environmentalists argued white bark pine cones were an incredibly important food source for GYE grizzlies. Based on this ruling, GYE grizzlies remained listed while scientists studied the relationship between White Bark Pine Trees and Grizzly bears. Further scientific and peer reviewed study showed that this grizzlies used this as a food source, but that because they are able to utilize hundreds of different food sources based on availability, White Bark Pine wasn’t a limiting factor in maintaining a recovered population. Furthermore, the same study showed the GYE population was near or at its carrying capacity.

With that argument off the table, environmental groups challenged the 2017 Rule delisting GYE grizzlies for a plethora of reasons. Five of Six lawsuits challenging the 2017 Delisting Rule were filed in the same judicial district in Montana where the district judge presided that had struck down the 2007 Delisting Rule over white bark pine concerns. Conveniently, the same court reversed the 2017 Delisting Rule for three different problems with the rule including “recalibration” as discussed below. The undisputed fact that nearly all of the environmental groups who challenged the 2017 Delisting Rule did so in the same judicial district where the 2007 rule was struck down, clearly shows that at least in the eyes of environmental groups, justice is not blind.

These facts also show that the ESA, as a whole, is not working as intended. Parties who want to keep an endangered species on the ESA list forever, need only build some innocuous technicality or even false claim into the record of decision and find a judge who is favorable to their political and social ideas. A delisting rule and the thousands of man hours, sweat equity, and tens of millions of dollars of scientific study are tossed out. The central tenant of the ESA - that state and federal wildlife managers are the only entities with the expertise and knowledge to make decisions under the ESA, is being ignored by the court system.
The successful recovery of the GYE grizzly bear population is in my opinion the most significant conservation success story in the history of wildlife conservation in North America and a shining example of the power of the ESA to conserve this nation’s treasured wildlife resources. Listing the grizzly bear as a threatened species in 1975 triggered a full court press of scientific research and natural resource policy development. Today, we know more about the GYE grizzly bear than any other wildlife species on the face of the earth. Constant observation, monitoring and study of these bears since 1975 by many of the world’s best scientists have given us a level of scientific knowledge of these bears that is unparalleled with regard to any other species.

Wyoming is proud to have paid for, and taken a leadership role in, grizzly bear recovery and management over the last four decades. Those who purchase hunting and fishing licenses in Wyoming have financed the Wyoming Game and Fish Department’s (Department) $50 million investment in grizzly bear recovery. The fruit of this investment is evident in a recovered population showing steady growth from an estimated 100-300 bears in the GYE when first listed to at least 700 to 1,000 in the ecosystem today. In addition to the significant financial investment, Wyoming people have changed the way they work, live, and recreate in grizzly bear country providing further assurance the species’ future is safe.

While the majority of GYE grizzly bears are in Wyoming, Idaho and Montana have an ever-growing number of bears in their portions of the ecosystem. Along with Wyoming, these states contribute significantly to the recovery of this population. The recovery of the GYE grizzly bear epitomizes the cooperation and consultation the creators of the ESA envisioned between state and federal partners.

The ultimate goal of the ESA is to recover species and allow state wildlife management agencies, who are best suited to manage their wildlife resources, the ability to exercise the state’s general governmental powers. The localized experience and expertise of state wildlife experts provide
proper context in how to manage wildlife populations using the most current techniques and best available science. In the case of the GYE, the states of Wyoming, Montana and Idaho have taken lead roles in data collection, public education, conflict management, law enforcement and research during the decades long listing.

**Changing Goalposts for Recovery**

The State of Wyoming has been frustrated in the non-biologically based efforts of environmental litigants to raise the established recovery bar higher and higher each time population benchmarks are reached and exceeded. Attachment I to this testimony provides a detailed account of recovery criteria changes through time for GYE grizzly bears. To date, there have been four iterations of recovery plans and associated recovery criteria for the GYE population. In 1982, the USFWS released the first recovery plan for grizzly bears in the lower 48 states. The 1982 plan set the level of a recovered GYE grizzly population at 229 to 301 bears.

In 1993, the Service updated the original 1982 recovery plan. The updated recovery criteria established a minimum number of females with cubs seen annually, identified a metric for distribution of family groups and set a limit on human-caused mortality. The 1993 recovery threshold required at least 15 females with cubs for at least six years. These females with cubs had to be geographically spaced over 18 bear management units comprising the GYE and an additional buffer area surrounding the GYE. Strict mortality limits on females further limited when GYE grizzlies could be deemed to be recovered.

