

**Wyoming Mule Deer Initiative  
Bates Hole  
(Area 66)**



**July 28<sup>th</sup>, 2015**

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# FROM THE DEPARTMENT



The Wyoming Game and Fish Department (WGFD) convened the Area 66 Mule Deer Initiative (MDI) and resulting citizen working group in July of 2014. The Area 66 MDI was established as an extension of the statewide MDI in concert with direction from WGFD Administration to establish various initiatives throughout the state. This initiative required 13 working group meetings, a formal public meeting, substantial public outreach using various media, and has culminated in this suite of management recommendations from the working group to Casper WGFD staff. The Department, and specifically the Wildlife Division personnel in the Casper Region, sincerely and whole-heartedly appreciate the tremendous time, effort and thought put into this initiative by all the working group members. The Casper WGFD staff will therefore strongly consider and attempt to implement these recommendations where and whenever possible to the best of our ability, recognizing that many recommendations must still be routed through the proper Department channels and ultimately the Wyoming Game and Fish Commission (WGFC). Both mule deer and Wyoming's hunting heritage have been very well served by this dedicated group of sportsmen who so generously volunteered their time and perspective in helping to solve such complex management challenges. The Department sincerely appreciates their commitment.

# INTRODUCTION OF GROUP

The Area 66 Mule Deer Working Group (MDWG) was established by the Casper Region of the Wyoming Game and Fish Department (WGFD). The MDWG is comprised of a wide variety of persons with various interests in this local deer herd. The working group includes landowners, an outfitter, hunters, a sporting goods store manager, a BLM representative, and representatives from a variety of wildlife interest groups. Collectively, group members share over 350 combined years of living, working and recreating in this area. All members share similar concerns regarding the recent decline in the overall population and health of this mule deer herd as well as an interest in deriving potential solutions.

MDWG members include:

- **Miles Bundy**
- **Jeff Muratore**
- **Chris Mikels**
- **Rhen Etzelmiller**
- **Steve Garrett**
- **Dusty Porter**
- **Paul Threlkeld**
- **Pete Garrett**
- **Ryan Kaiser**
- **Randy Morrison**
- **Jim Wetzel**

