RAC AGENDA – November 2015

1.	Approval of Agenda - RAC Chair	
2.	Approval of Minutes - RAC Chair	
3.	Old Business - RAC Chair	WILDLIFE RESOURCES
4.	Regional Update - DWR Regional Supervisor	INFORMATIONAL
5.	Waterfowl Recommendations and Rule Amendments - 2016 - Blair Stringham, Waterfowl Program Coordinator	ACTION
6.	Statewide Elk Management Plan Revisions - Justin Shannon, Big Game Coordinator	ACTION
7.	Bucks, Bulls & OIAL 2016 Season Dates, Application Timeline And R657-5 Rule Amendments - Justin Shannon, Big Game Coordinator	ACTION
8.	SER Deer Management Plans - Guy Wallace, Southeastern Region Wildlife Manager	ACTION
9.	CWMU Management Plans - Scott McFarlane, Public Wildlife/Private Lands Coordinator	ACTION
10.	Landowner Association Permit Number for 2016 - Scott McFarlane, Public Wildlife/Private Lands Coordinator	ACTION
11.	R657- 37 CWMU Rule Amendments - Scott McFarlane, Public Wildlife/Private Lands Coordinator	ACTION
	Meeting Locations	
NR RAC - Nov	v. 10th 6:00 PM SER RAC – Nov. 18th 6:30) PM

	Weber State Univ. Room 404 Shepherd Union Bldg, Ogden	John Wesley Powell Museum 1765 E. Main St, Green River
CR RAC –	Nov. 12th 6:30 PM (Thursday) Springville City Civic Center 110 S. Main Street, Springville	NER RAC – Nov. 19th 6:30 PM Wildlife Resources NER Office 318 North Vernal Ave., Vernal
SR RAC –	Nov. 17th 5:00 PM Cedar City Middle School 2215 W. Royal Hunte Dr., Cedar City	Board Meeting – Dec. 2 - 9:00 AM (Wednesday) DNR Boardroom 1594 West North Temple, SLC



State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER Executive Director

Governor SPENCER J. COX Lieutenant Governor Division of Wildlife Resources GREGORY SHEEHAN Division Director

October 20, 2015

TO:Utah Wildlife Board / Regional Advisory Council MembersFROM:Blair Stringham
Migratory Game Bird Program CoordinatorSUBJECT:2016-17 Waterfowl Season Recommendations

Starting in 2015, the Division will be moving the waterfowl recommendation process to November to coincide with the U.S. Fish and Wildlife Service recommendation schedule. Future recommendations will be based on the previous springs North American Duck Breeding Pair Survey and May Pond Survey results, which will allow us to now present actual season dates and bag limits offered to us by the USFWS.

General season duck harvest frameworks are driven by the status of mallard breeding populations. The Western Mallard Harvest Strategy was implemented to determine harvest regulations in the Pacific Flyway. Additionally, scaup, pintail and canvasback have separate harvest frameworks that are based on species-specific harvest strategies. The year's option is the LIBERAL waterfowl package (107 day season/7 bird bag); 2-bird bag for pintails; 2-bird bag for canvasback; and a 3-bird bag and 86 day season for scaup.

Last year there was some controversy regarding season dates for the Northern Goose Zone in Box Elder County. The Division went through an extensive process of collecting public input about the zone and is recommending changes based on that feedback. We recommend adjusting the boundary of the Northern Goose Zone as follows:

Boundary begins at the intersection of the eastern boundary of Public Shooting Grounds Waterfowl Management Area and SR-83 (Promontory Road); east along SR-83 to I-15; south on I-15 to the Perry access road; southwest along this road to the Bear River Bird Refuge boundary; west, north, and then east along the refuge boundary until it intersects the Public Shooting Grounds Waterfowl Management Area boundary; east and north along the Public Shooting Grounds Waterfowl Management Area boundary to SR-83.

The remaining portion of the old Northern Goose zone will now become part of the Rest of the State Zone.

The Division is recommending adjusting light goose hunting dates to better coincide with dates light geese move through the state, as well as doing away with multiple season dates and zone to reduce complexity. We are also recommending closing Public Shooting Grounds and Salt Creek Waterfowl Management Areas to light goose hunting from January 22 –



Page 2 October 26, 2015 Subject: 2016-17 Migratory Game Bird Recommendations

March 10. Very few snow geese occur on the WMAs and the hunt conflicts with management activities occurring on the WMA during that time.

The USFWS definition of youth has changed this year and we are recommending changing the waterfowl youth age to 17 or younger. This would allow anyone 17 or younger on July 31, 2016 to participate in the waterfowl youth day. Youth hunters will still be required to have an adult accompany them on their hunts to maintain the mentoring aspect that is critical to this hunts success. Youth hunters 16 years old and older will also be required to adhere to federal duck stamp requirements.

Specific season and bag recommendations for the 2016-2017 Utah waterfowl season are as follows:

Youth Day: 9/17/2016

Duck/Coot/Merganser (7 bag / 21possession; 2 female mallards, 2 redheads, 2 wood ducks, 2 pintails, 2 canvasback, 3 scaup) Season: 10/1/2016 – 1/14/2017 Scaup Season: 10/1/2016 – 12/27/2016

Dark Goose (4 bag / 12 possession)

Northern Zone: 10/1/2016 – 1/14/2017 Rest of the State Zone: 10/1/2016 – 10/13/2016; 10/22/2016 – 1/22/2017 Urban Zone: 10/1/2016 – 10/13/2016; 11/5/2016 – 2/5/2017

Light Goose (20 bag / 60 possession)

Season: 10/25/2016 – 11/30/2016; 1/16/2017 – 3/10/2017

- Closed in Millard County from February 6- February 28
- Snipe (8 bag / 24 possession) Season: 10/1/2016 – 1/14/2017

Falconry (3 bag / 9 possession) Season: 10/1/2016 – 1/14/2017

Swan (1 with permit; 2000 total permits) Season: 10/1/2016 – 12/11/2016

R657. Natural Resources, Wildlife Resources.

R657-9. Taking Waterfowl, Wilson's Snipe and Coot.

R657-9-1. Purpose and Authority.

(1) Under authority of Sections 23-14-18 and 23-14-19, and in accordance with 50 CFR 20, 50 CFR 32.64 and 50 CFR 27.21, 2004 edition, which is incorporated by reference, the Wildlife Board has established this rule for taking waterfowl, Wilson's snipe, and coot.

(2) Specific dates, areas, limits, requirements and other administrative details which may change annually are published in the guidebook of the Wildlife Board for taking waterfowl, Wilson's snipe and coot.

R657-9-29. Season Dates and Bag and Possession Limits.

(1) Season dates and bag and possession limits are specified in the guidebook of the Wildlife Board for taking waterfowl, Wilson's snipe and coot.

(2) A youth duck hunting day may be allowed for any person [15]17 years of age or younger on July 31st of the year in which the youth hunting day is held, as provided in the guidebook of the Wildlife Board for taking waterfowl, Wilson's snipe and coot.

KEY: wildlife, birds, migratory birds, waterfowl

Date of Enactment or Last Substantive Amendment: August 7, 2015 **Notice of Continuation** August 16, 2011

Authorizing, and Implemented or Interpreted Law: 23-14-19; 23-14-18; 50 CFR part 20

UTAH STATEWIDE ELK MANAGEMENT PLAN



UTAH DIVISION OF WILDLIFE RESOURCES DEPARTMENT OF NATURAL RESOURCES

UTAH DIVISION OF WILDLIFE RESOURCES STATEWIDE MANAGEMENT PLAN FOR ELK

I. PURPOSE OF THE PLAN

A. General

The statewide elk management plan provides overall guidance and direction for Utah's elk management program. This plan briefly describes general information on elk natural history, management, habitat, and population status. This statewide elk management plan was revised by a 20 person advisory committee. The committee was diverse and had representation from: the Utah Wildlife Board, 5 Regional Advisory Councils, Brigham Young University, Rocky Mountain Elk Foundation, Sportsmen for Fish and Wildlife, Utah Bowman's Association, US Forest Service, Bureau of Land Management, Utah Farm Bureau, Cooperative Wildlife Management Unit Association, Utah Guides and Outfitters, Utah State Legislature, private landowners, livestock permittees, public at large, and Utah Division of Wildlife Resources (UDWR). This group met five times from June 2 to August 11, 2015. The committee identified components of the last elk plan that were working well and areas that could be improved upon, and then developed goals, objectives, and strategies to address those management issues.

B. Dates Covered

The elk plan was approved by the Wildlife Board on XXX and will be in effect for a period of seven years from that date.

II. SPECIES ASSESSMENT

A. Natural History

Elk (*Cervus elaphus*) are members of the cervid family along with deer, moose, and caribou. Elk are the same species as European red deer, even though visually they are quite different. North American elk are also commonly called wapiti to distinguish them from European red deer. Wapiti is the Shawnee name for elk and means "white rump" or "white deer." There are six recognized subspecies of elk in North America with all of the elk in Utah of the subspecies known as Rocky Mountain elk (*C. e. nelsoni*). In 1971, the Rocky Mountain elk was designated as Utah's state animal.

Elk males, females, and young are known as bulls, cows, and calves, respectively. Calves are generally born as singles (twins are extremely rare) after a gestation period of approximately 8–8.5 months. Calves are normally born from mid May until early June and weigh approximately 13 pounds at birth. Elk are gregarious animals and, as such, often gather into large nursery bands of cows and calves in early summer. During this time, it is common to see groups of several hundred elk. Within a few weeks those nursery bands disperse into smaller groups across the summer range.

The antlers of bulls begin to grow as soon as the old antlers are shed in late winter or early spring. Bulls generally segregate from cows and calves through the summer antler growing period and often band together in small groups during this time. The velvet that covers and provides nourishment to the growing antlers begins to shed in early August. In Utah, the rut or breeding period for elk begins in early September and continues until mid October with the peak of the rut typically occurring in mid to late September. In early September, bulls begin to bugle and gather cows into harems of approximately 10–20 females. Breeding bulls vigorously defend their harems from other "satellite" bulls who attempt to steal cows for themselves.

After the rut, bulls leave the cows and calves and either become reclusive or band together with other bulls. It is common to see large groups of bulls in the late fall and winter. In late spring, cows seek solitude for calving. At this time, yearlings from the previous year are often aggressively driven away by the cows and forced to find new home ranges. As new calves are born, the cycle of life begins again.

B. Management

1. UDWR Regulatory Authority

The Utah Division of Wildlife Resources operates under the authority granted by the Utah Legislature in Title 23 of the Utah Code. The Division was created and established as the wildlife authority for the state under section 23-14-1 of the Code. This Code also vests the Division with necessary functions, powers, duties, rights, and responsibilities associated with wildlife management within the state. Division duties are to protect, propagate, manage, conserve, and distribute protected wildlife throughout the state.

2. Past and Current Management

Elk along with bighorn sheep were probably the most common game animals in Utah prior to settlement times. Indians, trappers, and pioneers all used elk as a source of food and clothing. Unrestricted hunting eliminated most of the elk in Utah by the end of the nineteenth century. Because of the low elk numbers, elk hunting seasons were closed in Utah in 1898.

Large scale transplant efforts are a major reason for the reestablishment of elk in Utah. Interstate transplants of elk occurred from 1912 to 1925 to reestablish elk to their historical ranges. During that period, elk were transplanted from Yellowstone National Park and released on the Fishlake, Oquirrh Mountains, Mount Timpanogos, Mount Nebo, Logan Canyon, and Manti units. A few elk were also captured from Montana and released in Smithfield Canyon during that period. In addition to the interstate transplant efforts, elk have also been captured and transplanted to and from source herds within Utah. Those transplants occurred in the late 1970s and 1980s and were mainly released on the eastern and southern Utah mountain ranges.

Elk herds in Utah were managed by the Board of Big Game Control from 1925 until 1996. In 1996, the Board of Big Game Control was abolished and replaced with five Regional Advisory Councils and a Wildlife Board that regulate the management of all wildlife in Utah.

Elk were hunted under a limited entry hunting system until 1967 when the Board of Big Game Control adopted an "open bull" hunt strategy on most large elk units. Smaller elk units continued to be managed as "restricted permit" or "limited entry" type hunts. That hunting strategy continued until 1989 when a "yearling only" regulation was initiated on the two largest elk herds, the Manti and Fishlake. Yearling only was later replaced with a "spike only" regulation and expanded to other units.

Elk herds in Utah are currently managed under a combination of general season (spike and any bull) and limited entry hunting regulations. The any bull units are located primarily in northern Utah and are generally on units with large amounts of private land, large wilderness areas, or units with very low elk populations. Spike hunting is used on most limited entry units and is intended to reduce bull:cow ratios, while still allowing for trophy quality bulls. Any bull and spike hunts are designed to provide hunting opportunity. In 2014, UDWR issued nearly 41,000 general season permits (14,300 any bull, 15,000 spike, and 11,500 archery). The harvest rate on those hunts is fairly low with success rates in 2014 averaging 17.0%, 13.4%, and 11.1% for the any bull, spike, and archery hunts respectively.

Limited entry hunting is managed for an average age of harvested bulls (Figure 1). Those age objectives are based on the premise that in order to achieve a given average age of harvest, a certain age structure must be present in the population. The higher the age class objective, the more the age structure will be shifted towards older animals, and as such, the greater the likelihood of a hunter harvesting a larger trophy animal. In general, over the past 5 years bulls in units that are managed for opportunity (4.5-5.0 or 5.5-6.0 years old) have exceeded the age objective and permits have been increased. Bulls in older age class units (6.5-7.0 and 7.5-8.0 years old) have been at or below the age objective and permits have been reduced. As a result, ages are trending upward on older age class units. From 2009 - 2014, that statewide average age for bull elk has been between 6.1 and 6.5 (Table 1).

C. Habitat

Elk are a generalist ungulate, and have a varied diet which consists of grasses, forbs, and shrubs. The percentage of each food type can vary based on availability. This flexible diet allows elk to live in a variety of habitat types including all of Utah's mountains as well as some of the low deserts (Figure 2). Although elk inhabit most habitat types in Utah, they prefer to spend their summers at high elevations in aspen conifer forests. Elk will spend the winter months at mid to low elevation habitats that contain mountain shrub and sagebrush communities.

Elk in Utah are more closely tied to aspen than any other habitat type. Aspen stands provide both forage and cover for elk during the summer months and are used for calving in spring. For several decades, aspen has been declining throughout the West with overgrazing, lack of disturbance (e.g., logging, fire), and extended drought all being listed as potential reasons for the decline. If the declines in aspen continue, it will reduce the amount of potentially suitable habitat available for elk and, as such, reduce the number of elk those habitats can support.

Water is also an important component of elk habitat, and the lack of sufficient water distribution could limit the number of elk we can have in certain areas of Utah. In Utah, Jeffrey (1963)

found that elk on summer range preferred areas within 0.33 miles of a permanent water source. Other studies have shown elk use of summer range declined markedly beyond 0.5 mile from water (Mackie 1970, Nelson and Burnell 1975).