In 2007, the recovery criteria were once again changed as a result of additional analyses related to GYE grizzly bears. There were formerly three demographic criteria in the 1993 Grizzly Bear Recovery Plan. The second criterion pertaining to the distribution of females with offspring remained unchanged. However, the first and third criteria pertaining to the minimum allowable number of females with cubs of the year and sustainable mortality limits were revised and updated to reflect current methods. The 2007 threshold still required geographic spacing of females with cubs over the expansive bear management units. The number of females with cubs necessary to determine the population was recovered was increased from 15 to 48. This requirement of 48 sows with cubs geographically spaced over the huge GYE ecosystem would guarantee that at least 500 grizzlies (as compared to 300 in 1982) would forever exist in the GYE. Strict limits on mortality for both male bears and female bears were included in the 2007 recovery benchmark.

The Recovery Plan in 2017 codified the use of the Demographic Monitoring Area (DMA) and attributed estimates of population size and mortality specific to bears within the DMA. The USFWS updated portions of demographic recovery criteria 1 and 3 for the GYE grizzly bear population based on new scientific analyses and information. The second criterion pertaining to the distribution of females with offspring (Demographic Recovery Criterion 2) remained unchanged. Demographic Recovery Criterion 1 is essentially the same as it was in 2017, however rather than using the number of females with cubs of the year it used this and a population estimate of 500 bears as a minimum threshold. The 2017 Recovery Plan States:

- “The biological intent of this revision is identical to the 2007 criterion: to maintain a minimum population size of at least 500 animals, which exceeds the genetic recommendations of Miller and Waits (2003). The only change is that this criterion no
longer specifies which scientific method must be used to assess the criterion. The current method (2016) used to estimate population size is the model-averaged Chao2 population estimator and this method will continue to be used until another scientifically valid method is developed. We eliminated the criterion’s dependence on a specific method (e.g., Chao2) so that the IGBST can rapidly implement improved scientific methods as they become available in the peer reviewed literature. Methods used to estimate population size will be available online for review in the Application Protocol posted on the IGBST’s website (http://nrmsc.usgs.gov/research/igbst/research). The number 500 is not a population goal nor is there any intention to manage down to 500 bears. The number 500 represents a minimum population size necessary to assure no short-term negative effects of loss of genetic diversity.”

- Demographic Recovery Criterion 1—Maintain a minimum population size of 500 grizzly bears and at least 48 females with cubs-of-the-year within the Demographic Monitoring Area (DMA), as indicated by methods established in published, peer-reviewed scientific literature and calculated by the Interagency Grizzly Bear Study Team (IGBST) using the most updated Application Protocol, as posted on their website. If the estimate of total population size drops below 500 in any year or below 48 females with cubs-of-the-year in 3 consecutive years, this criterion will not be met…

The primary change in the 2017 update to the GYE Grizzly Bear Recovery plan occurred in Recovery Criterion 3 in relation to the evaluation of mortality and calculation of mortality thresholds for the population. In 2017, recovery adjustments to mortality limits essentially raised the number of bears necessary to have a recovered bear population to 600 bears.

In essence we have seen the Federal goals for minimum population sizes to document recovery go from roughly 300 bears, to 400 bears for genetic health, to 500 bears for a conservative buffer, to 600 bears based on currents rates and ratios used to calculate population size. The target for a “recovered population” has been ever increasing.

Current Status of the GYE Population

The GYE grizzly bear population is fully recovered as measured by all federally developed biologically based recovery criteria. It has exceeded recovery criteria since at least 2003. Those recovery criteria again are:

- At least 500 individual grizzly bears to ensure genetic diversity
- Reproducing females across the entire ecosystem (at least 16 of 18 bear management units occupied by reproducing females)
- Mortality limits below established limits by age and gender class and at least 600 individual grizzly bears in the demographic monitoring area (DMA) (see below for more DMA details).

Based on all biological data collected and the analysis of the Interagency Grizzly Bear Study Team, this population has reached biological carrying capacity within the area identified as suitable habitat (see Fig. 2). The DMA was identified as a large enough tract of contiguous habitat to maintain GYE grizzly bears in perpetuity. However, because the core of the population has achieved density
dependence, grizzly bear distribution has extended far beyond suitable habitats. Grizzly bear populations have expanded their range beyond habitat considered suitable by the USFWS. In 2018, 20,041 km$^2$ (7,738 mi$^2$) of occupied grizzly bear range was outside the DMA. This amount of occupied range is roughly the same size as the land mass of the state of New Jersey.