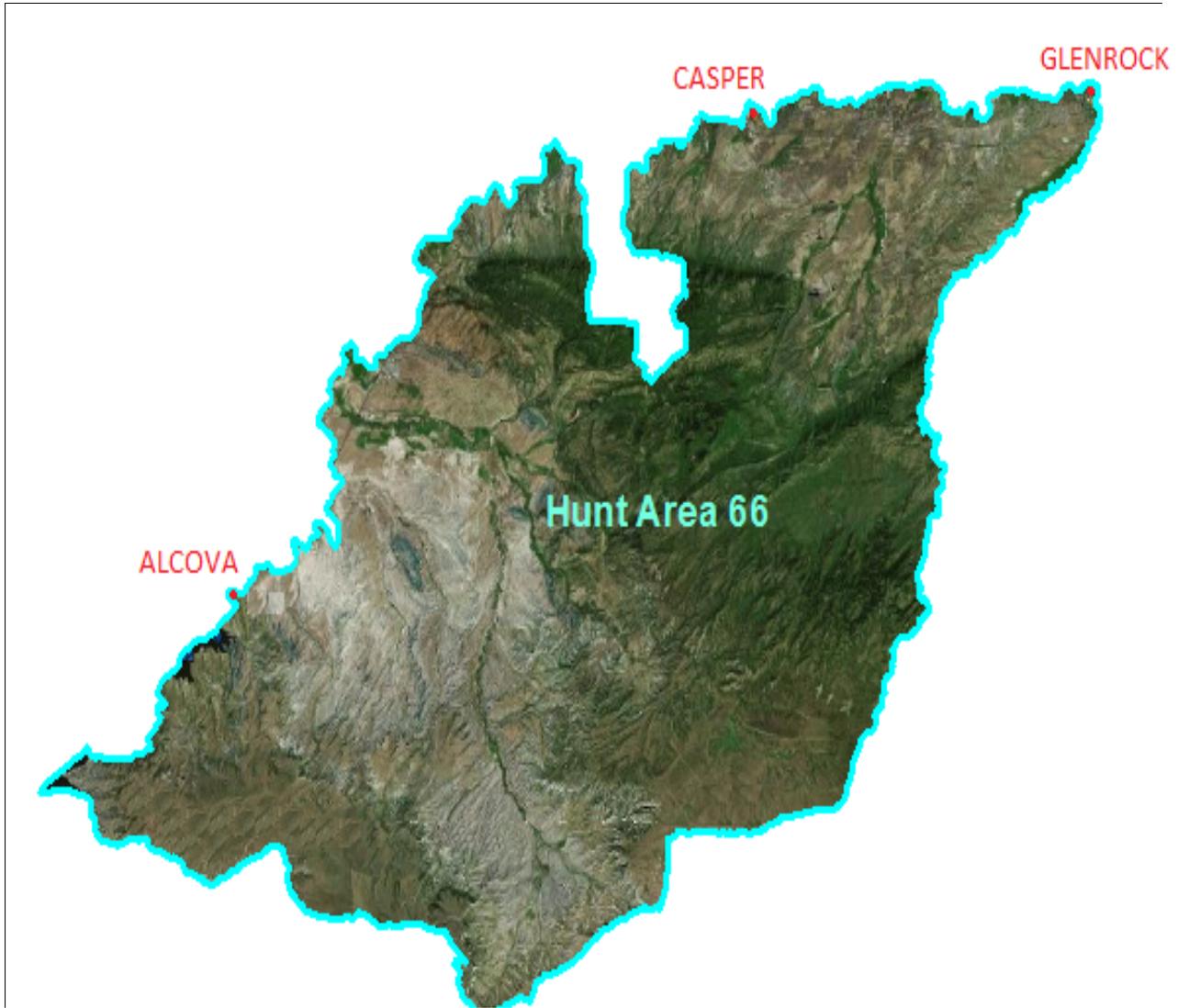
Over the course of the last 12 months, the MDWG committed countless hours to this Mule Deer Initiative learning about the deer herd, gathering public opinion, and deriving the recommendation that follow within this report. The group recognizes that these recommendations may not be without controversy from some. However, a direct approach has been taken that we feel best encompasses the input we have gathered based primarily on public comments throughout this process, science-based information, and our own knowledge of the area. Additionally, there are certain factors affecting mule deer that are well outside of our or the Department's control that we do not have the ability to impact. It is our hope that the implementation of these ideas will have an overall positive impact and promote a healthy mule deer herd into the future for sustainable public opportunities.

The MDWG would also like to acknowledge various Department personnel who have been equally committed to this Initiative and instrumental to our process:

- **Justin Binfet**
- **Heather O'Brien**
- **Brian Olsen**
- **Keith Schoup**
- **Janet Milek**
- **Cody Bish**
- **Matt Withroder**

The above mentioned have provided the MDWG with critical information regarding the various issues impacting mule deer. The group is appreciative of the help and guidance we have received along the way.

# MAP OF AREA MULE DEER AREA 66



# MISSION STATEMENT & OBJECTIVES

**Mission Statement:** It is the mission of the Area 66 Mule Deer Working Group to provide recommendations through discussion, public forum and science-based information to the Wyoming Game and Fish Department to manage and improve mule deer populations and habitat in Area 66 for sustainable hunting opportunities into the future.

**Purpose:** The working group was tasked with assisting the Wyoming Game & Fish Department (Casper Region) with efforts in conducting a Mule Deer Initiative (MDI) for the Bates Hole / Hat Six Mule Deer Herd. The group engaged in collaborative process to ultimately provide the Department with recommendations to consider for improving mule deer populations and their habitat in Area 66 for sustainable opportunities into the future.