D. Population Status

Elk are well established throughout Utah with the current statewide population estimated at approximately 81,000 animals (Figure 3). From 1975 to 1990, the elk population in Utah grew rapidly from an estimated 18,000 elk to 58,000 elk (average annual growth rate = 1.08). This rapid increase was largely due to low population levels and the abundance of available habitat (i.e., the population was well below carrying capacity). From 1990 to 2005, population growth slowed down considerably through the use of antlerless harvest designed to reduce population growth rates, as well as reduce populations in areas with poor range conditions due to drought. Although most elk populations are currently at or near the population objective (Table 2), elk populations have increased in many areas of the state due to increases in population objectives, difficulties with obtaining harvest on private lands that manage for elk, and movements of elk from tribal lands to public lands during winter. As such, this plan provides additional harvest strategies to obtain adequate harvest, in needed areas, on local units.

III. ISSUES AND CONCERNS

A. Habitat

Healthy and productive elk herds require high amounts of quality habitat. Crucial elk habitat is continually being fragmented or lost due to human expansion and development. Urbanization, road construction, OHV use, and energy development impact elk habitat, and proper planning and mitigation are essential to maintaining and improving elk habitat and migration routes. Additionally, elk summer ranges such as aspen habitat has been gradually replaced by conifers due to fire suppression, and winter ranges that were once dominated with shrubs and perennial grasses have been replaced by annual grasses or invasive weeds that are not beneficial to elk.

The UDWR has a long history of restoring and enhancing elk habitat in Utah. The habitat section, habitat council, watershed restoration initiative, and many conservation partners have provided leadership and funding to improve elk habitats. These projects have included pinyon-juniper removal, controlled burns, reseeding efforts after wildfires, conifer thinning, etc., which have allowed for increased perennial grasses, forbs, and shrubs to be established for the benefit of elk and other wildlife. Water catchments (i.e., guzzlers) and other developments have also been installed that benefit elk, cattle, and other big game species in Utah. Since 2005, UDWR and our partners have treated over 650,000 acres of elk habitat (350,000 acres of habitat improvement projects and 300,000 acres of fire rehabilitation). These efforts will continue to support elk populations throughout the state.

B. Population Size and Elk Distribution

The statewide elk management plan does not set a population objective for elk in Utah; rather, population objectives are established in unit plans and the summation of those objectives

becomes the statewide objective. The current population objective for elk statewide is 70,965 (Table 2). Local committees or other forms of public input are used when changing a population objective for a given unit. Population estimates are obtained by conducting aerial surveys every 3 years as snow conditions and budgets allow. Population models include data on bull and cow harvest, survival, and calf production, are also used to estimate elk populations for a given unit and are updated annually.

Properly managing the distribution and number of elk within units is a key priority for UDWR. In most units, managing to a population objective is easily attained by issuing antlerless elk permits to public hunters. However, in some units, particularly those with large amounts of private or tribal lands, managing to the population objective has been challenging because elk quickly learn to use sanctuary or refuge areas that receive little hunting pressure during hunting seasons (Mangus 2009). Throughout this planning process, the statewide elk committee wanted to provide UDWR biologists as many management tools as possible to properly distribute elk and reach population objectives on individual units.

In addition to antlerless permits available through the public draw, antlerless elk control permits have been issued on units where the population objective is 0 or where elk harvest has been difficult to obtain. This strategy allows a hunter with a buck, bull, or once-in-a-lifetime permit to purchase a cow elk permit at a reduced price and harvest a cow within the season dates of their hunt in a specified boundary. Antlerless elk control permits have been successful because additional hunters are not added to the field, and it provides more hunting opportunities and increased harvest. Moving forward, additional strategies should be utilized on units that are over objective including increasing the number of cow elk permits a hunter can obtain annually, over-the-counter permits, and private-lands-only permits. These hunt strategies should provide hunting pressure and harvest in desired areas so elk can be better distributed throughout the unit. Also, private landowners can more easily harvest elk on their property, which may increase tolerance of elk in some areas.

C. Bull Hunting

This plan provides for opportunity and quality bull elk hunting in Utah. Opportunity hunts include spike and any bull elk permits and are needed to reduce bull to cow ratios. Harvesting bulls on these units allows for increased hunting opportunities and increased calf production in future years because more cows can be retained in the population. Spike hunting occurs on most limited entry units whereas any bull hunting occurs on units that are primarily dominated by private lands, units with low elk populations, or wilderness areas.

Limited entry hunts are designed for increased quality, and harvested bulls are managed to a desired age objective (Figure 1). The elk committee defined characteristics of lower age and higher age objective units and assigned all elk units to an age objective category (Table 1). In general, lower age objective units (4.5-5.0 and 5.5-6.0) have high populations of elk which allows for hunters to draw limited entry permits more frequently, thus reducing point creep. These units also have high amounts of interchange with neighboring units, many roads, easy access to elk, and are in close proximity to urban areas. Higher age class objective units (6.5-7.0 and 7.5-8.0) have lower populations of elk, low amounts of interchange with neighboring

units, few roads, difficult access to elk, and are in relatively remote parts of the state. The committee also considered other factors when assigning age objectives to units including point creep, management strategies of neighboring states and tribes, dynamics of private lands, and unit histories.

D. Poaching

Poaching is not considered to be a major problem in Utah; however, it is extremely difficult to determine the true extent to which elk are being poached in the state. Although poaching has not resulted in overall declines in elk population numbers in Utah, poaching of mature bulls can be significant and has reduced hunter opportunity in some localized areas. Units that are most susceptible to poaching typically have small isolated elk populations and issue very few bull elk permits. High grading of bulls may also be occurring on some units where hunters kill one bull elk and then abandon it to look for a larger bull. Continued law enforcement efforts are needed to maintain hunting opportunity.

E. Predator Management

Utah's elk populations have increased dramatically in Utah since 1970 even with presence of several predator species (e.g., mountain lion, black bear, and coyote). Although mountain lions may display strong patterns of selection for elk calves (Clark et al. 2014), along with black bears and coyotes occasionally preying on elk, there are no known instances of predators causing elk herd declines in Utah. Predator management occurs in some elk herd units due to declining or depressed mule deer populations on shared ranges, and also occurs when deer herds are chronically below population objectives (UDWR 2011*a*). In some instances, elk herds may have benefited by this predator management that was initiated for deer and other ungulate species.

Although wolves are not currently established in Utah, there is concern that wolves could impact elk populations and elk hunting opportunities. Recent studies in surrounding western states have implicated predation by wolves as a reason for localized elk herd declines, particularly in areas with poor to marginal habitat quality (Hamlin and Cunningham 2009). To deal with the potential establishment of wolves in Utah, UDWR in conjunction with the Wolf Working Group developed a wolf management plan that was passed by the Utah Wildlife Board in 2005 and was recently revised in 2014 (UDWR 2014).

F. Disease Issues

Similar to other wild ungulates, elk are susceptible to a wide variety of viral, bacterial, and parasitic diseases. In Utah, the two most concerning diseases include brucellosis (*Brucella abortus*) and chronic wasting disease (CWD). Other diseases and parasites either documented or considered a concern to elk include bluetongue virus (BTV), epizootic hemorrhagic disease (EHD), and elaeophora (*Elaeophora schneideri*).

Brucellosis is an infectious bacterial disease that causes late term abortions, non-viable calves, and sterility in adult cattle (Godfroid et al, 2011). Brucellosis can also infect humans (Godfroid et al., 2011). Transmission most commonly occurs when an animal licks or ingests infected fetal

materials, aborted fetuses, uterine discharges, or contaminated feed or water (Godfroid et al., 2011). Depending on environmental conditions, such as cool temperatures and moisture, the bacteria can remain viable in uterine discharges and the aborted fetus for prolonged periods of time (Crawford et al. 1990). Brucellosis is thought to be self-limiting in free-ranging elk populations because of their secretive nature during parturition and the fact that most female elk quickly consume fetal materials after birth (Thorne 2001). However, this has not been the case for elk of the Greater Yellowstone area where feed ground practices that concentrate elk during the period when abortions are most likely have allowed the disease to persist and increase in prevalence (Thorne 2001). This finding has also been reported in Idaho, where the prevalence of brucellosis antibodies is two to four times higher in elk that use feed grounds (Etter and Drew 2006).

In the late 1960's, controversy began to surface in Utah regarding the status of brucellosis in elk. The origination of Utah elk from the Greater Yellowstone Area caused much concern in the agricultural community, given the findings of brucellosis in those herds in the early 1930's (Tunnicliff and Marsh 1935). Moreover, the proximity and potential exchange of elk in Utah with possible brucellosis positive elk from Wyoming has also caused concern. In response, the UDWR has agreed to monitor the disease status of elk at Hardware Ranch on an annual basis and a trapping and testing program was initiated in 1969. Between 1969 and 1971, blood samples were collected from 101 elk, all of which were sero-negative for brucellosis (Follis 1972).

Serological testing of elk populations has continued on an annual basis in northern Utah and includes elk that use feed grounds on private property in Rich County, Hardware Ranch, and the Millville Face in Cache County. Further, hunter harvested antlerless elk from Rich and Cache County are tested through a voluntary participation program. To date, no elk in the state of Utah has ever been classified as a suspect or reactor (UDWR unpublished data).

CWD is a contagious, slow-acting, and fatal degenerative disease known to affect members of the cervid family including elk (Williams and Young 1982, Miller et al. 1998, Miller et al. 2000, Williams et al. 2002). Chronic Wasting Disease affects the central nervous system, resulting in weight loss, deterioration of body condition, and eventually death (Williams and Young 1982, Williams and Young 1992, Spraker et al. 1997, Williams et al. 2002). Chronic Wasting Disease was first documented in Utah in a hunter-harvested mule deer in late 2002 and has since then been found in three distinct geographic areas: the North Slope and South Slope Units near Flaming Gorge and Brush Creek, the La Sal Mountains Unit, and the Central Mountains Unit near Fountain Green and the Spencer Fork Wildlife Management Area.

Surveillance for CWD in Utah includes hunter-harvest surveillance in areas known to have positive mule deer and targeted surveillance focusing on the removal of sick or symptomatic animals. To date, two elk have tested positive for CWD in Utah; one hunter harvested elk from the La Sal Mountains in 2009, and one female elk with neurological symptoms that was euthanized by UDWR personnel in 2014 near Vernal. Further, CWD was documented in two captive elk ranches in Utah in 2014, one in the Southeastern Region, and one in the Northern Region. The elk ranch in the southeastern region was subsequently depopulated, and 38% of the elk on the ranch tested positive. Chronic Wasting Disease in captive cervid facilities are of great concern to the health of Utah's wild elk. Licensing and CWD surveillance on captive elk

ranches is overseen by the Utah Department of Agriculture and Food (UDAF), but the responsibility for removal of wild cervids within the ranches lies with UDWR. Close collaboration with UDAF, and enforcement of existing regulations is critical to prevent the spread of CWD from captive elk ranches.

G. Access Management

The use of off highway vehicles (OHVs) in Utah has dramatically increased in recent years. OHV registrations increased more than 3-fold from 1998 to 2006 (from 51,686 to 172,231) and that trend continues to increase (Smith 2008). Uncontrolled use of OHVs can cause damage to elk habitat and disturbance to elk during critical phases of their life cycle. Shed antler gathering and the associated human disturbance on crucial winter ranges, especially with the use of OHVs, can cause undue stress on elk during a time when they must conserve energy. State and federal land management agencies are currently struggling with issues involving the use of OHVs on public land. Those agencies acknowledge OHVs as a legitimate use of public land, but also recognize the potential problems associated with uncontrolled activity. As such, these agencies have developed or are currently working on travel management plans to help minimize the impact of OHVs on wildlife and their habitat.

H. Depredation Issues

Depredation of private croplands continues to exist in some areas despite careful management of elk populations. In some localized areas depredation can be a significant problem. UDWR has committed substantial resources to address depredation concerns, and there are numerous programs designed to assist land owners with depredation situations. Harvesting elk on private lands can ease frustrations of private landowners and better distribute elk into more favorable portions of a unit. Depredation problems need to be addressed within the sideboards of state code, rule, and policy, and in a timely and efficient manner so that landowners will better tolerate migratory populations of elk.

I. Private Land/ CWMU Issues

The value of private lands to the elk population cannot be overstated. Many crucial elk habitats throughout the state are privately owned, and some of those private rangelands have been converted to housing developments, recreational properties, or other uses that result in a loss of elk habitat. As such, programs that provide incentives for private landowners to manage their properties to benefit elk and other wildlife species are essential to the success of the state's elk management program (e.g. CWMU, Landowner Association, and Walk-In Access programs). In some areas of the state, obtaining adequate cow harvest on private lands has been challenging, and reviewing current incentive programs and additional management options (e.g. private-lands -only permits, over-the-counter permits) will be necessary as elk management challenges continue to evolve. Additionally, the Utah Watershed Restoration Initiative has worked with numerous cooperating landowners to provide funding and other resources to accomplish vegetation treatments on both private and public lands to benefit elk and other wildlife species, as well as livestock.

J. Winter Feeding

Supplemental feeding is often viewed by the public as a viable solution to a lack of suitable winter range. However, there is evidence that the potential harm created by feeding elk may outweigh the limited benefits (WAFWA 2013). Winter feeding programs are generally costly and can cause problems for elk including behavioral changes, range destruction, and expansion of disease problems. Recent research conducted in Utah has shown that elk feeding programs in Utah can be reduced or eliminated without creating new problems (Mangus 2009).

Although there are negative consequences of winter feeding, it is also recognized that feeding may be necessary to sustain elk populations in emergency situations. It may also be necessary to temporarily feed elk to reduce depredation problems or to keep elk from impacting deer populations in extreme conditions. For instance, elk are fed at Hardware Ranch each winter to keep elk from moving on the urban interface. These elk are also physically examined, disease tested, and an outreach opportunity for the public to view and enjoy elk.

In Utah, winter feeding of big game is currently guided by the winter feeding policy (UDWR 2011*b*). Under this policy, feeding is discouraged except under extreme circumstances. With the discovery of CWD in Utah, the feeding policy was updated to state that "the Division will not participate in any emergency big game feeding program that occurs within the known range or use area of any big game population where CWD, brucellosis or tuberculosis has been detected."

K. Competition

Competition occurs when two species use the same limited resource, and one of the two suffers in some way because of that use (WAFWA 2003). Competition can potentially take place between elk and other ungulates such as horses, livestock, or deer. Competition most often occurs where habitat is limited such as on crucial winter ranges or on the summer ranges of some drier units.

Concern has been expressed by some that elk populations are responsible for declines in deer herds over the past few decades. Direct competition is possible during a hard winter when forage is limited because elk can successfully shift to a diet largely comprised of browse, causing a high degree of diet overlap with mule deer (Frisina et al. 2008). Additionally indirect competition, such as spatial and behavioral differences between elk and deer, may occur for fawning/calving habitats (Stewart et al. 2002). The extent of competition between elk and deer in Utah is unknown and that information is difficult to collect and quantify. Deer herd declines have occurred in areas with few or no elk, and deer herd increases have occurred in areas with large elk populations. Currently, elk and deer populations are thriving in Utah largely because of light winters and favorable amounts of precipitation during growing seasons.

There is also concern that elk and livestock compete for the same forage on shared ranges. Ranges where elk coexist with mule deer and livestock should be closely monitored to prevent over use and competition. Additionally, habitat improvement projects should be focused in those areas to reduce competition and improve range conditions for all species.