Figure 2. Map depicting the major legal, political and biological boundaries for the GYE
Recovery in Relation to the Idea of “Recalibration”

The idea that changes in the methods to count bears in the population should somehow force a change in how recovery is defined has been a point of disagreement between the states, the USFWS and some environmental litigants only since about 2014. It also became the pivotal issue in court challenges striking down the 2017 Rule removing grizzly bears from ESA protection.

Grizzly bears are impossible to physically count. They spend their lives in incredibly wild timbered country. They are not a pack animal where radio collaring could give us an accurate estimate. They do not spend winters on winter range where aerial observations could give us an accurate count. Accordingly, the amazing scientists studying these bears have developed statistical models that provide an accurate estimate of the number of bears in the GYE. The statistical model is known as Chao2.

The Chao2 model has been revised a number of times over the years as our knowledge of these bears has grown. There is no dispute from any scientists involved that Chao2 is a very conservative method to estimate the number of bears in the GYE. Said another way, Chao2 underestimates the number of bears in the GYE each year. Wyoming grizzly bear experts believe there are approximately 40% more bears in the GYE than the number of bears calculated by Chao2 in any given year.

During the 2017 delisting process, the scientists considered that some future statistical model might more accurately estimate grizzly numbers. All scientists agree that this future unknown model would show that the GYE has more grizzlies than currently estimated by Chao2. Questions then arose about what occurs if the new, future, and currently non-existent model shows that there are 1000 bears in the GYE rather than the 600 to 700 currently estimated via Chao2? Wyoming, Idaho, and Montana pointed out that the ESA requires that the best science available drives listing or delisting under the ESA and that speculation regarding a new counting method could not and should not control or affect recovery criteria. Recovery criteria are nothing more than the identification of factors, i.e. healthy number of female bears with cubs, appropriate genetic diversity, and geographic occupation over areas of suitable habitat, to insure that grizzlies remain in the GYE for the foreseeable future.

Environmental groups, and the USFWS, under former director Dan Ash, saw this future, speculative, and currently non-existent improved population estimator as a useful tool to increase the ever increasing minimum number of bears necessary for delisting and as a tool to strike down a future delisting in its entirety. Several emails, inaccurately representing Wyoming, Montana, and Idaho’s objections regarding “recalibration” were included in the record of the 2017 Delisting Rule. The District Court in Montana, that had previously ruled the 2007 rule was fatally flawed, seized on these emails to support striking down the 2017 rule. The court asserted that the USFWS didn’t include an adequate future description of a process to recalibrate and that they did so for political reasons. I am flabbergasted how the potential development of some future statistical model to estimate number of GYE bears could be used to reverse a delisting decision regarding one of the greatest wildlife recoveries under the ESA.

There are biologically based problems in the potential requirement to conduct a strict back calculation in order to update population objectives when using new techniques for estimation.
First, it requires significant speculation on what some future method may look like. It also requires a new model to be anchored to identical biological criteria. The current model is based solely on a count of observed unique females with cubs born in the same year. Should IGBST or others develop a completely new methodology to accurately estimate population size using the newest and best available science that is based in genetic analysis or another biological metric that is not directly linked to current methodologies, it would be extremely difficult or impossible to go back in time to align old metrics with new ones. Additionally, as currently written, there are mortality thresholds in place that are required regardless of the population size. A population of 10,000 grizzly bears would still have annual mortality thresholds for independent aged females (10%) and independent aged males (22%), so regardless of the techniques or updates to accuracy of population estimates there are safeguards and regulatory mechanisms in place to ensure a recovered population.