## **Goals of the Group:**

- Understand critical issues that mule deer are facing in Area 66
- Gather public input through various avenues (Facebook page, public meetings, postcards, emails, surveys, booths, banquets etc.)
  - In addition to the group's interactions with the public, additional efforts were undertaken throughout the process to solicit comments to the best of our ability. A few of the resources used to gather comments included the establishment of a Facebook page which asked weekly questions, postcards being handed out during hunting season and at game check stations, various email correspondence, and attendance at numerous wildlife banquets and public meetings. In spite of all efforts, public comments received were relatively limited in number.
- Derive a consensus recommendation to the Department for future management of the herd with focus to ultimately improve overall mule deer numbers

# MATERIALS & REFERENCE

All materials, presentations, meeting agendas and meeting minutes from the Area 66 MDI have been compiled and are available for reference at the following link:

<https://wgfd.wyo.gov/Habitat/Statewide-Mule-Deer-Initiatives/Mule-Deer-Public-Working-Groups/Casper-Hunt-Area-66>

# MANAGEMENT RECOMENDATIONS

Management recommendations from the MDWG to the Casper WGFD are presented below to address the various factors affecting mule deer in Area 66.

## **PREDATION**

Overall, the general consensus of the group concluded that existing predator control on coyotes in the area is working very well with strong localized efforts to reduce coyote numbers fueled primarily by an active Natrona County Predator Board. Existing management techniques seem to be very effective.

- **Support cooperation with the Department, the Natrona County Predator Management District (PMD), and the Animal Damage Management Board (ADMB)**
  - The MDWG is interested in helping the Natrona County PMD improve the bounty/rewards program for coyotes to make it easier to turn in ears and better market the program to the public. The current redemption process appears to be restricting participation and could be simplified.
  - Either an MDWG representative, Department representative, or both should attend the annual May ADMB meeting and voice support for the existing programs.
  - Support maintaining or increasing the existing funding model for the Natrona County PMD given the apparent need for a local helicopter and pilot. They are currently utilizing services out of the area which are cost prohibitive.
  - Explore ways to help the PMD maintain a “full time” trapper in Bates Hole Area. This has been done for the last four years as funding has allowed and has had a positive impact.
  - The MDWG recommends the Department continue cooperation with the Natrona County PMD to address predator control in important mule deer habitats.

Although not specifically supported by data, the group expressed concern that mountain lion predation has a significant impact on this mule deer herd. Currently, there appears to be very little pressure on mountain lions in this area for a variety of reasons. Although the group recognizes there would be opposition from various organizations, a focus on increasing mountain lion harvest is a critical issue that should be addressed.

- **Maintain liberal mountain lion seasons with an emphasis on increased harvest in Mountain Lion Hunt Area 27 with an emphasis on female harvest**
  - The MDWG acknowledges this may be controversial and conflict with other groups.
  - Create an annual mountain lion “contest” similar to existing “big buck” contests in hopes that this will lead to an increase in overall harvest.
  - The MDWG would like to explore the possibility of legalizing trapping of mountain lions and encourage the Natrona County PMD and other trappers to participate.
  - Open key roads in winter months to access areas with high mountain lion densities to increase mountain lion harvest (see Roads & Access Section).

## **DISEASE**

The MDWG recognizes Chronic Wasting Disease (CWD) and other diseases may be having a negative impact on the Area 66 mule deer herd. We support the continual CWD monitoring and research the Department is committed to. However, we have no new recommendations at this time to address concerns with respect to disease and its control.

- **At minimum, we recommend the Department conduct CWD surveillance of hunter-killed mule deer on an annual or periodic basis**

## **HABITAT**

The group recognizes that prolonged drought and degraded habitats are having a significant negative impact on the ability of mule deer habitats to hold and support this herd. Although wintering grounds are important, the group feels the largest improvement we can make in mule deer habitat is on traditional summer ranges deer utilize to get them in better condition entering the winter. The group supports continued and future efforts to improve various habitats as identified and recommended by local biologists.

- **Continue to promote habitat projects that will increase the carrying capacity of the land to support a healthy mule deer herd**
  - Rejuvenate mountain mahogany (burning or chemical treatments).
  - Remove conifers and over-mature aspen from aspen stands (cutting or chipping).
  - Thin junipers where encroaching is occurring.
  - Sagebrush thinning – re-establishment of varying age classes, removal or thinning of decadent stands, promote more herbaceous vegetation growth in key areas.
  - Continual monitoring and mitigation for noxious weeds.
  - Improve water storage and retention.
  - Pursue NEPA and other necessary permitting for state and federal land treatments.

Local biologists appear to be working diligently and are starting to see early signs of success in the areas they have been able to work on. Although we cannot alter the limited time frame in which these treatments can be applied, efforts must be made to increase man power on a much larger scale to be able to treat more acres each year in order to see any meaningful results on a landscape scale.