L. Research and Elk Movements

Understanding the movements of elk, factors that influence movements of elk, and potential barriers are needed to properly align management unit boundaries with biological groups of elk (Petersburg et al. 2000). Elk frequently move away from hunting pressure, which can make managing to a consistent population objective difficult in units with high amounts of migration. In southern Utah, individual elk that were radio-collared on the Mt Dutton unit have been observed on 4 neighboring units (UDWR unpublished data). This can cause concern for both biologists and hunters because elk on a given winter range may have been on a neighboring unit during the fall hunting seasons. As a result UDWR, BYU, and many conservation groups have provided direction and funding to conduct research on elk movements on the Wasatch and surrounding units. Additionally, information on body condition and survival estimates of elk will be collected, which will aid in population modeling efforts.

Increased knowledge of elk movements can also aid in reducing elk-vehicle collisions. DWR and our partners have worked to identify migration routes and locations where elk are commonly hit on roadways. This information has allowed us to know where to place underpasses and fences to increase elk survival. These studies have also provided data on the types of underpass structures these animals will use (Cramer 2014). Although costly, these efforts are helping to prevent future collisions, increase public safety, and minimize elk mortalities.

IV. USE AND DEMAND

Elk have become one of the most sought after big game animals in Utah. Geist (1998) in <u>Deer</u> of the World says the following of red deer, the elk of the old world:

"It adorns coats of arms, crests and monuments and is the deer of legends, poetry, and songs. Castles were built in its honor and to display its antlers, and throughout history its hunting and management generated passions that transcended life, death, and reason..."

Sportsmen are no less passionate about elk and elk hunting in Utah today. Hunter demand and interest for limited entry permits has always been high (Table 3). In 2014, a total of 53,334 hunters applied for 2,868 limited entry permits, resulting in 1:16.1 draw odds for residents a and 1:43.4 for nonresidents. Draw odds have been relatively stable over the past 8 years when comparing total hunters with permits available; however, some hunts have more favorable draw odds than others. For instance, nearly 60% of all limited entry elk hunters apply for the early season rifle hunt, resulting in added point creep for those hunts. Also, units managed for older age class bulls are more difficult to draw compared to lower age class units.

In addition to limited entry permits, Utah sold 40,807 general season elk permits for spike and any bull hunts in 2014. Although the number of general season elk permits has remained relatively constant over the past five years, the permits have been selling out earlier each year, indicating the demand for general season elk hunting in Utah.

Elk are also a high interest watchable wildlife species. Nearly everyone enjoys seeing and hearing elk in the wild. Units which produce large bulls are especially attractive not only to

hunters but to wildlife watchers as well. Many thousands of hours and considerable money is expended each year in elk watching activities. For instance, 15,000 - 20,000 people attend Hardware Ranch annually to view elk. As elk populations and habitats are properly managed, elk viewing and recreating activities will be enhanced for years to come.

VI. STATEWIDE MANAGEMENT GOALS AND OBJECTIVES

A. Population Management Goal: Improve management of Utah's elk populations.

Population Objective 1: Maintain healthy elk populations at biologically and socially sustainable levels.

Note: The statewide population objective is the sum of objectives contained in unit plans.

- A. Elk Population Objectives
 - a) Set population objectives and manage elk populations at appropriate spatial scales that account for migration patterns.
 - b) Establish local advisory committees to review individual herd unit management plans when considering a change (increase or decrease) in the herd size objective.
 - i) Committees will be established following approval of the statewide elk plan.
 - ii) Committees will consist of the UDWR unit biologist and regional wildlife manager as facilitators, two local sportsman's representatives, and one representative from each of the following (if applicable): Farm Bureau, Cattlemen's Association, Wool Growers Association, Bureau of Land Management, USDA Forest Service, local elected official, RAC member, CWMU Association, Sportsmen for Fish and Wildlife, Mule Deer Foundation, Rocky Mountain Elk Foundation, tribal representative, local land owner or land owner association representative and other affected stakeholders. Recommendations from these committees will be reviewed by UDWR and presented to the Regional Advisory Councils and Wildlife Board for public input and approval.
 - iii) Committees shall be provided with the results of habitat projects completed in the previous five years, planned projects for the next three years, UDWR range trend data, and any other applicable information.
 - c) On units where population decreases are necessary, UDWR will recommend shortterm population objectives in unit management plans or increases in antlerless elk permits.
- B. Population Management
 - a) Utilize antlerless harvest as the primary tool to manage elk populations within herd size objectives and to target specific areas where range concerns or depredation problems exist.
 - b) Properly manage elk populations to minimize competition with mule deer on crucial mule deer range.
 - c) If drought related conditions and high elk densities are negatively impacting habitat, recommend additional antlerless elk permits at the August Wildlife Board meeting.
 - d) During severe winters, aggressively use antlerless elk harvest (public hunters and DWR removal) to minimize conflicts.
 - e) Consider using over-the-counter cow elk permits to provide additional harvest and hunting pressure in areas of conflict.

- f) On units over objective where cow harvest is difficult to obtain, allow for cow harvest using a general season muzzleloader bull elk permit (similar to general season archery elk hunt).
- g) Encourage innovative ideas from regional biologists to manage towards population objectives.
- C. Monitoring Elk Populations and Elk Habitat
 - a) Monitor all elk populations by helicopter survey on a three year rotational basis to evaluate herd size, calf production, herd composition, and habitat use, as conditions and budgets allow.
 - b) Evaluate herd size and population trends on an annual basis.
 - c) Implement research studies where needed to close information gaps.
 - d) Continue to support the interagency big game range trend study of crucial ranges throughout the state.
 - e) Monitor range condition, utilization, and trends annually as manpower and budget allow.
- D. Predator Control
 - a) Utilize the Predator Management Policy where needed to help achieve objectives for elk populations, including the management of wolves if necessary.
- E. Disease Control
 - a) Investigate and manage disease outbreaks that threaten elk populations including CWD and brucellosis.
 - b) Promote management practices that minimize disease risks such as discouraging baiting/feeding, conducting CWD surveillance, and assisting Department of Agricultural in monitoring elk farms/ranches for compliance.
 - c) Follow the emergency big game winter feeding policy, and avoid unnecessary feeding of elk.

Population Objective 2: Foster support among stakeholders for Utah's elk management program.

- A. Landowner Incentives
 - a) Continue to provide incentive programs for landowners that will encourage elk populations on private land such as the CWMU, Landowner Association, and Walk-In Access programs.
 - b) Address all depredation problems in a timely and efficient manner to increase landowner tolerance of elk populations in accordance with current laws, rules, and policies.
- B. Habitat Acquisition and Restoration
 - a) Identify and support the acquisition of property (fee title or conservation easements) from willing sellers that would better accommodate current population numbers or allow for increased elk populations.
 - b) Identify future habitat restoration projects with stakeholders.
 - c) Increase tolerance of public land grazers not enrolled in a CWMU or LOA by conducting habitat projects that will benefit livestock and wildlife.

- C. Public Outreach and Enforcement
 - a) Educate the public on the use and validity of population modeling in wildlife management.
 - b) Increase communication and understanding between UDWR and stakeholders regarding elk distributions, population estimates, hunt recommendations, and management decisions.
 - c) On units with high amounts of social conflict, create elk committees during unit plan revisions and/or hold open houses to obtain public input.
 - d) Enforce existing laws that protect resources on public and private lands.

Population Objective 3: Achieve a proper distribution of elk on private and public lands.

- A. Antlerless Permits
 - a) Create a private-lands-only permit to encourage and target cow elk harvest on private lands.
 - b) Increase the number of general season cow elk a hunter may annually harvest, but only allow for 1 cow elk permit to be obtained through the public draw system.
 - c) Use depredation permits and vouchers, public hunters, and/or UDWR removal to harvest resident elk on agricultural lands or where elk are creating conflicts.
 - d) Issue antlerless-elk-control permits on units that are over objective, in areas with limited access, units with low population objectives, or where hunter crowding is an issue.
 - e) Coordinate season dates and permit numbers to distribute elk appropriately within a hunt unit and to achieve adequate harvest in areas of concern.
- B. Landowner Assistance Programs
 - a) Investigate an incentive program for landowners not enrolled in the CWMU or LOA programs to qualify for a special drawing for bull elk permits/vouchers based on cow harvest. This program should be used on units exceeding their population objective.
 - b) Review and modify eligibility requirements for existing landowner incentive programs (LOA, CWMU, WIA) as needed to increase cow elk harvest and/or improve elk distribution during hunting seasons.
 - c) Secure easements to increase hunter access to elk on public and private lands from willing participants.

B. Habitat Management Goal: Conserve and improve elk habitat throughout the state.

Habitat Objective 1: Maintain sufficient habitat to support elk herds at population objectives and reduce competition for forage between elk and livestock.

Strategies:

- A. Elk Habitat Classification and Assessment
 - a) Identify and characterize elk habitat throughout the state.
 - b) Provide information to educate counties, municipalities, and developers to promote zoning that benefits elk.
- B. Habitat Management
 - a) Coordinate with land management agencies and private landowners to properly manage and improve elk habitat, especially calving and wintering areas.
 - b) Work with state and federal land management agencies to use livestock as a management tool to enhance crucial elk ranges.
- C. Watershed Restoration Initiative
 - a) Increase forage production by annually treating a minimum of 40,000 acres of elk habitat.
 - b) Coordinate with land management agencies, conservation organizations, private landowners, and local leaders through the regional Watershed Restoration Initiative working groups to identify and prioritize elk habitats that are in need of enhancement or restoration.
 - i) Identify habitat projects on summer ranges (aspen communities) to improve calving habitat.
 - ii) Encourage land managers to manage portions of forests in early succession stages through the use controlled burning and logging. Controlled burning should only be used in areas with minimal invasive weed and/or safety concerns.
 - iii) Promote let-burn policies in appropriate areas that will benefit elk, and conduct reseeding efforts post wildlife.
- D. Habitat Acquisition
 - a) Acquire additional, important elk habitat from willing sellers to offset habitat loss.
 - b) Support programs, such as conservation easements, that provide incentives to private landowners to keep prime elk habitat managed as rangeland.
- E. Public Support
 - a) Educate the public on the value of the general license, conservation, and expo permits for funding elk habitat improvement projects.
 - b) Continue to support the conservation permit and habitat enhancement programs that provide crucial funding for habitat improvement efforts.

Habitat Objective 2: Reduce adverse impacts to elk herds and elk habitat.

- A. Road Management
 - a) Seek to maintain less than 2 miles of roads per square mile within crucial elk habitat.
 - b) Work cooperatively with UDOT, county, state, and federal agencies to limit the impacts of roads on elk.

- c) Support the establishment of multi-agency OHV plans developed on a county or planning unit level to prevent resource damage and protect crucial elk habitat.
- B. Energy Development
 - a) Coordinate with land management agencies and energy development proponents to develop an effective mitigation approach for oil, gas, and mining proposals and large scale developments (e.g., solar, wind, and recreation) which have the potential to impact crucial elk habitat.
 - b) Encourage energy development companies to avoid and minimize the impact of disturbance and use Best Management Practices that promote the conservation of wildlife resources.
- C. Noxious Weed Control
 - a) Work with land management agencies and county weed boards to control the spread of noxious and invasive weeds throughout the range of elk in Utah.

C. Recreation Management Goal: Enhance recreational opportunities for hunting and viewing elk throughout the state.

Recreation Objective 1: Maintain a diversity of elk hunting opportunities.

- A. Opportunity Emphasis General Season Units
 - a) Provide the following statewide general season permits:
 - i) 15,000 spike bull permits. If harvest success is > 20% statewide, permits will be reduced to 14,000 the following year. Permits will be reinstated to 15,000 if harvest success is < 20% statewide.
 - ii) 15,000 any bull permits.
 - iii) Unlimited archery permits valid on both spike and any-bull units.
 - b) Investigate a dedicated hunter program for elk.
 - c) Continue to allow general season archery hunters to harvest a cow elk with their bull permit.
 - d) Provide hunting opportunities that will encourage youth participation and maintain family hunting traditions.
 - e) Seek opportunities to expand youth hunting on any-bull units.
- B. Quality Emphasis Limited Entry Units
 - a) Provide varied levels of limited entry elk hunting quality by maintaining 4 categories of age class harvest objectives (Figure 1, Table 1).
 - b) Accurately monitor the age of harvested bull elk by collecting a statistically valid sample of teeth from all seasons on all limited entry units. Provide incentives to encourage hunters to submit teeth or implement mandatory tooth submission if necessary.
 - c) Recommend limited entry bull permits on each unit based on the 3-year average and trend of age data. Permit recommendations should make progress towards the age objective.
 - d) Set permits for the 3 weapon types based on the following percentages: 25% for archery, 60% for rifle, and 15% for muzzleloader. On some units those percentages may vary to fulfill a management need.
 - e) On appropriate limited entry units, provide a mid season (overlaps with general season spike hunt) and/or late season rifle elk hunt to increase hunting opportunity or improve hunter distribution.
 - i) On these units, the percent of rifle permits in the early season rifle hunt will not exceed 60%, unless there is a management-related need.
 - f) On suitable limited entry units, offer 3% of bull elk permits for multi-season hunting opportunities. These permits will be subtracted from the any weapon permit allocation.
- C. Hunting Access
 - a) Continue to support programs that provide incentives for private landowners to manage for elk and elk habitat (e.g. CWMU, Landowner Association, and Walk-In Access programs).
 - b) Identify and support the acquisition of leveraged pieces of property (such as Wilcox Ranch and Book Cliffs Initiative) that control access to or management of larger

tracts of public land for the purpose of increasing hunting and wildlife viewing opportunities.

- c) Support the responsible use of OHV's in specified areas during hunting seasons.
- d) Assist state and federal agencies with the development of travel management plans.
- D. Law Enforcement
 - a) Direct law enforcement to reduce illegal activities.

Recreation Objective 2: Increase opportunities for viewing elk while educating the public concerning the needs of elk management and the importance of habitat.

- A. Education
 - a) Use social media and other media outlets to promote interest and emphasize the importance of elk habitat and population management.
 - b) Promote public tours, elk viewing days, and spring range rides on crucial elk winter ranges to demonstrate the importance of elk habitat and population management.
- B. Partners
 - a) Work with partners (conservation organizations, state and federal agencies, etc.) to increase outreach efforts that promote elk conservation, habitat, and management.
 - b) Highlight the importance of the conservation permit program, expo permits, watershed restoration initiative, and license and permits sales for funding efforts to improve elk habitat.