From a policy perspective, the notion of recalibration is inherently flawed. The ESA requires the USFWS to use science to determine metrics that indicate whether a listed population is recovered or not (recovery criteria). The ESA does not require or authorize the USFWS to establish delisting criteria that provide for perpetual federal management long after the species is recovered. The ESA does not require the USFWS to establish management objectives, but rather the minimum requirements to establish a population is biologically recovered and faces little chance of extinction in the foreseeable future. The space between minimum recovery and the level the population is managed at is the responsibility of the states. Recalibration in the context described by recent court decisions would provide for a change in management objectives into the future based on some hypothetical and speculative new way to count bears. It discourages states from looking for new science to more accurately estimate bear populations because any changes would require changes to state management objectives. Recovery criteria were developed to allow for flexibility and regional management of populations by states and tribes so long as the population is maintained at or above recovery goals. This was the goal and intent of the ESA when it was created. States could decide to manage for more or less grizzly bears based on population status, annual data collection and public input, and follow the North American Model of Wildlife Conservation.

**Grizzly Bear Expansion and Human Conflict**

Because the GYE population has reached is carrying capacity, bears are expanding into new areas that are not biologically and/or socially suitable habitats. This expansion is far outside of the scientifically established primary conservation area (PCA) that was established in early recovery plans. The expansion is also outside of the current DMA or the area where recovery is managed. Currently population estimates do not include bears in the areas outside of the DMA.

This expansion in range into unsuitable habitats has created significant challenges for all states involved because of the ever-increasing rise in human/bear conflicts (see Figs. 3, 4, 5). Dangerous encounters with humans, destruction of private property, and bear occupancy in human dominated landscapes are all the reality of an expanding population. The areas of expansion are primarily rural and agricultural communities. People working, living and recreating in these areas were previously assured grizzly bears would not be allowed to establish residency by the state and federal entities involved in recovery. Occupancy in these human-dominated areas, far from
biologically suitable habitats, is not a realistic scenario for success from a human or bear perspective. Since GYE grizzly bears were initially delisted in 2007 to now, the population has increased its distribution by nearly 800 square miles annually. Using the methods developed by Wyoming Game and Fish and the Interagency Grizzly Bear Study Team, grizzly bear range in the GYE has increased steadily, from 23,000 km² during 1976-1990, to over 68,000 km² during 2004-2018 (see Fig. 3). This overall increase in distribution represents a nearly 3-fold increase in occupied range. The amount of private lands within the estimated occupied range has increased considerably over the same period, from 600 km² to nearly 12,000 km² today (see Fig. 5).

When evaluating verified grizzly bear conflicts in Wyoming, we have documented a widespread increase in conflicts associated with the increased distribution of grizzly bears. The conflict potential has been exacerbated as bears have expanded beyond habitats suitable for their long-term viability. From 1990-1999, we averaged 79 conflicts annually. From 2000-2009, that number jumped to 150 annual verified conflicts, and from 2010-2018 we averaged approximately 221 verified grizzly bear conflicts (see Figs. 6 and 7). The number of conflicts resulting in human fatality and injury, self-defense killing of bears and lethal bear removal have grown significantly. In the past two years, 50 grizzly bears were removed from the population by Wyoming Game and Fish managers to address conflict situations (human safety, chronic livestock depredation, food conditioned behavior), and many grizzly bears were killed in self-defense.

Since 2010, there have been seven human fatalities in the GYE caused by grizzly bear attacks. From the mid-1980’s to 2010, there were none. These unfortunate events are the result of more bears and bears expanding into new areas. We are documenting increased occurrences of humans injured by grizzly bears. Grizzly bears are showing up in places they have not existed for hundreds of years which is another testament of a healthy and recovered population. Since grizzly bears emerged from their dens in the spring of 2020, we have had seven people injured by grizzly bears in the GYE.

People who live, work and recreate in grizzly bear occupied habitats have changed their lifestyles and made sacrifices to reduce conflict potential. Landowners and residents have incurred costs to create bear proof storage for trash, livestock feed, and other attractants. Working with Wyoming Game and Fish, many ranches and residences have erected bear proof infrastructure with electric fencing or other deterrents and complete revamping of landscapes to reduce conflict potential. In the core of the ecosystem, conflicts have not increased proportionally to the growth of the bear population. However, at the fringe of the ecosystem, where grizzly populations are expanding into previously unoccupied and unsuitable habitat, the number of conflicts is increasing.