- **Increase involvement in habitat projects to treat more acres per year**
  - Establish a citizen working group or volunteer opportunities which enable people to assist with mule deer habitat treatment projects with the Department.
  - Explore the possibility of allowing commercial harvest of conifer trees in need of removal. Identify those persons who may have an interest in this and may even pay to do so.
  - Consider creating a summer internship program (possible partnership with the University of Wyoming Ag College, Casper College, or students looking to get into

wildlife management) to assist with conducting habitat treatment projects. *Explore the possible use of WGFC seed money for this project.*

- Consider hiring seasonal at-will Department contract employees to assist with habitat restoration efforts.

- **Secure adequate funding for habitat projects while being cost effective**

- Continue to support cooperation with agencies and Non-Governmental Organizations such as the WGFD Trust Fund, WWNRT, Mule Deer Foundation, Muley Fanatics, RMEF, and other entities / NGOs to maximize matching funds for habitat treatment projects.
- Utilize non-contractors when possible to stretch dollars further (volunteers or interns may be most cost effective but there may be a learning curve).
- Partner with state and federal agencies to treat identified projects regardless of ownership - potentially spreading costs (i.e. cost-sharing).

## **ROADS & ACCESS**

The MDWG recognizes that road and public access issues need to be addressed at several locations within Area 66. The MDWG feels there are motorized roads and trails in critical mule deer habitat that put unnecessary pressure on deer year-round while other areas are in need of better or improved access to promote proper use of public lands as recommended by the State, BLM and WGFD. *It should be noted that Rhen Etzelmiller abstained from offering recommendations, voting on recommendations, or influencing recommendations within this section due to his role and employment with the BLM, and the ongoing Travel Management Plan. Any discussion was strictly in an informational or advisory capacity.*

- **Submit recommendations to the Bureau of Land Management's ongoing Bates Hole Travel Management Plan**

- Work with BLM to continue to provide input into the ongoing Bates Hole Travel Management Plan. The plan appears to still be 6-12 months from completion.
- Support opening access to Muddy Mountain (BLM) and Circle Drive (Natrona County Road 505) in winter months to extend the timeframe for recreational access on Muddy Mountain. Although this area is utilized by mule deer, these road closures also inhibit the ability to harvest elk and mountain lions.
- Support the closure of roads in the Bates Hole Stock Trail area that traverse many ridgetops while maintaining main arterial access roads. Specific areas of concern include Lone Tree, Lawn Creek and Sand Draw. The current road system does not allow mule deer any remote areas of security or escapement.
- Voice opposition to existing or new dirt bike trails in the Twin Buttes Area which is also key mule deer crucial winter range.
- The Area 66 MDWG may also consider similar recommendations for areas outside the existing Bates Hole Travel Management Planning Area in Area 66 that may also potentially encompass State lands.

The group also recognized there are stretches of State highway within Area 66 that see a high level of mule deer mortality. There are currently no mitigating factors or proposals to help alleviate this concern.

- **The Department should cooperate with WYDOT to address concerns of deer mortality along state highways**
  - Gather information from WYDOT to identify specific stretches of HWY 487 that experience the highest collision rates.
  - Explore potential funding from WYDOT for highway over and under passes.
  - Work with the Department to identify priority areas for potential over/under passes and high-fence areas to reduce deer-vehicle collisions. *Explore the possible use of WGFC seed money for this project.*

## **COMPETITION**

Although the impacts of elk competition on this mule deer herd cannot be quantified, the MDWG generally considers the over-objective elk population (in Elk Hunt Area 19) is having an overall negative impact on mule deer and their habitats. Better efforts should be made to increase elk harvest in this area to reduce impacts to mule deer. The group recognizes that significant attempts have been made by the Department but are complicated by landowners who restrict hunting access and create elk refuges.