Literature Cited

- Clark, D. A., G. A. Davidson, B. K. Johnson, and R. G. Anthony. 2014. Cougar kill rates and prey selection in a multiple-prey system in northeast Oregon. The Journal of Wildlife Management 78:1161–1176.
- Crawford, R. P., J. D. Huber, and B. S. Adams. 1990. Epidemiology and surveillance. Pages 131–151 *in* K. Nielsen and J. R. Duncan, editors. Animal Brucellosis. CRC Press, Boston, Massachusetts, USA.
- Etter, R. P., and M. L. Drew. 2006. Brucellosis in elk of Eastern Idaho. Journal of Wildlife Diseases 43:271–278.
- Follis, T. B. 1972. Reproduction and hematology of the Cache elk herd. Utah Division of Wildlife Resources. Publication Number 72-8, Salt Lake City, Utah, USA.
- Frisina, M. R., C. L. Wambolt, W. W. Fraas, and G. Guenther. 2008. Mule deer and elk winter diet as an indicator of habitat competition. USDA Forest Service Proceedings RMRS-P-52.
- Geist V. G. 1998. Deer of the World. Stackpole Books, Mechanicsburg, Pennsylvania, USA.
- Godfroid, J., H. C. Scholz, T. Barbier, C. Nicolas, P. Wattiau, D. Fretin, A. M. Whatmore, A. Cloeckaert, J.M. Blasco, I. Moriyon, C. Saegerman, J.B. Muma, S. Al Dahouk, H. Neubauer, and J.J. Letesson. 2011. Brucellosis at the animals/ecosystem/human interface at the beginning of the 21st century. Preventive Veterinary Medicine 102:118–131.
- Hamlin, K. L., and J. A. Cunningham. 2009. Monitoring and assessment of wolf-ungulate interactions and population trends within the Greater Yellowstone area, southwestern Montana, and Montana statewide. Final Report, Montana Fish, Wildlife, and Parks, Helena, Montana, USA.
- Jeffrey, D. E. 1963. Factors influencing elk and cattle distribution on the Willow Creek summer range, Utah. Thesis, Utah State University, Logan, Utah, USA.
- Mackie, R. J. 1970. Range ecology and relations of mule deer, elk, and cattle in the Missouri Riverbreaks, Montana. Wildlife Monographs 20:1–79.
- Mangus, D. 2009. Reducing reliance on supplemental winter feeding in elk: An applied management experiment at Deseret Land and Livestock Ranch. Thesis, Utah State University, Logan, Utah, USA.
- Miller, M. W., E. S. Williams, C. W. McCarty, T. R. Spraker, T. J. Kreeger, C. T. Larsen, and E. T. Thorne. 2000. Epizootology of chronic wasting disease in free-ranging cervids in Colorado and Wyoming. Journal of Wildlife Diseases 36:676–690.

- Miller, M. W., M. A. Wild, and E. S. Williams. 1998. Epidemiology of chronic wasting disease in captive Rocky Mountain elk. Journal of Wildlife Diseases 34:532–538.
- Nelson, J. R., and D. G. Burnell. 1975. Elk-cattle competition in central Washington. Northwest Section of the Society of American Foresters, Spokane, Washington, USA.
- Petersburg, M. L., A. W. Alldredge, and W. J. de Vergie. 2000. Emigration and survival of 2year-old male elk in northwestern Colorado. Wildlife Society Bulletin 28:708-716.
- Smith, J. W. 2008. Utah off-highway vehicle owners' specialization and its relationship to environmental attitudes and motivations. Thesis, Utah State University, Logan, Utah USA.
- Spraker, T. R., M. W. Miller, E. S. Williams, D. M. Getzy, W. J. Adrian, G. G. Schoonveld, R. A. Spowart, K. I. O'Rourke, J. M. Miller, and P. A. Merz. 1997. Spongiform encephalopathy in free-ranging mule deer (*Odocoileus hemionus*), white-tailed deer (*Odocoileus virginianus*), and Rocky Mountain elk (*Cervus elaphus nelsoni*) in North-central Colorado. Journal of Wildlife Diseases 33:1–6.
- Stewart, K. M., R. T. Bowyer, J. G. Kie, N. J. Cimon, and B. K. Johnson. 2002. Temporospatial distributions of elk, mule deer, and cattle: Resource partitioning and competition displacement. Journal of Mammalogy 83:229–244.
- Thorne, E. T. 2001. Brucellosis. Pages 372–395 *in* E. S. Williams and I. K. Barker, editors. Infectious Diseases of Wild Mammals. Iowa State University Press, Ames, Iowa, USA.
- Tunnicliff, E. A., and H. Marsh. 1935. Bang's disease in bison and elk in the Yellowstone National Park and on the National Bison Range. Journal of Veterinary Medical Association 86:745–752.
- Utah Division of Wildlife Resources. 2011a. Managing predatory wildlife species policy W1AG-4.
- Utah Division of Wildlife Resources. 2011b. Emergency big game winter feeding policy W5Wld-02.
- Utah Division of Wildlife Resources. 2014. Utah Wolf Management Plan. Publication # 05-17.
- WAFWA. 2003. Mule Deer: Changing landscapes, changing perspectives. Mule Deer Working Group, Western Association of Fish and Wildlife Agencies.
- WAFWA. 2013. Understanding mule deer and winter feeding, fact sheet #2. Mule Deer Working Group, Western Association of Fish and Wildlife Agencies.

- Williams, E. S., M. W. Miller, T. J. Kreeger, R. H. Kahn, and E. T. Thorne. 2002. Chronic wasting disease of deer and elk: A review with recommendations for management. Journal of Wildlife Management 66:551–563.
- Williams, E. S., and S. Young. 1982. Spongiform encephalopathy of Rocky Mountain elk. Journal of Wildlife Diseases 18:463–471.
- Williams, E. S., and S. Young. 1992. Spongiform encephalopathies in Cervidae. Scientific and Technical Review Office of International Epizootics 11:551–567.



Figure 1. Age objectives for elk units, 2015.



Figure 2. Elk habitat, Utah 2015.



Figure 3. Statewide post-season elk population estimates, Utah 1975–2014.

	2015 Age					Year					3-year
Unit	Objective	2006	2007	2008	2009	2010	2011	2012	2013	2014	average
Beaver	7.5-8.0	6.8	7.7	7.0	7.6	6.5	6.7	6.7	6.8	7.9	7.1
Book Cliffs, Bitter Creek/South	6.5-7.0	6.6	7.3	6.7	7.2	6.7	6.4	7.1	7.3	7.9	7.4
Book Cliffs, Little Creek	7.5-8.0	7.8	8.1	7.4	7.9	6.8	6.6	7.1	7.3	7.9	7.4
Box Elder, Grouse Creek	4.5-5.0	6.4	5.0	4.2	4.0	5.0	4.8	6.3	5.2	5.3	5.6
Box Elder, Pilot Mountain*	4.5-5.0	7.3	4.7	5.5	4.5	6.0	5.3	6.5	_	6.7	6.6
Cache, Meadowville	4.5-5.0	6.8	6.5	7.1	6.9	6.4	5.7	5.5	5.3	4.6	5.1
Cache, North	4.5-5.0	4.4	4.5	5.4	5.3	5.3	4.1	4.9	4.1	3.3	4.1
Cache, South*	6.5-7.0	6.6	6.5	6.8	6.8	5.7	5.8	5.9	5.8	5.4	5.7
Central Mountains, Manti	5.5-6.0	7.3	7.2	6.3	7.0	6.4	6.1	6.2	6.2	6.1	6.2
Central Mountains, Nebo	6.5-7.0	7.6	6.9	6.1	5.8	5.7	6.1	5.8	6.2	5.6	5.9
Fillmore, Oak Creek	4.5-5.0	4.8	4.6	3.7	3.9	4.0	4.6	4.8	_	_	4.8
Fillmore, Pahvant	7.5-8.0	7.7	7.8	7.9	8.0	7.0	6.9	6.9	7.3	7.6	7.3
La Sal, La Sal Mountains	5.5-6.0	5.9	7.4	6.9	7.1	6.3	6.7	6.0	6.8	6.5	6.4
Monroe*	6.5-7.0	8.2	7.9	7.8	7.4	6.2	6.0	6.6	6.6	7.1	6.7
Mount Dutton*	6.5-7.0	6.8	6.6	6.2	6.0	5.6	5.0	5.4	6.1	6.0	5.8
Nine Mile, Anthro	5.5-6.0	6.6	7.1	5.6	6.3	5.6	7.4	6.0	6.1	4.7	5.6
Nine Mile, Range Creek South	4.5-5.0	5.3	8.5	8.9	5.3	6.5	7.6	7.7	8.8	9.2	8.5
North Slope, Three Corners	5.5-6.0	5.5	5.0	5.1	5.7	5.5	6.0	6.0	6.3	5.9	6.1
Oquirrh-Stansbury	5.5-6.0	6.6	7.3	6.5	6.0	6.1	5.6	6.1	6.0	6.2	6.1
Panguitch Lake*	6.5-7.0	7.0	5.8	5.7	5.7	5.7	5.5	5.6	5.8	5.8	5.8
Paunsaugunt	4.5-5.0	6.0	5.9	6.7	5.3	5.8	4.9	4.9	6.5	5.3	5.6
Plateau, Boulder / Kaiparowits	7.5-8.0	8.4	7.8	8.3	8.2	7.1	7.4	7.4	7.6	7.9	7.6
Plateau, Fish Lake / 1000 Lake	5.5-6.0	7.6	7.3	7.2	6.8	6.6	6.1	6.1	6.3	5.9	6.1
San Juan	7.5-8.0	7.6	8.0	8.1	7.8	7.6	7.4	7.3	7.3	8.3	7.6
South Slope, Diamond Mountain	6.5-7.0	5.5	5.5	5.5	4.8	5.5	6.0	6.5	5.8	6.6	6.3
Southwest Desert, Indian Peaks	6.5-7.0	8.2	9.2	8.0	8.2	7.2	7.5	7.3	7.6	7.6	7.5
Wasatch Mountains	5.5-6.0	7.2	7.1	7.3	6.7	6.8	6.5	6.3	6.9	6.8	6.7
West Desert, Deep Creek*	7.5-8.0	8.0	8.2	7.6	7.1	7.1	7.5	6.5	7.2	6.8	6.8
Statewide average		6.8	6.8	6.6	6.4	6.2	6.1	6.3	6.5	6.5	6.4

Table 1. Age objectives and average age of harvested bull elk by management unit, Utah 2006–2014.

*indicates a change in age objective from the 2009 management plan.

Population Year Unit Objective 2006 2007 2010 2008 2009 2011 2012 2013 2014 Beaver 1,050 875 850 800 850 1,100 1,100 1,150 1,175 1,100 **Book Cliffs** 7.500 4.500 4.270 4.000 4.800 3.900 4.650 4.100 4.200 5.500 Box Elder 675 380 400 425 425 500 550 700 700 700 Cache 2,300 2,050 1,750 2.200 2.350 2,350 2,400 2,500 2.200 2,300 Central Mountains, Manti 12,000 10.000 10,000 10.600 11,100 11.700 12,500 12,700 12.300 12,500 Central Mountains, Nebo 1,450 1,375 1,550 1,550 1,150 1,150 1,100 1,200 1,200 1,400 Chalk Creek 2,400 2.150 2.090 1.900 2.0003,950 4.600 4,200 4.200 4,300 East Canvon 1.000 2.125 1.650 1,275 1.000 2.400 3.000 3.100 3.000 3.100 Fillmore 1,600 1,350 1,900 1,500 1,500 1,550 1,450 1,400 1,350 1,350 Henry Mountains 0 30 25 25 25 25 20 20 20 25 Kaiparowits 25 25 25 25 25 50 25 25 25 25 Kamas 850 600 570 600 800 1,100 1,100 1,175 1,100 1,000 La Sal 2,500 2.100 2,500 2.300 2,300 2,500 2.400 2,300 2.450 2,350 Monroe 1,800 1,000 1,000 1,050 1,200 1,300 1,400 1,400 1,300 1,250 Morgan-South Rich 3,500 4,500 3,800 4,400 3,800 3,500 5,000 5,000 5,000 4,100 Mt. Dutton 1.500 1.270 1.400 1.500 2.0001.750 1.800 2.150 1.900 1.900 Nine Mile, Anthro 950 700 1.000 1.050 1.320 1.450 1.400 1.450 850 900 Nine Mile, Range Creek 1,600 2,100 2,100 2,180 2,100 1,700 1,700 1,700 1,550 1,400 North Slope, Summit 300 280 280 300 300 335 340 500 850 875 North Slope, Three Corners 500 1,075 830 800 650 550 550 400 600 600 North Slope, West Daggett 1,600 1,800 1,300 1,015 1,000 1,100 1,200 1,200 1,100 1,300 Ogden 800 700 780 780 620 650 600 600 2.0002.100 **Oquirrh-Stansbury** 900 600 750 725 650 600 600 950 850 850 Panguitch Lake 1,100 870 950 1,000 800 775 850 1,000 1,100 1,100 Paunsaugunt 140 25 175 30 50 100 140 150 175 175 Pine Vallev 50 50 50 50 50 50 50 50 50 75 Plateau, Boulder 1,500 500 900 1,500 1,800 1,500 1,350 1,600 1.700 1,700 Plateau, Fish Lake / Thousand Lakes 5,600 4,350 4,800 5,700 5,200 5,100 4,800 5,600 5,400 5,100 San Juan 1,300 1,100 1,400 1,400 1,200 1,600 1,500 1,300 1,100 1,200 0 20 San Rafael 30 20 30 60 60 60 25 25 South Slope, Vernal / Diamond Mountain 2,500 3.030 2.770 2.700 2.8002.800 2.700 3.100 2.500 2,300 South Slope, Yellowstone 5,500 5.600 5,600 5.600 5.900 5,900 5.900 7,500 7.500 7,500 Southwest Desert, Indian Peaks 975 1,205 1,120 1,150 1,150 975 975 1,100 1,250 1,300 Wasatch Mountains, Avintaquin 1.600 1.250 1.300 1.400 1.400 1.950 1.900 1.750 1.900 1.900 Wasatch Mountains, Currant Creek 1,200 2,250 2,200 3,000 1,200 1,600 1,500 1,400 3,750 3,500 Wasatch Mountains, West 3,185 3,850 3,000 3,000 3,500 3,400 2,600 3,500 3,400 3,400 West Desert, Deep Creek 350 175 185 100 100 100 60 250 250 250 Zion 300 300 500 480 275 325 325 350 340 500 Statewide Totals 70.965 63.365 67.030 72.530 75.375 81.135 65.880 67.685 79,750 81.475

Table 2. Elk herd population estimates and objectives by unit, Utah 2006–2014.

Veen		Residents			Nonresidents	
Year	Applicants	Permits	Odds	Applicants	Permits	Odds
1998	21921	789	1 in 27.8	1931	60	1 in 32.2
1999	24146	831	1 in 29.1	2788	65	1 in 42.9
2000	27398	789	1 in 34.7	3278	63	1 in 52.0
2001	31068	831	1 in 37.4	4622	70	1 in 66.0
2002	34141	862	1 in 39.6	5539	76	1 in 72.9
2003	34707	978	1 in 35.5	6270	86	1 in 72.9
2004	38275	1272	1 in 30.1	8044	106	1 in 75.9
2005	39238	1533	1 in 25.6	9021	118	1 in 76.4
2006	40869	1805	1 in 22.6	9401	147	1 in 64.0
2007	43681	2065	1 in 21.2	10930	163	1 in 67.1
2008	41822	2352	1 in 17.8	8949	215	1 in 41.6
2009	40925	2526	1 in 16.2	10666	239	1 in 44.6
2010	41208	2743	1 in 15.0	10694	266	1 in 40.2
2011	38637	2767	1 in 14.0	10093	260	1 in 38.8
2012	38995	2586	1 in 15.1	10434	271	1 in 38.5
2013	40424	2552	1 in 15.8	10723	256	1 in 41.9
2014	42013	2607	1 in 16.1	11321	261	1 in 43.4

Table 3. Drawing odds of obtaining a limited entry bull elk permit, Utah 1998–2014.



State of Utah DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER Executive Director

Division of Wildlife Resources GREGORY J. SHEEHAN

Division Director

MEMORANDUM

Date: October 15, 2015

To: Wildlife Board and Regional Advisory Council Members

From: Justin Shannon, Big Game Coordinator

SUBJECT: 2016 BBOIAL Season Dates, Boundary Changes, and Rule Changes

The attached documents summarize the Division's recommended changes to the current big game guidebook and rule.