The Wyoming Game and Fish Department (Department) has created educational/outreach programs (e.g. Bear Wise Wyoming) to reduce conflict potential and incentivize actions to secure attractants and alter human behavior when recreating, living and working in grizzly bear country. In an effort to reach the widest audience possible, we have created interactive materials on our website and use all venues and forums to disseminate information. We have documented a decrease in conflicts associated with property damage and bears acquiring anthropogenic foods. Unfortunately, as alluded to earlier, we are witnessing increases in human injuries, site conflicts, and a wide scale shift toward livestock depredation as bears continue to expand outside of the suitable habitat well beyond the DMA. Securing attractants and reducing conflict potential is much more difficult in the rural, exurban, and agricultural landscapes where grizzly bears have expanded.
Annual mortality thresholds for male, female, and dependent young grizzly bears throughout the GYE remain below agreed upon annual mortality limits. Since 2002, the long-term average estimated mortality rate of 7.0% for independent female grizzly bears within the DMA is below the mortality threshold of 7.6% required to maintain a stable to increasing population. The estimate for total mortality includes an estimate of unknown and unreported mortality. In addition, the population estimate derived from counts of unique females with cubs is known to be very conservative and the actual mortality rate since 2002 is likely much lower than 7.0%. These mortality rates have allowed for continued population growth and range expansion of the GYE bear population in areas outside the DMA. The long-term average mortality rate for independent males is 9.6% of the annual population estimate, which is also well below the established mortality limit for males.

Human-caused mortality has always be the leading cause of mortality of grizzly bears, but mitigation measures have been adopted and adapted over multiple decades to reduce instances of human-caused mortality proportionally. These have proven effective in many instances. In discussions and hyperbole regarding “record levels of mortality” the overall metrics of population ecology are usually omitted. Annual mortality is only part of the equation for overall population demographics. Higher reproduction is occurring to a level that there are more bears recruited into the population each year than the number that are dying from all causes. The unfortunate reality of being beyond recovery is an increased potential for dangerous encounters between grizzly bears and humans, with negative outcomes for both species.
Figure 3. Map depicting increase grizzly bear occupancy in the GYE.
Figure 4. Rate of geographic expansion over time

Figure 5. Increasing amount of private land considered to be occupied by grizzly bears in the GYE.
Figure 6. Map depicting grizzly bear/human conflicts through 1990

Figure 7. Map depicting grizzly bear/human conflicts 2011-2018.
State Management Capacity and Capability

The states of Wyoming, Montana, and Idaho are fully capable of assuming management of the GYE grizzly population. The three states have been handling on the ground grizzly bear management activities throughout their respective jurisdictions under the federal oversight of the Service for nearly 45 years. Litigation, not science, has prevented the states from assuming the ability to manage this fully recovered population.

Wyoming has a Commission and USFWS-approved Grizzly Bear Management Plan. Additionally, a signed conservation strategy, updated in 2017, documenting commitments by all involved state and federal agencies for post-delisting management remains in place. The states of Wyoming, Montana, and Idaho entered into a three-state memorandum of agreement (MOA) to provide assurances regarding the post-delisting allocation of discretionary mortality. Upon gaining management authority for grizzly bears most recently, Wyoming Game and Fish personnel traveled around the state to seek insight into how people wanted grizzly bears managed, specifically asking for input regarding monitoring, research, conflict management, outreach/education, and hunting. The discussions and comments were used to update the Grizzly Bear Management plan and codified in Game and Fish Commission Regulations. These efforts modeled a transparent approach reflective of the manner in which the Department manages all species. This approach was a prelude to how grizzly bear management and conservation would occur into the future with involvement by all stakeholders. These commitments are all above and beyond requirements of the ESA. The courts have concluded adequate regulatory mechanisms are in place.

The Department currently manages other species of large carnivores including Black Bear, Gray Wolf, and Mountain Lion. All three of these species are managed under a science based, comprehensive and adaptive management plan. These populations are thriving, healthy, and viable under state management. The state is able to provide necessary management through the use of research, data collection, conflict management, information and education, and hunting. There are as many or more opportunities now than in the past to see or photograph these animals in their natural environment and the recovery efforts of Montana, Idaho, and Wyoming have created a thriving ecotourism industry centered on grizzly bears.

The Department created a dedicated team of large carnivore experts to manage grizzly bears and other large predators in a science-based framework that considers public comment while also providing an immediate response to conflicts between carnivores and humans. The majority of work by this section in collaboration with regional Department personnel is devoted to grizzly bear monitoring, outreach/education, and conflict management.