- **Maintain liberal cow elk hunting seasons and access to maximize harvest and curb expansion of elk in Area 19**
  - Continue efforts to work with local landowners to open up access for hunting after bull seasons. Consider additional access to existing areas and promote use of motorized vehicles for retrieval purposes.
  - The MDWG urges the Department/WGFC to consider implementing a “*Bonus Cow Tag*” that would accompany any successful draw of a Full Price Type 1 or 2 License to increase cow harvest without increasing hunter densities.
  - The MDWG urges the Department/WGFC to consider allowing hunters to obtain multiple Full Price Type 4 and 5 Antlerless Elk Licenses (efforts are already underway for the 2016 season) to improve cow elk harvest.
  - The MDWG and/or the Department should work to establish a donation program for elk meat to community organizations or persons in need that would fund the cost of elk processing. This would potentially entice more hunters to harvest cows and donate the meat without incurring processing costs. On a limited scale, establish and maintain a list of persons or organizations that would be willing to pay for processing. Having a place to donate elk meat may increase hunter willingness to harvest an extra elk. *Explore the possible use of WGFC seed money for this project.*
  - There are concerns regarding elk use of traditional mule deer habitats with respect to the Lone Tree and Spruce Canyon areas as they have also become popular with hunters. Even with modified season structure, the group does not see the ability to remove elk from these areas entirely.

Although white-tailed deer are present in Area 66, the MDWG has minimal concern with respect to white-tailed deer encroaching on mule deer habitats. White-tailed deer are generally confined to private lands along riparian areas and do not often occupy uplands. White-tailed deer are already managed liberally by the Department with general and limited quota seasons.

- **The MDWG recommends the Department continue liberal harvest of white-tailed deer within this area**
  - Maintain existing hunting structure to curb potential expansion of white-tailed deer into mule deer habitat.

### **POPULATION OBJECTIVE**

Since 1988, the WGFC defined population objective for Areas 66 & 67 (Bates Hole / Hat Six Mule Deer Herd) was to manage for 12,000 mule deer postseason while maintaining buck ratios between 20-29 per 100 does (“Recreational” management strategy). Because this herd had not reached this objective since the late 1980’s, the Department and the MDWG considered it to be unrealistic, with the current population estimate being ~5,600 mule deer. As a result, the MDWG concurred with the Department’s recommendation to revise the postseason objective to 8,000 mule deer. In addition, the MDWG recommended the Department ask the WGFC to change the management strategy to manage this herd for postseason buck ratios between 30-45 bucks per 100 does (“Special” management strategy). Specifically, the MDWG recommended the Department attempt to manage for 35 bucks per 100 does postseason. Based on this recommendation, the Department asked the WGFD to adopt the special management strategy for this herd. In July 2015, the WGFC formally adopted the recommendations from the Department, which entails for managing for 8,000 mule deer and 30-45 bucks per 100 does postseason. See the “Season Structure” section for management trigger recommendations to help achieve these management goals.

### **SEASON STRUCTURE**

It was the general consensus of the group, as well as the public, that the existing hunting season structure is placing too much pressure on the Area 66 mule deer herd. Although opinions were split in all forums, the group’s ultimate recommendation was to maintain the existing general license season structure as opposed to converting Area 66 to a limited quota area. This recommendation was unanimous. The key factors that contributed to this recommendation were the need to maintain adequate public opportunity for deer hunting as well as an understanding that a shift to limited quota only impacts hunter perception and hunting quality and ultimately has no impact on improving overall deer numbers. With the recommendation for the Department to keep Area 66 as a general area, the group still hopes to significantly improve the existing structure and overall quality of the hunting experience in Area 66. As a result, the MDWG recommended the WGFC change the management strategy from recreational to special to manage for higher buck ratios. The MDWG feels this is justified based on the general season structure recommendation and the popularity of Area 66 with hunters.

- **Maintain conservative seasons and harvest until herd numbers rebound**
  - We recommend the Department remove the ability of hunters to harvest “any deer” during archery season to mirror that of the rifle season.
  - Although the group recognizes the need for youth to have opportunity advantages, we recommend the Department modify the season structure from “any deer” to “any buck” for general youth licenses in Area 66.

- The Department should continue to restrict doe harvest, which should only be considered to address specific damage concerns in a localized area (although there are not any damage concerns noted at this time).
- The Department should maintain Antler Point Restrictions (APRs) of 3 points or better which have already been in place for two years. The herd has begun to show a positive response to these APRs with a shift toward higher buck quality and an increase of buck ratios (see below for management triggers). It is further recognized by the group that maintaining APR's for an extended period of time goes against traditional thinking and should be monitored closely for adverse effects.