BBOIAL season dates:

See attached tables for details.

Big Game Rule Changes and Guidebook Recommendations:

Rule Changes to R657-5

- 1. We will present the statewide elk management plan. If accepted in its entirety, the following rule changes will be required.
 - A. We recommend updating the big game rule to allow a person to obtain 3 elk permits annually with the following restrictions: 1) a maximum of 1 permit can be for a bull, 2) a maximum of 1 permit can be obtained through the antlerless big game draw, and 3) a maximum of 2 antlerless elk permits can be obtained over the counter.
 - B. We recommend allowing general season muzzleloader bull elk hunters to harvest a cow or bull elk with their muzzleloader permit on select units that are over objective (similar to archery elk).
 - C. We recommend defining private lands only permits, which allow a person to take one antlerless elk on private lands using any weapon during the season dates and area as approved by the Wildlife Board.
 - D. We recommend defining antlerless elk control permits.
- 2. We recommend defining 2-doe permits for mule deer and pronghorn.
- 3. We recommend prohibiting smart guns (computerized targeting firearms) to take big game.
- 4. We recommend allowing magnifying scopes on muzzleloaders during the muzzleloader season.
- 5. We recommend allowing hunters to use an electronic range-finding device attached to a bow to take big game.
- 6. We recommend clarifying areas with special restrictions in Salt Lake County.
- 7. We recommend other minor clarifications and edits to R657-5.

Statewide Changes

 We recommend adding 6 additional limited entry muzzleloader deer hunts. These hunts would occur on general season units that are exceeding management objectives of 18-20 bucks per 100 does. They include 1) Fillmore, 2) Monroe, 3) Plateau, Boulder/Kaiparowits, 4) Plateau, Thousand Lakes, 5) South Slope, Yellowstone, and 6) Wasatch Mtns, East.

WILDLIFE RESOURCES

 We recommend adding a limited entry bull elk hunt that overlaps the general season spike elk hunt in early-mid October on select units: 1) Box Elder, Grouse Creek, 2) Paunsaugunt, 3) Plateau, Fishlake/Thousand Lakes, 4) South Slope, Diamond Mtn, and 5) West Desert, Deep Creeks.

Southern Region Changes

- 1. We recommend discontinuing the Beaver (nanny) mountain goat hunt.
- 2. Recently approved hunt boundary changes in unit deer plans will be implemented in fall 2016.

Southeastern Region Changes

1. We recommend altering the elk and bighorn sheep boundary on the Henry Mtns to align with the current deer boundary. The spike elk and bighorn sheep boundaries on the San Rafael Swell will also be altered to match this change.

Northern Region Changes

- 1. We recommend adding an extended archery deer unit (Cache, Laketown) to address urban deer.
- 2. We recommend reinstating the Pilot Mtn bighorn sheep hunt.
- 3. We recommend altering the Pilot Mtn bighorn sheep and elk boundary.
- 4. We recommend expanding the Pilot Mtn pronghorn hunt and renaming it Box Elder, West. The Snowville pronghorn boundary will also be altered to match this change.
- 5. We recommend eliminating the limited entry bull elk hunt on the Grouse Creek unit.

Central Region Changes

1. No changes recommended.

Northeast Region Changes

- 1. We recommend discontinuing the youth late-season any bull elk hunt.
- 2. We recommend adding a bighorn sheep hunt on the Wasatch Mtns, Avintaquin unit. Sportsman permit holder may hunt this unit during even years, and statewide conservation permit holder may hunt this unit during odd years.

Boundary description for new hunts or boundary changes on existing hunts are attached in the packet

Sept. 17-Nov. 30

General Season Buck Deer

General Season Archery Hunts

			2016	2016	2016
Hunt #	Hunt Name	Unit #	Season Dates	Nonres Permits	Notes
	Beaver	22	Aug. 20-Sept. 16	у	
	Box Elder	1	Aug. 20–Sept. 16	у	
	Cache	2	Aug. 20–Sept. 16	у	
	Central Mtns, Manti/San Rafael	12/16B/16C	Aug. 20–Sept. 16	у	
	Central Mtns, Nebo	16A	Aug. 20–Sept. 16	у	
	Chalk Creek/East Canyon/Morgan-South Rich	4/5/6	Aug. 20–Sept. 16	у	
	Fillmore	21A/21B	Aug. 20–Sept. 16	у	Boundary Change
	Kamas	7	Aug. 20–Sept. 16	у	
	La Sal, La Sal Mtns	13A	Aug. 20–Sept. 16	у	
	Monroe	23	Aug. 20–Sept. 16	у	
	Mt Dutton	24	Aug. 20–Sept. 16	у	
	Nine Mile	11	Aug. 20–Sept. 16	у	
	North Slope	8	Aug. 20–Sept. 16	у	
	Ogden	3	Aug. 20–Sept. 16	у	
	Oquirrh-Stansbury	18	Aug. 20–Sept. 16	у	
	Panguitch Lake	28	Aug. 20–Sept. 16	у	
	Pine Valley	30	Aug. 20–Sept. 16	у	
	Plateau, Boulder/Kaiparowits	25C/26	Aug. 20–Sept. 16	у	
	Plateau, Fishlake	25A	Aug. 20–Sept. 16	у	
	Plateau, Thousand Lakes	25B	Aug. 20–Sept. 16	у	
	San Juan, Abajo Mtns	14A	Aug. 20–Sept. 16	у	
	South Slope, Bonanza/Vernal	9B/9D	Aug. 20–Sept. 16	у	
	South Slope, Yellowstone	9A	Aug. 20-Sept. 16	y	
	Southwest Desert	20	Aug. 20–Sept. 16	у	
	Wasatch Mtns, East	17B/17C	Aug. 20–Sept. 16	y	Hunt Name Change
	Wasatch Mtns, West	17A	Aug. 20–Sept. 16	у	
	West Desert, Tintic	19C	Aug. 20–Sept. 16	y	
	West Desert, West	19A	Aug. 20–Sept. 16	y	
	Zion	29	Aug. 20–Sept. 16	у	

General Season Any Legal Weapon Hunts

			2016	2016	2016
Hunt #	Hunt Name	Unit #	Season Dates	Nonres Permits	Notes
	Beaver	22	Oct. 22–Oct. 30	у	
	Box Elder	1	Oct. 22–Oct. 30	у	
	Cache	2	Oct. 22–Oct. 30	у	
	Central Mtns, Manti/San Rafael	12/16B/16C	Oct. 22–Oct. 30	у	
	Central Mtns, Nebo	16A	Oct. 22–Oct. 30	у	
	Chalk Creek/East Canyon/Morgan-South Rich	4/5/6	Oct. 22–Oct. 30	у	
	Fillmore	21A/21B	Oct. 22–Oct. 30	у	Boundary Change
	Kamas	7	Oct. 22–Oct. 30	у	
	La Sal, La Sal Mtns	13A	Oct. 22–Oct. 30	у	
	Monroe	23	Oct. 22–Oct. 30	у	
	Mt Dutton	24	Oct. 22–Oct. 30	у	
	Nine Mile	11	Oct. 22–Oct. 30	у	
	North Slope	8	Oct. 22–Oct. 30	у	
	Ogden	3	Oct. 22–Oct. 30	у	
	Oquirrh-Stansbury	18	Oct. 22–Oct. 30	у	
	Panguitch Lake	28	Oct. 22–Oct. 30	у	
	Pine Valley	30	Oct. 22–Oct. 30	у	
	Plateau, Boulder/Kaiparowits	25C/26	Oct. 22–Oct. 30	у	
	Plateau, Fishlake	25A	Oct. 22–Oct. 30	у	
	Plateau, Thousand Lakes	25B	Oct. 22–Oct. 30	у	
	San Juan, Abajo Mtns	14A	Oct. 22–Oct. 30	у	
	South Slope, Bonanza/Vernal	9B/9D	Oct. 22–Oct. 30	у	
	South Slope, Yellowstone	9A	Oct. 22–Oct. 30	у	
	Southwest Desert	20	Oct. 22-Oct. 30	у	

Wasatch Mtns, East	17B/17C	Oct. 22–Oct. 30	у	Hunt Name Change
Wasatch Mtns, West	17A	Oct. 22–Oct. 30	у	
West Desert, Tintic	19C	Oct. 22–Oct. 30	у	
West Desert, West	19A	Oct. 22–Oct. 30	У	
Zion	29	Oct. 22-Oct. 30	у	

General Season Muzzleloader Hunts

			2016	2016	2016
Hunt #	Hunt Name	Unit #	Season Dates	Nonres Permits	Notes
	Beaver	22	Sept. 28–Oct. 6	у	
	Box Elder	1	Sept. 28–Oct. 6	у	
	Cache	2	Sept. 28–Oct. 6	у	
	Central Mtns, Manti/San Rafael	12/16B/16C	Sept. 28–Oct. 6	у	
	Central Mtns, Nebo	16A	Sept. 28–Oct. 6	у	
	Chalk Creek/East Canyon/Morgan-South Rich	4/5/6	Sept. 28–Oct. 6	у	
	Fillmore	21A/21B	Sept. 28–Oct. 6	у	Boundary Change
	Kamas	7	Sept. 28–Oct. 6	у	
	La Sal, La Sal Mtns	13A	Sept. 28–Oct. 6	у	
	Monroe	23	Sept. 28–Oct. 6	У	
	Mt Dutton	24	Sept. 28–Oct. 6	у	
	Nine Mile	11	Sept. 28–Oct. 6	у	
	North Slope	8	Sept. 28–Oct. 6	у	
	Ogden	3	Sept. 28–Oct. 6	у	
	Oquirrh-Stansbury	18	Sept. 28–Oct. 6	у	
	Panguitch Lake	28	Sept. 28–Oct. 6	у	
	Pine Valley	30	Sept. 28–Oct. 6	У	
	Plateau, Boulder/Kaiparowits	25C/26	Sept. 28–Oct. 6	у	
	Plateau, Fishlake	25A	Sept. 28–Oct. 6	у	
	Plateau, Thousand Lakes	25B	Sept. 28–Oct. 6	у	
	San Juan, Abajo Mtns	14A	Sept. 28–Oct. 6	У	
	South Slope, Bonanza/Vernal	9B/9D	Sept. 28–Oct. 6	у	
	South Slope, Yellowstone	9A	Sept. 28–Oct. 6	у	
	Southwest Desert	20	Sept. 28–Oct. 6	у	
	Wasatch Mtns, East	17B/17C	Sept. 28–Oct. 6	у	Hunt Name Change
	Wasatch Mtns, West	17A	Sept. 28–Oct. 6	У	
	West Desert, Tintic	19C	Sept. 28–Oct. 6	у	
	West Desert, West	19A	Sept. 28–Oct. 6	у	
	Zion	29	Sept. 28–Oct. 6	у	

Premium Limited Entry Buck Deer

Premium Archery Hunts

			2016	2016	2016
Hunt #	Hunt Name	Unit #	Season Dates	Nonres Permits	Notes
	Henry Mtns	15	Aug. 20–Sept. 16	у	
	Paunsaugunt	27	Aug. 20–Sept. 16	у	

Premium Any Legal Weapon Hunts

			2016	2016	2016
Hunt #	Hunt Name	Unit #	Season Dates	Nonres Permits	Notes
	Antelope Island	1	Nov. 16–Nov. 23	n	
	Henry Mtns	15	Oct. 22–Oct. 30	у	
	Paunsaugunt	27	Oct. 22–Oct. 30	у	

Premium Muzzleloader Hunts

			2016	2016	2016
Hunt #	Hunt Name	Unit #	Season Dates	Nonres Permits	Notes
	Henry Mtns	15	Sept. 28–Oct. 6	у	
	Paunsaugunt	27	Sept. 28–Oct. 6	у	

Management Buck Hunt

			2016	2016	2016
Hunt #	Hunt Name	Unit #	Season Dates	Nonres Permits	Notes
	Henry Mtns	15	Oct. 31–Nov. 4	У	
	Paunsaugunt	27	Nov. 2–Nov. 6	у	
Limited Entry Buck Deer

Limited Entry Archery Hunts

			2016	2016	2016
Hunt #	Hunt Name	Unit #	Season Dates	Nonres Permits	Notes
	Book Cliffs	10A/10B/10C	Aug. 20–Sept. 16	У	
	Fillmore, Oak Creek LE	21C	Aug. 20–Sept. 16	у	Boundary Change
	La Sal, Dolores Triangle	13B	Nov. 5–Nov. 18	n	
	San Juan, Elk Ridge	14B	Aug. 20–Sept. 16	у	
	South Slope, Diamond Mtn	9C	Aug. 20–Sept. 16	у	
	West Desert, Vernon	19B	Aug. 20–Sept. 16	у	

Limited Entry Any Legal Weapon Hunts

			2016	2016	2016
Hunt #	Hunt Name	Unit #	Season Dates	Nonres Permits	Notes
	Book Cliffs, North	10A/10C	Oct. 22–Oct. 30	у	
	Book Cliffs, South	10B	Oct. 22–Oct. 30	У	
	Fillmore, Oak Creek LE	21C	Oct. 22–Oct. 30	у	Boundary Change
	La Sal, Dolores Triangle	13B	Nov. 19–Nov. 27	У	
	North Slope, Summit	8A	Oct. 8–Oct. 20	у	
	San Juan, Elk Ridge	14B	Oct. 22–Oct. 30	У	
	South Slope, Diamond Mtn	9C	Oct. 22–Oct. 30	у	
	West Desert, Vernon	19B	Oct. 22–Oct. 30	У	

Limited Entry Muzzleloader Hunts

			2016	2016	2016
Hunt #	Hunt Name	Unit #	Season Dates	Nonres Permits	Notes
	Book Cliffs	10A/10B/10C	Sept. 28–Oct. 6	у	
	Cache, Crawford Mtn	2D	Nov. 19–Dec. 4	у	
	Fillmore, Oak Creek LE	21C	Sept. 28–Oct. 6	у	Boundary Change
	La Sal, Dolores Triangle	13B	Nov. 30–Dec. 8	n	
	San Juan, Elk Ridge	14B	Sept. 28–Oct. 6	у	
	South Slope, Diamond Mtn	9C	Sept. 28–Oct. 6	у	
	West Desert, Vernon	19B	Sept. 28–Oct. 6	у	

Multi-Season

			2016	2016	2016
Hunt #	Hunt Name	Unit #	Season Dates	Nonres Permits	Notes
	Henry Mtns	15	All Limited Entry Seasons	n	
	Paunsaugunt	27	All Limited Entry Seasons	n	
	Book Cliffs	10A/10B/10C	All Limited Entry Seasons	У	
	Fillmore, Oak Creek LE	21C	All Limited Entry Seasons	n	Boundary Change
	San Juan, Elk Ridge	14B	All Limited Entry Seasons	n	
	South Slope, Diamond Mtn	9C	All Limited Entry Seasons	n	
	West Desert, Vernon	19B	All Limited Entry Seasons	у	