Financial Investments and Costs of Grizzly Bear Management

Since the GYE population was first listed under the ESA, the State of Wyoming has invested over $50 million in recovering and managing this population. Since 1990, Wyoming has expended $35 million on grizzly bear recovery outside National Park Service lands and the Wind River Reservation. Currently, the Department spends approximately $1-2 million annually. The Wyoming Game and Fish Department recovers less than $100,000 of this amount annually from the Service and the remainder is provided by fishing and hunting license revenues (see Fig. 8 and 9). The money expended is a further demonstration of our commitment to grizzly bear
conservation and management.

Figure 8. Costs by type associated with the GYE grizzly bear population by fiscal year
It is inherently unfair that the cost of grizzly bear management is carried on the backs of sportsmen. If Wyoming is denied the discretion to manage this species, the cost of future management should be borne by the federal government whose actions, and inactions, over the years have prevented Wyoming from assuming management of GYE grizzly bears.

If GYE grizzly bears remain listed as a threatened population under the ESA, the cost of grizzly bear management has the potential to continue to rise commensurate with the expansion and increase of the grizzly bear population. This expansion is occurring in areas deemed unsuitable for grizzly bears and the burden of addressing conflict in these human dominated landscapes is increasing significantly. Since 2012, approximately 30% of all conflicts verified and addressed by the Department occurred outside the DMA. Grizzly bear caused livestock depredation and subsequent damage payments in Wyoming have continued to increase due to a recovered and increasing population, from Fiscal Year 2007 through Fiscal Year 2018 a total of $2,946,355 was paid in damage compensation for grizzly bear depredation (an annual average of $245,530 with an overall increasing trend in payment and depredations).

**Effects of Perpetual Listed Status of Grizzly Bears and Other Species/Populations**

More important than direct monetary costs, keeping an animal such as the grizzly bear listed is seriously eroding public support for grizzly recovery. Sportsmen and sportswomen whose license fees have provided the $50 million to recover the bear, have fewer ungulates to hunt and fear to hunt in areas they have used for years. The intent of the ESA is to provide the necessary protections for a species or population to recover on the landscape, with the ultimate goal of removing them from threatened or endangered status. The perpetual litigation surrounding grizzly bears is a fund-raising tactic of litigants. I have noted a waning tolerance for grizzly bears, especially along the expanding front of grizzly bear range throughout Northwest Wyoming. As tolerance and acceptance of this iconic animal decreases, support for maintaining grizzly bears
outside the DMA becomes more difficult. In the case of the GYE grizzly bear, the ESA is no longer serving its purpose to recover and delist the species and turn management over to the respective state wildlife agencies. While the ESA is widely regarded as landmark conservation legislation, its support is waning due to the Service’s inability to provide a durable delisting rule for a fully recovered species that has been the benefactor of the ESA. The prescribed protections of the ESA are ineffective and cumbersome when a population has moved beyond recovery. Removal of ESA listed status does not strip protections, but rather places the management authority in the hands of the proper jurisdiction of those that have been managing grizzly bears for decades and are responsible for their current recovered status. A state managed population would allow professional wildlife managers to employ all the tools necessary to maintain grizzly bears in perpetuity, resolve conflicts, conduct valuable research and properly serve the people of Wyoming and those who visit our state.

Thank you for the opportunity to provide this testimony and to share some perspective regarding grizzly bear conservation in Wyoming.
RAISING THE BAR OF RECOVERY

Achieved Recovery (1982 Standards) after 1995

Achieved Recovery Criterion 1 (2007 Standards) by 2002

Achieved additional buffers for Recovery Criterion 3 (2017 Standards) in regards to discretionary mortality by 2002

Achieved the “population objective” (674 grizzly bears) as per Recovery Criterion 3 (2017 Standards) by 2008 – even the highest bar of the evolving recovery criteria have been exceeded for more than a decade while arguments occur in a courtroom whether GYE grizzly bears are recovered.
Estimated population size

Achieved Recovery (1982 Standards) after 1995

Achieved Recovery Criterion 1 (2007 Standards) by 2002

Achieved additional buffers for Recovery Criterion 3 (2017 Standards) in regards to discretionary mortality by 2002

Achieved the “population objective” (674 grizzly bears) as per Recovery Criterion 3 (2017 Standards) by 2008 – even the highest bar of the evolving recovery criteria have been exceeded for more than a decade while arguments occur in a courtroom whether GYE grizzly bears are recovered.

RAISING THE BAR OF RECOVERY