The MDWG hopes these recommendations will be implemented and will have a positive impact on the ability to grow and maintain a quality deer herd. If mule deer numbers rebound, opportunities should be extended to allow for a more liberal hunting experience while maintaining herd objectives.

- **The MDWG recommends the Department consider the following management triggers to adjust hunting season structure for Deer Area 66:**
  - Maintain the existing 7-day season until the population objective has been reached.
  - Increase the season length to 10 days after the herd objective has been reached.
  - As of the 2015 season, maintain APRs until the buck: doe ratio reaches 35:100 per post-hunt surveys.
  - Eliminate APR's whenever postseason buck ratios are between 25 and 35, but not until buck ratios have reached 35 per 100 following the completion of this plan.
  - Implement APRs whenever the postseason buck ratio drops below 25:100.

The group recommends these parameters be closely monitored for adverse and unforeseen effects over the next 3-5 years. The MDWG will likely request future follow-up from the Department with respect to post-hunt population counts and survey information. This will help determine current status and whether any changes need to be made should these parameters become unattainable.

### **MISCELLANEOUS**

The group recognizes that with increasing frequency, rural landscapes are being impacted by urban sprawl and various forms of development. Although the necessity of change and growth is certainly recognized, it is our hope that future expansion into critical habitats will continue to be monitored with concerns being raised accordingly. These concerns extend specifically to proposed wind power development and transmission.

Some discussion was also had regarding the increase in popularity of shed hunting and its potential impact on mule deer on winter ranges. Although this can be a concern, it was agreed that it is not the actual act of shed hunting (hiking) but rather the continual harassment and disturbance that is placed on animals with various forms of motorized vehicles. The group would be in favor of finding common ground to curb this issue while still allowing for responsible recreational opportunities.

# CONCLUSION OF PLAN

Given the above management recommendations developed by the MDWG, it is prudent to recap the process that led to these decisions. The commitment of the MDWG members also cannot go unrecognized. This group devoted countless hours to this Initiative and put aside personal biases to develop a suite of recommendations that were derived from both data and public input.

Overall public support and comments given to the group were very limited in spite of significant efforts that were undertaken to ensure everyone had an opportunity to voice their concerns. The group drew on years of personal experience in the area and information from the Department to formulate the above recommendations. In addition, a broad overview of identified negative impacts to mule deer in Area 66 is provided below in no particular order:

- Years of prolonged drought conditions, over utilization/mismanagement of habitat and a general “no burn” policy are all having a negative impact on the land and its ability to support a healthy mule deer population.
- Although local efforts to reduce coyotes are substantial, mountain lions are having a significant impact on mule deer. Cultural shifts toward favoring predators have allowed increased numbers to be prevalent in recent years.
- Diseases (specifically CWD) may be having a significant impact on mule deer. With this disease being 100% fatal when contracted and our local herd having high prevalence, the group believes this is contributing to the lack of older age class deer as well as overall population decline. Even if a vaccine were to be developed, distribution would prove difficult to administer to a wild population. Research shows that a natural selection process may be starting to take place, although it is unknown if this disease will ever be eradicated.
- As with many areas around the state, an overabundance of elk within this area appears to be crowding out mule deer on traditional habitats. A lack of access to private lands to control the elk population and increase harvest is a leading cause of the problem.
- Although certainly the most tenuous topic of discussion, the ongoing debate of General vs. Limited Quota hunting season structure will continue. Most group members went into the Initiative leaning towards converting Area 66 to limited quota. However, after reviewing data (experiencing same problems in LQ Areas as General) from other areas/herds, an educated decision was made to recommend maintaining a general license season structure in Area 66 to allow for good hunting opportunity. The group recognizes that changing season structure does not contribute to the ultimate goal of increasing deer numbers. Converting to limited quota appears to be strictly a shift of hunting quality and influence on hunter perceptions.
- Outside forces such as urban sprawl and energy development in certain areas continue to change our landscape.
- Finally, it should be noted that declining mule deer numbers are not specific to this particular herd or Wyoming, as this trend is occurring throughout the American West.