Limited Entry Late Season Muzzleloader 2016 2016 2016 Hunt # Hunt Name Unit # Season Dates **Nonres Permits** Notes Chalk Creek/East Canyon/Morgan-South Rich 4/5/6 Nov. 2-Nov. 10 21A/21B Fillmore New Hunt Nov. 2-Nov. 11 у 7 Kamas Nov. 2-Nov. 10 у Monroe 23 Nov. 2-Nov. 10 New Hunt у Nine Mile 11 Nov. 2-Nov. 10 ٧ Pine Valley 30 Nov. 2-Nov. 10 у 25C/26 Nov. 2-Nov. 10 Plateau, Boulder/Kaiparowits New Hunt у 25B Nov. 2-Nov. 10 New Hunt Plateau, Thousand Lakes n South Slope, Yellowstone 9A Nov. 2-Nov. 10 у New Hunt Southwest Desert 20 Nov. 2-Nov. 10 n Wasatch Mtns, East 17B/17C Nov. 2-Nov. 10 New Hunt/ Name Ch v 29 Nov. 2-Nov. 10 Zion у

(y) At least one nonresident permit in 2016

(n) No nonresident permit in 2016

NOTE: Permit Numbers will be determined in May 2016

The 2016 DWR General Sea	son Elk Dates Recommendation
Archery Spike	Aug. 20–Sep. 9
Archery Any Bull	Aug. 20–Sep. 16
Muzzleloader	Nov. 2–Nov. 10
Rifle	Oct. 8–Oct. 20
Extended Archery Elk	
Uintah Basin	Sept. 17–Dec. 15
Wasatch Front	Aug. 20–Dec. 15

Limited Entry Bull Elk

Archery Hunts

		2016	2016	2016
Hunt #	Hunt Name	Season Dates	Nonres Permits	Notes
	Beaver, East	Aug. 20–Sept. 16	У	
	Book Cliffs, Bitter Creek/South	Aug. 20–Sept. 16	У	
	Book Cliffs, Little Creek Roadless	Aug. 20–Sept. 16	У	
	Cache, Meadowville	Aug. 20–Sept. 16	У	This unit is composed of all or largely private
	Cache, North	Aug. 20–Sept. 16	У	
	Cache, South	Aug. 20–Sept. 16	У	
	Central Mtns, Manti	Aug. 20–Sept. 16	У	
	Central Mtns, Nebo	Aug. 20–Sept. 16	У	
	Fillmore, Pahvant	Aug. 20–Sept. 16	У	
	La Sal, La Sal Mtns	Aug. 20–Sept. 16	У	
	Monroe	Aug. 20–Sept. 16	У	
	Mt Dutton	Aug. 20–Sept. 16	У	
	Nine Mile, Anthro	Aug. 20–Sept. 16	У	
	North Slope, Three Corners	Aug. 20–Sept. 16	У	
	Oquirrh-Stansbury	Aug. 20–Sept. 16	У	
	Panguitch Lake	Aug. 20–Sept. 16	У	
	Paunsaugunt	Aug. 20–Sept. 16	У	
	Plateau, Boulder/Kaiparowits	Aug. 20–Sept. 16	У	
	Plateau, Fishlake/Thousand Lakes	Aug. 20–Sept. 16	У	
	San Juan (bull elk)	Aug. 20–Sept. 16	У	
	South Slope, Diamond Mtn	Aug. 20–Sept. 16	У	
	Southwest Desert	Aug. 20–Sept. 16	У	
	Wasatch Mtns	Aug. 20–Sept. 16	У	
	West Desert, Deep Creek	Aug. 20–Sept. 16	У	

Any legal weapon (rifle) hunts

		2016	2016	2016
Hunt #	Hunt Name	Season Dates	Nonres Permits	Notes
	Beaver, East	Sept. 17–Sept. 25	У	
	Beaver, East	Nov. 12–Nov. 20	У	
	Book Cliffs, Bitter Creek/South	Sept. 17–Sept. 25	У	
	Book Cliffs, Bitter Creek/South	Nov. 12–Nov. 20	У	
	Book Cliffs, Little Creek Roadless	Sept. 17–Sept. 25	У	
	Box Elder, Grouse Creek	Sept. 17–Sept. 25	У	
	Box Elder, Grouse Creek	Oct. 8–Oct. 30	n	New Hunt
	Box Elder, Pilot Mtn	Sept. 17–Oct. 7	n	Boundary Change
	Cache, Meadowville	Sept. 17–Sept. 25	У	This unit is composed of all or largely private
	Cache, Meadowville	Nov. 12–Nov. 20	У	This unit is composed of all or largely private
	Cache, North	Sept. 17–Sept. 25	У	
	Cache, North	Nov. 12–Nov. 20	У	
	Cache, South	Sept. 17–Sept. 25	У	
	Cache, South	Nov. 12–Nov. 20	У	
	Central Mtns, Manti	Sept. 17–Sept. 25	У	
	Central Mtns, Manti	Nov. 12–Nov. 20	У	
	Central Mtns, Nebo	Sept. 17–Sept. 25	У	
	Central Mtns, Nebo	Nov. 12–Nov. 20	У	
	Fillmore, Pahvant	Sept. 17–Sept. 25	у	
	Fillmore, Pahvant	Nov. 12–Nov. 20	у	
	La Sal, Dolores Triangle	Dec. 10–Jan. 31	n	

La Sal, La Sal Mtns	Sept. 17-Sept. 25	У	
La Sal, La Sal Mtns	Nov. 12–Nov. 20	У	
Monroe	Sept. 17-Sept. 25	У	
Monroe	Nov. 12–Nov. 20	У	
Mt Dutton	Sept. 17–Sept. 25	У	
Mt Dutton	Nov. 12–Nov. 20	У	
Nine Mile, Anthro	Sept. 17-Sept. 25	У	
Nine Mile, Anthro	Nov. 12–Nov. 20	У	
North Slope, Three Corners	Oct. 1–Oct. 14	У	Tri-State Agreement
Oquirrh-Stansbury	Sept. 17-Sept. 25	У	
Oquirrh-Stansbury	Nov. 12–Nov. 20	У	
Panguitch Lake	Sept. 17–Sept. 25	У	
Panguitch Lake	Nov. 12–Nov. 20	У	
Paunsaugunt	Sept. 17-Sept. 25	У	
Paunsaugunt	Oct. 8-Oct. 20	У	New Hunt
Paunsaugunt	Nov. 12–Nov. 20	У	
Plateau, Boulder/Kaiparowits	Sept. 17–Sept. 25	У	
Plateau, Boulder/Kaiparowits	Nov. 12–Nov. 20	У	
Plateau, Fishlake/Thousand Lakes	Sept. 17–Sept. 25	У	
Plateau, Fishlake/Thousand Lakes	Oct. 8-Oct. 20	У	New Hunt
Plateau, Fishlake/Thousand Lakes	Nov. 12–Nov. 20	У	
San Juan (bull elk)	Sept. 17-Sept. 25	У	
San Juan (bull elk)	Nov. 12–Nov. 20	У	
South Slope, Diamond Mtn	Sept. 17–Sept. 25	У	
South Slope, Diamond Mtn	Oct. 8-Oct. 20	У	
Southwest Desert	Sept. 17-Sept. 25	У	
Southwest Desert	Nov. 12–Nov. 20	У	
Wasatch Mtns	Sept. 17–Sept. 25	У	
Wasatch Mtns	Nov. 12–Nov. 20	У	
West Desert, Deep Creek	Sept. 17–Sept. 25	У	
West Desert, Deep Creek	Oct. 8-Oct. 20	n	New Hunt
West Desert, Deep Creek	Nov. 12–Nov. 20	У	

Muzzleloader Hunts

		2016	2016	2016
Hunt #	Hunt Name	Season Dates	Nonres Permits	Notes
	Beaver, East	Sept. 26–Oct. 7	у	
	Book Cliffs, Bitter Creek/South	Sept. 26–Oct. 7	у	
	Book Cliffs, Little Creek Roadless	Sept. 26–Oct. 7	у	
	Box Elder, Grouse Creek	Sept. 26–Oct. 7	n	
	Cache, Meadowville	Sept. 26–Oct. 7	у	This unit is composed of all or largely private
	Cache, North	Sept. 26–Oct. 7	у	
	Cache, South	Sept. 26–Oct. 7	у	
	Central Mtns, Manti	Sept. 26–Oct. 7	у	
	Central Mtns, Nebo	Sept. 26–Oct. 7	у	
	Fillmore, Pahvant	Sept. 26–Oct. 7	у	
	La Sal, La Sal Mtns	Sept. 26–Oct. 7	у	
	Monroe	Sept. 26–Oct. 7	n	
	Mt Dutton	Sept. 26–Oct. 7	у	
	Nine Mile, Anthro	Sept. 26–Oct. 7	n	
	North Slope, Three Corners	Nov. 2–Nov. 10	у	Tri-State Agreement
	Oquirrh-Stansbury	Sept. 26–Oct. 7	у	
	Panguitch Lake	Sept. 26–Oct. 7	у	
	Paunsaugunt	Sept. 26–Oct. 7	у	
	Plateau, Boulder/Kaiparowits	Sept. 26–Oct. 7	у	
	Plateau, Fishlake/Thousand Lakes	Sept. 26–Oct. 7	у	
	San Juan (bull elk)	Sept. 26–Oct. 7	у	
	South Slope, Diamond Mtn	Sept. 26–Oct. 7	у	
	Southwest Desert	Sept. 26–Oct. 7	у	
	Wasatch Mtns	Sept. 26–Oct. 7	у	
	West Desert, Deep Creek	Sept. 26–Oct. 7	у	

Multi-Season

		2016	2016	2016
Hunt #	Hunt Name	Season Dates	Nonres Permits	Notes
	Beaver, East	All Limited Entry Seasons	n	
	Book Cliffs, Bitter Creek/South	All Limited Entry Seasons	n	
	Book Cliffs, Little Creek Roadless	All Limited Entry Seasons	n	
	Cache, Meadowville	All Limited Entry Seasons	n	This unit is composed of all or largely private
	Cache, North	All Limited Entry Seasons	n	
	Cache, South	All Limited Entry Seasons	n	
	Central Mtns, Manti	All Limited Entry Seasons	У	
	Central Mtns, Nebo	All Limited Entry Seasons	n	
	Fillmore, Pahvant	All Limited Entry Seasons	n	
	La Sal, La Sal Mtns	All Limited Entry Seasons	n	
	Monroe	All Limited Entry Seasons	n	
	Mt Dutton	All Limited Entry Seasons	n	
	Nine Mile, Anthro	All Limited Entry Seasons	n	
	North Slope, Three Corners	All Limited Entry Seasons	n	
	Oquirrh-Stansbury	All Limited Entry Seasons	n	
	Panguitch Lake	All Limited Entry Seasons	n	
	Paunsaugunt	All Limited Entry Seasons	n	
	Plateau, Boulder/Kaiparowits	All Limited Entry Seasons	n	
	Plateau, Fishlake/Thousand Lakes	All Limited Entry Seasons	У	
	San Juan (bull elk)	All Limited Entry Seasons	n	
	South Slope, Diamond Mtn	All Limited Entry Seasons	n	
	Southwest Desert	All Limited Entry Seasons	у	
	Wasatch Mtns	All Limited Entry Seasons	у	
	West Desert, Deep Creek	All Limited Entry Seasons	n	

Youth Any Bull Hunts

		2016	2016	2016
Hunt #	Hunt Name	Season Dates	Nonres Permits	Notes
	Youth General Any Bull Elk	Sept. 17–Sept. 25	У	

(y) At least one nonresident permit in 2016

(n) No nonresident permit in 2016

NOTE: Permit Numbers will be determined in May 2016

Limited Entry Pronghorn

Archery Hunts

		2016	2016	2016
Hunt #	Hunt Name	Season Dates	Nonres Permits	Notes
	Beaver	Aug. 20–Sept. 16	n	
	Book Cliffs, Bitter Creek	Aug. 20-Sept. 16	n	
	Book Cliffs, South	Aug. 20-Sept. 16	у	
	Box Elder, Promontory	Aug. 20-Sept. 16	n	
	Box Elder, Puddle Valley	Aug. 20–Sept. 16	n	
	Box Elder, Snowville	Aug. 20-Sept. 16	n	Boundary Change
	Box Elder, West	Aug. 20-Sept. 16	n	New Hunt/Boundary
	Cache/Morgan-South Rich/Ogden	Aug. 20-Sept. 16	у	
	Fillmore, Black Rock	Aug. 20-Sept. 16	n	
	La Sal, Potash/South Cisco	Aug. 20-Sept. 16	n	
	Mt Dutton/Paunsaugunt, Johns Valley	Aug. 20-Sept. 16	у	
	Nine Mile, Anthro-Myton Bench	Aug. 20-Sept. 16	у	Hunt Name Change
	North Slope, Three Corners/West Daggett	Aug. 20-Sept. 16	n	
	Pine Valley	Aug. 20-Sept. 16	у	
	Plateau, Parker Mtn	Aug. 20-Sept. 16	у	Hunt Name Change
	San Rafael, North	Aug. 20-Sept. 16	у	
	South Slope, Bonanza/Diamond Mtn	Aug. 20-Sept. 16	n	
	South Slope, Vernal	Aug. 20-Sept. 16	n	
	Southwest Desert	Aug. 20-Sept. 16	у	
	West Desert, Riverbed	Aug. 20-Sept. 16	у	
	West Desert, Rush Valley	Aug. 20-Sept. 16	n	
	West Desert, Snake Valley	Aug. 20–Sept. 16	n	

Muzzleloader hunts

		2016	2016	2016
Hunt #	Hunt Name	Season Dates	Nonres Permits	Notes
	Cache/Morgan-South Rich/Ogden	Sept. 28-Oct. 6	У	
	Plateau, Parker Mtn	Sept. 28-Oct. 6	У	Hunt Name Change
	Southwest Desert	Sept. 28-Oct. 6	у	

Any Legal Weapon Hunts

		2016	2016	2016
Hunt #	Hunt Name	Season Dates	Nonres Permits	Notes
	Beaver	Sept. 17-Sept. 25	У	
	Book Cliffs, Bitter Creek	Sept. 17-Sept. 25	У	
	Book Cliffs, South	Sept. 17-Sept. 25	У	
	Box Elder, Promontory	Sept. 17-Sept. 25	У	
	Box Elder, Puddle Valley	Sept. 17–Sept. 25	у	
	Box Elder, Snowville	Sept. 17–Sept. 25	у	Boundary Change
	Box Elder, West	Sept. 17-Sept. 25	У	New Hunt/Boundary
	Cache/Morgan-South Rich/Ogden	Sept. 17-Sept. 25	У	
	Fillmore, Black Rock	Sept. 17–Sept. 25	у	
	Kaiparowits	Sept. 17–Sept. 25	n	
	La Sal, Potash/South Cisco	Sept. 17–Sept. 25	n	
	Mt Dutton/Paunsaugunt, Johns Valley	Sept. 17-Sept. 25	У	
	Nine Mile, Anthro-Myton Bench	Sept. 17–Sept. 25	у	Hunt Name Change
	Nine Mile, Range Creek	Sept. 17-Sept. 25	У	
	North Slope, Summit	Sept. 17-Sept. 25	n	
	North Slope, Three Corners/West Daggett	Sept. 17-Sept. 25	у	
	Panguitch Lake/Zion, North	Sept. 17–Sept. 25	у	Hunt Name Change
	Pine Valley	Sept. 17–Sept. 25	у	
	Plateau, Parker Mtn	Sept. 17-Sept. 25	У	Hunt Name Change
	San Juan, Hatch Point	Sept. 17-Sept. 25	n	
	San Rafael, Desert	Sept. 17–Sept. 25	у	
	San Rafael, North	Sept. 17–Sept. 25	у	
	South Slope, Bonanza/Diamond Mtn	Sept. 17-Sept. 25	У	
	South Slope, Vernal	Sept. 17-Sept. 25	У	
	Southwest Desert	Sept. 17-Sept. 25	у	
	West Desert, Riverbed	Sept. 17-Sept. 25	у	
	West Desert, Rush Valley	Sept. 17-Sept. 25	у	
	West Desert, Snake Valley	Sept. 17-Sept. 25	у	

(y) At least one nonresident permit in 2016

(n) No nonresident permit in 2016

NOTE: Permit Numbers will be determined in May 2016

ONCE IN A LIFETIME SPECIES

Bull Moose		2016		2016
Hunt #	Hunt Name	Season Dates	Nonres Permits	Notes
	Cache	Sept. 17–Oct. 20	n	
	Central Mtns/Wasatch Mtns	Sept. 17–Oct. 20	у	
	Chalk Creek †	Sept. 17–Oct. 20	n	This unit is composed of
	East Canyon †	Sept. 17–Oct. 20	n	This unit is composed of
	East Canyon, Morgan-Summit †	Sept. 17–Oct. 20	n	This unit is composed of
	Kamas	Sept. 17–Oct. 20	n	
	Morgan-South Rich †	Sept. 17–Oct. 20	n	This unit is composed o
	North Slope, Summit	Sept. 17–Oct. 20	у	
	North Slope, Three Corners/West Daggett	Sept. 17–Oct. 20	n	
	Ogden †	Sept. 17–Oct. 20	n	This unit is composed o
	South Slope, Diamond Mtn/Vernal	Sept. 17–Oct. 20	n	
	South Slope, Yellowstone	Sept. 17–Oct. 20	n	

†This unit is composed of all or largely private property. Hunters should acquire written permission from the landowner before applying for this hunt.

Bison		2016	2016	2016	
Hunt #	Hunt Name	Season Dates	Nonres Permits	Notes	
	Antelope Island	Dec. 5–Dec. 7	У		
	Book Cliffs (hunter's choice)	Nov. 5–Dec. 2	У	Hunter's choice	
	Book Cliffs, Wild Horse Bench (hunter's choice)	Dec. 3 2016–Jan. 31 2017	У	Hunter's choice	
	Henry Mtns (hunter's choice)	Nov. 5–Nov. 17	У	Hunter's choice	
	Henry Mtns (hunter's choice)	Nov. 19–Dec. 1	У	Hunter's choice	
	Henry Mtns (cow only)	Dec. 3–Dec. 16	У	Cow only	
	Henry Mtns (cow only)	Dec. 17–Dec. 31	У	Cow only	

Desert Bighorn Sheep		2016	2016	2016
Hunt #	Hunt Name	Hunt Name Season Dates Nonres Permits		Notes
	Henry Mtns	Sept. 17–Nov. 10	n	Boundary Change
	Kaiparowits, East*	Sept. 17–Nov. 10	у	
	Kaiparowits, Escalante	Sept. 17–Nov. 10	n	
	Kaiparowits, West	Sept. 17–Nov. 10	n	
	La Sal, Potash/South Cisco	Sept. 17–Nov. 10	n	
	Pine Valley	Oct. 29–Dec. 30	n	
	San Juan, Lockhart	Sept. 17–Nov. 10	n	
	San Juan, South	Sept. 17–Nov. 10	n	
	San Rafael, Dirty Devil	Sept. 17–Nov. 10	n	
	San Rafael, North	Sept. 17–Nov. 10	n	
	San Rafael, South †	Sept. 17–Nov. 10	у	Boundary Change
	Zion^	Sept. 17–Oct. 16	У	
	Zion	Oct. 17–Nov. 10	n	

* Nonresidents may hunt all Kaiparowits subunits

† Nonresidents may hunt both the San Rafael, North and San Rafael, South subunits

^ Nonresidents may hunt both the early and late season of the Zion unit

Rocky Mountain Bighorn Sheep		2016	2016	2016
Hunt #	Hunt Name	Season Dates	Nonres Permits	Notes
	Antelope Island	Nov. 16–Nov. 23	n	
	Book Cliffs, South	Nov. 1–Nov. 30	у	
	Box Elder, Pilot Mtn	Sept. 1–Oct. 30	n	New Hunt/Boundary
	Box Elder, Newfoundland Mtn	Oct. 29–Nov. 18	n	
	Box Elder, Newfoundland Mtn	Nov. 19–Dec. 11	у	
	Central Mtns, Nebo/Wasatch Mtns, West*	Nov. 1–Nov. 30	n	
	Nine Mile, Range Creek	Nov. 1–Nov. 15	у	
	Nine Mile, Range Creek	Nov. 16–Nov. 30	n	
	North Slope, Three Corners-Bare Top	Sept. 15–Nov. 30	n	
	North Slope, West Daggett	Nov. 1–Nov. 30	n	
	Stansbury	Nov. 1–Nov. 30	n	
	Wasatch Mtns, Avintaquin*	Nov. 1–Nov. 30	n	New Hunt/Excludes trib

*Sportsmans permit holder may only hunt these units during even years, statewide conservation permit holder may only hunt these units during odd yea

Mour	untain Goat 2016 2016		2016	
Hunt #	Hunt Name	Season Dates	Nonres Permits	Notes
	Beaver	Sept. 10-Sept. 25	у	
	Beaver	Sept. 26–Nov. 15	у	
	Central Mtns, Nebo	Sept. 12–Nov. 30	n	
	Chalk Creek/Kamas, Uintas	Sept. 17-Oct. 31	у	Hunt Name Change
	North Slope/South Slope, High Uintas Central	Sept. 12-Oct. 31	у	
	North Slope/South Slope, High Uintas East	Sept. 12-Oct. 31	n	
	North Slope/South Slope, High Uintas Leidy Peak	Sept. 12–Oct. 31	n	
	North Slope/South Slope, High Uintas West	Sept. 12–Oct. 31	У	
	Ogden, Willard Peak	Sept. 12–Sept. 25	У	
	Ogden, Willard Peak	Sept. 26–Nov. 15	У	
	Ogden, Willard Peak (female goat only)	Oct. 10–Nov. 15	n	Female goat only
	Wasatch Mtns, Box Elder Peak/Lone Peak/Timpanogos*	Sept. 12–Nov. 30	у	
	Wasatch Mtns, Provo Peak	Sept. 12-Nov. 30	n	

* Nonresidents may hunt all Wasatch Mtns subunits

(y) At least one nonresident permit in 2016

(n) No nonresident permit in 2016

NOTE: Permit Numbers will be determined in May 2016

NEW HUNT (EXISTING BOUNDARY) RECOMMENDATION

UNIT Box Elder, Pilot Mtn

SPECIES Elk and Rocky Mountain Bighorn Sheep



Boundary: Box Elder, Tooele, and Elko counties--Boundary begins at SR-30 and the Utah-Nevada state line; east along SR-30 to the township line separating Range 15 West and Range 16 West; south along this township line to I-80; west along I-80 to the Pilot Valley Road; north on Pilot Valley Road to State Route No. 233; north along this state line to SR-30. Hunters with this permit may hunt Nevada's portion of this interstate unit (091) and abide by Nevada laws. USGS 1:100,000 Maps: Grouse Creek, Newfoundland Mtns, Bonneville Salt Flats. Boundary questions? Call the Ogden office, 801-476-2740.

UNIT Box Elder, Snowville SPECIES Pronghorn



Updated boundary: Box Elder County--Boundary begins at Highway 42 and the Utah-Idaho state line; east on SR-42 to Highway 30; south and west on SR-30 to the township line separating Range 16 West and Range 17 West (near milepost 17); straight south to the township line separating Township 6 North and Township 7 North (1 mile east of the Little Pigeon Mountains); straight east (running 1.5 miles north of the Newfoundland Mountains) to the shore of the Great Salt Lake; north along this shoreline to Locomotive Springs; north on the Locomotive Springs-Snowville-Stone, Idaho county road to the Utah-Idaho state line; west along this state line to SR-42. USGS 1:100,000 Maps: Grouse Creek, Newfoundland Mtns., Tremonton. Boundary questions? Call the Ogden office, 801-476-2740.

NEW HUNT AND BOUNDARY RECOMMENDATION

UNITBox Elder, WestSPECIESPronghorn



Updated boundary: Box Elder County--Boundary begins at I-80 and the Utah-Nevada state line; north along this state line to the Idaho state line; east on the state line to Highway 42; east on Hwy 42 to Highway 30; south and west along Hwy 30 to the township line separating Range 16 West and Range 17 West (at milepost 17); south along this township line to I-80 (at milepost 18); west on I-80 to the Utah-Nevada state line. USGS 1:100,000 Maps: Grouse Creek, Newfoundland Mtns, Bonneville Salt Flats. Boundary questions? Call the Ogden office, 801-476-2740.

NEW BOUNDARY RECOMMENDATION

UNIT Cache, Laketown Extended Archery

SPECIES Deer



New boundary: Cache County--Beginning on Hwy 30 and the easternmost dirt road across from the road shed at the mouth of Old Laketown Canyon; south on this road to a junction and left/south at the junction to a Y; Right at the Y south to the next junction of roads; Right at this junction west and then south to the Rodeo Grounds; Behind the Rodeo Grounds and south on the dirt road to 200 East/Lak-town Canyon road; northwest on 200 East to the first access road at the buildings at the north end of the bluff to the south of 200 East at the mouth of Laketown Canyon; At the end of the access road directly west to 70 East; South on 70 East to the south boundary of the Cemetery; East on the south boundary of the Cemetery to a drainage at the southwest corner; Down this drainage to the agricultural fields; South at the boundary of the fields and then west along the field boundary; Continue around the field boundaries north to 300 South; North on 300 South to the access road to the homes on Last Chance Drive; North along these access roads to Last Chance Drive; North on Last Chance Drive to Round Valley Drive; West of Round Valley Drive to Canal that comes to Round Valley Drive at the Western Edge of the Laketown area; Northwest along this canal to Big Creek; Northeast on Big Creek to Hwy 30; East on Hwy 30 to the easternmost dirt road across from the road shed at the mouth of Old Laketown Canyon.

UNIT Henry Mountains
SPECIES Deer, Desert Bighorn Sheep and Elk



Updated boundary: Garfield, Kane and Wayne counties--Boundary begins on SR-95 at a point two miles south of Hanksville; south on SR-95 to Lake Powell; south along the west shore of Lake Powell to SR-276 at Bullfrog; north on SR-276 to the Burr Trail-Notom road; north on this road to the Capitol Reef National Park boundary; north on this boundary to the Burr Trail-Notom road at The Narrows and Divide Canyon; north on this road to a point two miles south of SR-24; east along a line that is two miles south of SR-24 to SR-95. EXCLUDES ALL NATIONAL PARKS. USGS 1:100,000 Maps: Escalante, Hanksville, Hite Crossing, Loa. Boundary questions? Call the Price office, 435-613-3700.

UNIT San Rafael, South
SPECIES Desert Bighorn Sheep



Updated boundary: Emery, Sevier, and Wayne counties--Boundary begins at the junction of I-70 and SR-24; south on SR-24 to a point two miles south of the SR-95/SR-24 Jct. at Hanksville; west along a line that is two miles south of SR-24 to the Burr Trail-Notom road; north along the Burr Trail-Notom road to SR-24; east on SR-24 to Caineville and the Caineville Wash road; north along the Caineville Wash road to the Cathedral Valley road; northwest on the Cathedral Valley road to the Capital Reef National Park boundary; north and west on the CRNP boundary back to the Cathedral Valley road; west on this road to Rock Springs Bench and the Last Chance Desert road; north on this road to the Blue Flats road; north and east on this road to the Willow Springs road; north on this road to the Windy Peak road; north and west on this road to I-70; east on I-70 to SR-24. EXCLUDES ALL NATIONAL PARKS. USGS 1:100,000 Maps: Loa, Hanksville, Salina, San Rafael Desert. Boundary questions? Call the Price office, 435-613-3700.

UNIT San Rafael, South-Dirty Devil

SPECIES Elk



Updated boundary: Emery, Garfield, Wayne, Sevier counties--Boundary begins at I-70 and the Green River; south along the Green River to the Colorado River; south on the Colorado River and the west shore of Lake Powell to SR-95; north on SR-95 to a point two miles south of the SR-95/SR-24 Jct. at Hanksville; west along a line that is two miles south of SR-24 to the Burr Trail-Notom road; north along the Burr Trail-Notom road to SR-24; east on SR-24 to Caineville and the Caineville Wash road; north along the Caineville Wash road to the Cathedral Valley road; northwest on the Cathedral Valley road to the Capital Reef National Park boundary; north and west on the CRNP boundary back to the Cathedral Valley road; west on this road to Rock Springs Bench and the Last Chance Desert road; north on this road to the Blue Flats road; north and east on this road to the Willow Springs road; north on this road to the Windy Peak road; north and west on this road to I-70; east on I-70 to the Green River. USGS 1:100,000 Maps: Hanksville, Hite Crossing, Huntington, Loa, Manti, Salina, San Rafael Desert. Boundary questions? Call Price office, 435-613-3700.

NEW HUNT (EXISTING BOUNDARY) RECOMMENDATION

UNITWasatch Mtns, AvintaquinSPECIESRocky Mountain Bighorn Sheep



Updated boundary: Carbon, Duchesne, Utah and Wasatch counties--Boundary begins at the Strawberry River and Beaver Creek southwest along Beaver Creek to Big Beaver Spring and USFS Road 081 (Reservation Ridge Road) east on this road to US-191 north on US-191 to Duchesne and the Strawberry River west along this river to Beaver Creek. EXCLUDES ALL NATIVE AMERICAN TRUST LANDS WITHIN THIS BOUNDARY. Excludes all CWMUs. USGS 1:100,000 Maps: Duchesne, Nephi, Provo. Boundary questions? Call Vernal office, 435-781-9453.

R657. Natural Resources, Wildlife Resources.

R657-5. Taking Big Game.

R657-5-1. Purpose and Authority.

(1) Under authority of Sections 23-14-18 and 23-14-19, the Wildlife Board has established this rule for taking deer, elk, pronghorn, moose, bison, bighorn sheep, and Rocky Mountain goat.

(2) Specific dates, areas, methods of take, requirements, and other administrative details which may change annually are published in the guidebook of the Wildlife Board for taking big game.

R657-5-7. Prohibited Weapons.

(1) A person may not use any weapon or device to take big game other than those expressly permitted in this rule.

(2) A person may not use:

(a) a firearm capable of being fired fully automatic; [or]

(b) any light enhancement device or aiming device that casts a visible beam of light[. Laser range finding devises are exempt from this restriction.]; or

(c) a firearm equipped with a computerized targeting system that marks a target, calculates a firing solution and automatically discharges the firearm at a point calculated most likely to hit the acquired target.

(3) Nothing in this Section shall be construed as prohibiting laser range finding devices.

R657-5-10. Muzzleloaders.

(1) A muzzleloader may be used during any big game hunt, except an archery hunt, provided the muzzleloader:

(a) can be loaded only from the muzzle;

(b) has open sights, peep sights, or a <u>variable or fixed [non-]power scope</u>, <u>including a magnifying [1x scope, except as provided in Subsection (4) and</u> <u>R657-12]scope</u>;

(c) has a single barrel;

(d) has a minimum barrel length of 18 inches;

(e) is capable of being fired only once without reloading;

(f) powder and bullet, or powder, sabot and bullet are not bonded together as one unit for loading;

(g) is loaded with black powder or black powder substitute, which must not contain smokeless powder.

(2)(a) A lead or expanding bullet or projectile of at least 40 caliber must be used to hunt big game.

(b) A bullet 130 grains or heavier, or a sabot 170 grains or heavier must be used for taking deer and pronghorn.

(c) A 210 grain or heavier bullet must be used for taking elk, moose, bison, bighorn sheep, and Rocky Mountain goat, except sabot bullets used for taking these species must be a minimum of 240 grains.

(3)(a) A person who has obtained a muzzleloader permit for a big game hunt may:

(i) use only muzzleloader equipment authorized in this Subsections (1) and (2) to take the species authorized in the permit; and

(ii) not possess or be in control of a rifle or shotgun while in the field during the muzzleloader hunt.

(A) "Field" for purposes of this section, means a location where the permitted species of wildlife is likely to be found. "Field" does not include a hunter's established campsite or the interior of a fully enclosed automobile or truck.

(b) The provisions of Subsection (a) do not apply to:

(i) a person licensed to hunt upland game or waterfowl provided the person complies with Rules R657-6 and R657-9 and the Upland Game Guidebook and Waterfowl Guidebook, respectively, and possessing only legal weapons to take upland game or waterfowl;

(ii) a person licensed to hunt big game species during hunts that coincide with the muzzleloader hunt;

(iii) livestock owners protecting their livestock; or

(iv) a person licensed to carry a concealed weapon in accordance with Title 53, Chapter 5, Part 7 of the Utah Code, provided the person is not utilizing the concealed firearm to hunt or take protected wildlife.

(4) A person who has obtained an any weapon permit for a big game hunt may use muzzleloader equipment authorized in this Section to take the species authorized in the permit[, including a fixed or variable magnifying scope].

R657-5-11. Archery Equipment.

(1) Archery equipment may be used during any big game hunt, except a muzzleloader hunt, provided:

(a) the minimum bow pull is 40 pounds at the draw or the peak, whichever comes first; and

(b) arrowheads used have two or more sharp cutting edges that cannot pass through a 7/8 inch ring;

(c) expanding arrowheads cannot pass through a 7/8 inch ring when expanded, and

(d) arrows must be a minimum of 20 inches in length from the tip of the arrowhead to the tip of the nock, and must weigh at least 300 grains.

(2) The following equipment or devices may not be used to take big game:

(a) a crossbow, except as provided in Subsection (5) and Rule R657-12;

(b) arrows with chemically treated or explosive arrowheads;

(c) a mechanical device for holding the bow at any increment of draw, except as provided in Subsection (5) and Rule R657-12;

(d) a release aid that is not hand held or that supports the draw weight of the bow, except as provided in Subsection (5) and Rule R657-12; or

(e) a bow with[-an attached electronic range finding device or] a magnifying aiming device.

(3) Arrows carried in or on a vehicle where a person is riding must be in an arrow quiver or a closed case.

(4)(a) A person who has obtained an archery permit for a big game hunt may :

(i) use only archery equipment authorized in Subsections (1) and (2) to take the species authorized in the permit; and

(ii) not possess or be in control of a crossbow, draw-lock, rifle, shotgun or muzzleloader while in the field during an archery hunt.

(A) "Field" for purposes of this section, means a location where the permitted species of wildlife is likely to be found. "Field" does not include a hunter's established campsite or the interior of a fully enclosed automobile or truck.

(b) The provisions of Subsection (a) do not apply to:

(i) a person licensed to hunt upland game or waterfowl provided the person complies with Rules R657-6 and R657-9 and the Upland Game Guidebook and Waterfowl Guidebook, respectively, and possessing only the weapons authorized to take upland game or waterfowl;

(ii) a person licensed to hunt big game species during hunts that coincide with the archery hunt, provided the person is in compliance with the regulations of that hunt and possesses only the weapons authorized for that hunt;

(iii) livestock owners protecting their livestock;

(iv) a person licensed to carry a concealed weapon in accordance with Title 53, Chapter 5, Part 7 of the Utah Code, provided the person is not utilizing the concealed firearm to hunt or take protected wildlife; or

(v) a person possessing a crossbow or draw-lock under a certificate of registration issued pursuant to R657-12.

(5) A person who has obtained an any weapon permit for a big game hunt may use archery equipment authorized in this Section to take the species authorized in the permit, including a crossbow or draw-lock.

(6)(a) A crossbow used to hunt big game must have:

(i) a minimum draw weight of 125 pounds;

(ii) a minimum draw length of 14 inches, measured between the latch (nocking point) and where the bow limbs attach to the stock;

(iii) an overall length of at least 24 inches; measured between the butt stock end and where the bow limbs attach to the stock; and

(iv) a positive mechanical safety mechanism.

(b) A crossbow arrow or bolt used to hunt big game must be at least 16 inches long and have:

(i) fixed broadheads that are at least 7/8 inch wide at the widest point; or

(ii) expandable, mechanical broadheads that are at least 7/8 inch wide at the widest point when the broadhead is in the open position.

(c) It is unlawful for any person to:

(i) hunt big game with a crossbow during a big game archery hunt, except as provided in R657-12-8;

(ii) carry a cocked crossbow containing an arrow or a bolt while in or on any motorized vehicle on a public highway or other public right-of-way, except as provided in R657-12-4; or

(iii) hunt any protected wildlife with a crossbow:

(A) bolt that has any chemical, explosive or electronic device attached; or

(B) [that has an attached electronic range finding device; or]

[(C)] that has an attached magnifying aiming device, except as provided in Subsection (7).

(7) A crossbow used to hunt big game during an any weapon hunt may have a fixed or variable magnifying scope.

R657-5-12. Areas With Special Restrictions.

(1)(a) Hunting of any wildlife is prohibited within the boundaries of all park areas, except those designated by the Division of Parks and Recreation in Rule R651-614-4.

(b) Hunting with rifles and handguns in park areas designated open is prohibited within one mile of all park area facilities, including buildings, camp or picnic sites, overlooks, golf courses, boat ramps, and developed beaches.

(c) Hunting with shotguns or archery equipment is prohibited within one-quarter mile of the areas provided in Subsection (b).

(2) Hunting is closed within the boundaries of all national parks unless otherwise provided by the governing agency.

(3) Hunters obtaining a Utah license, permit or tag to take big game are not authorized to hunt on tribal trust lands. Hunters must obtain tribal authorization to hunt on tribal trust lands.

(4) Military installations, including Camp Williams, are closed to hunting and trespassing unless otherwise authorized.

(5) In Salt Lake County, a person may:

(a) only use archery equipment to take buck deer and bull elk south of I-80 and east of I-15;

(b) only use archery equipment to take big game in Emigration Township; and

(c) not hunt big game within one-half mile of Silver Lake in Big Cottonwood Canyon.

(6) Hunting is closed within a designated portion of the town of Alta. Hunters may refer to the town of Alta for boundaries and other information.

(7) Domesticated Elk Facilities and Domesticated Elk Hunting Parks, as defined in Section 4-39-102(2) and Rules R58-18 and R58-20, are closed to big game hunting. This restriction does not apply to the lawful harvest of domesticated elk as defined and allowed pursuant to Rule R58-20.

(8) State waterfowl management areas are closed to taking big game, except as otherwise provided in the guidebook of the Wildlife Board for taking big game.

(9) Hunters are restricted to using archery equipment, muzzleloaders or shotguns on the Scott M. Matheson Wetland Preserve.

(10) A person may not discharge a firearm, except a shotgun or muzzleloader, from, upon, or across the Green River located near Jensen, Utah from the Highway 40 bridge upstream to the Dinosaur National Monument boundary.

R657-5-26. Premium Limited Entry and Limited Entry Buck Deer Hunts.

1)(a) To hunt in a premium limited entry or limited entry buck deer area, hunters must obtain the respective limited entry buck permit. Limited entry areas are not open to general archery buck deer, general any weapon buck deer, or general muzzleloader buck deer hunting, except as specified in the guidebook of the Wildlife Board for taking big game.

(b)(i) The Wildlife Board may establish in guidebook a limited entry buck deer hunt on a general season buck deer unit.

(ii) The season dates for a limited entry hunt under this Subsection will not overlap the season dates for the underlying general season hunt on the unit.

(iii) A landowner association under R657-43 is not eligible to receive limited entry permits that occur on general season units.

(2) A limited entry buck deer permit allows a person using the prescribed legal weapon, to take one buck deer within the area and season specified on the permit, excluding deer cooperative wildlife management units located within the limited entry unit.

(3)(a) A person who has obtained a premium limited entry, limited entry, management, or cooperative wildlife management unit buck deer permit must report hunt information within 30 calendar days after the end of the hunting season, whether the permit holder was successful or unsuccessful in harvesting a buck deer.

(b) Limited entry and cooperative wildlife management unit buck deer permit holders must report hunt information by telephone, or through the division's Internet address.

(c) A person who fails to comply with the requirement in Subsection (a) shall be ineligible to apply for any once-in-a-lifetime, premium limited entry, limited entry, management, or cooperative wildlife management unit permit or bonus point in the following year.

(d) Late questionnaires may be accepted pursuant to Rule R657-42-9(3).

(4) A person who has obtained a [premuim] premium limited entry or limited entry buck permit may not:

(a) obtain any other deer permit, except an antlerless deer permit as provided in R657-5-27 and the guidebooks of the Wildlife Board; or

(b) hunt during any other deer hunt, except unsuccessful archery hunters may hunt within extended archery areas as provided in Subsection (7).

(5)(a) The Wildlife Board may establish a multi-season hunting opportunity in the big game guidebooks for selected premium limited entry and limited entry buck deer hunts.

(b) A person that obtains a premium limited entry or limited entry buck deer permit with a multi-season opportunity may hunt during any of the following limited entry buck deer seasons established in the guidebooks of the Wildlife Board for the unit specified on the premium limited entry or limited entry buck deer permit: (i) archery season, using only archery equipment prescribed in R657-5-11 for taking deer;

(ii) muzzleloader season, using only muzzleloader equipment prescribed in R657-5-10 for taking deer; and

(iii) any weapon season, using any legal weapon prescribed in R657-5 for taking deer.

(c) A landowner association under R657-43 is not eligible to receive a multi-season hunting opportunity for premium limited entry or limited entry units.

(6) A premium limited entry or limited entry buck deer permit, including a permit with a multi-season opportunity, is valid only within the boundaries of the unit designated on the permit, excluding:

- (a) areas closed to hunting;
- (b) deer cooperative wildlife management units; and
- (c) Indian tribal trust lands.

(7) A person who possesses an archery buck deer permit for a premium limited entry or limited entry unit, including a permit with a multi-season opportunity, may hunt buck deer within any extended archery area during the established extended archery season for that area, provided the person:

- (a) did not take a buck deer during the premium limited entry or limited entry hunt;
- (b) uses the prescribed archery equipment for the extended archery area;
- (c) completes the annual Archery Ethics Course required to hunt extended archery areas during the extended archery season; and
 - (d) possesses on their person while hunting:
 - (i) the multi-season limited entry or limited entry buck deer permit; and
 - (ii) the Archery Ethics Course Certificate of Completion.

R657-5-27. Antlerless Deer Hunts.

(1)(a) To hunt[-an] antlerless deer, a hunter must obtain an antlerless deer permit.
 (b) A person may obtain only one antlerless deer permit or a two-doe antlerless deer permit through the division's antlerless big game drawing.

(2)(a) An antlerless deer permit allows a person to take one antlerless deer[, per antlerless deer tag,] using [any legal]the weapon type, within the area, and during season [as]dates specified on the permit and in the [antlerless addendum]Antlerless guidebook of the Wildlife Board for taking big game.

(b) A two-doe antlerless deer permit allows a person to take two antlerless deer using the weapon type, within the area, and during the season specified on the permit and in the Antlerless guidebook of the Wildlife Board for taking big game.

([b]c) A person may not hunt <u>antlerless deer</u> on any <u>deer</u> cooperative wildlife management [<u>units]unit</u> unless that person obtains an antlerless deer permit for [<u>a]that</u> <u>specific</u> cooperative wildlife management unit[<u>as specified on the permit</u>].

(3) A person who has obtained an antlerless deer permit may not hunt during any other antlerless deer hunt or obtain any other antlerless deer [permit.]permits, except as provided in R657-44-3.

(4)(a) A person who obtains an antlerless deer permit and any of the permits listed in Subsection (b) may use the antlerless deer permit during the established season for the antlerless deer permit and during the established season for the <u>applicable</u> permits listed in Subsection (b) provided:

(i) the permits are both valid for the same area;

(ii) the appropriate archery equipment is used, if hunting [with]antlerless deer during an archery [permit]season or hunt; and

(iii) the appropriate muzzleloader hunt equipment is used, if hunting [with]antlerless deer during a muzzleloader [permit]season or hunt.

(b)(i) General <u>buck deer for</u> archery[<u>deer</u>], <u>muzzleloader</u>, <u>or any weapon</u>;

(ii) [-general]General bull elk for archery, muzzleloader[-deer;], or any weapon;

(iii) <u>Premium</u> limited entry <u>buck deer for</u> archery[<u>deer; or</u>], <u>muzzleloader</u>, any <u>weapon</u>, <u>or multi-season</u>;

(iv) [limited]Limited entry buck deer for archery, muzzleloader[-deer.], any weapon, or multi-season;

(v) Limited entry bull elk for archery, muzzleloader, any weapon, or multi-season; or

(vi) Antlerless elk.

(c) A person that possess an unfilled antlerless deer permit and harvests an animal under authority of a permit listed in Subsection (b), may continue hunting antlerless deer as prescribed in Subsections (a) and (b) during the remaining portions of the Subsection (b) permit season.

R657-5-30. General Muzzleloader Bull Elk Hunt.

(1) The dates and areas for general muzzleloader bull elk hunts are provided in the guidebooks of the Wildlife Board for taking big game, except the following areas are closed to general muzzleloader bull elk hunting:

(a) Salt Lake County south of I-80 and east of I-15; and

(b) elk cooperative wildlife management units.

(2)(a) General muzzleloader bull elk hunters may purchase either a spike bull elk permit or an any bull elk permit.

(b) A person who has obtained a general muzzleloader spike bull elk permit may use a muzzleloader, prescribed in R657-5-10, to take a spike bull elk on an any general spike bull elk unit. Any bull units are closed to spike bull muzzleloader permittees.

(c) A person who has obtained a general muzzleloader any bull elk permit may use a muzzleloader, as prescribed in R657-5-10, to take any bull elk on an any bull elk unit. Spike bull units are closed to any bull muzzleloader permittees.

(3) <u>On selected units identified in the guidebook of the Wildlife Board for taking big</u> game, a person who has obtained a general muzzleloader bull elk permit may use muzzleloader equipment to take either an antlerless elk or a bull elk.

(4) A person who has obtained a general muzzleloader bull elk permit may not hunt during any other elk hunt or obtain any other elk permit, except as provided in Subsection R657-5-33(3).

R657-5-32. Limited Entry Bull Elk Hunts.

(1) To hunt in a limited entry bull elk area, a hunter must obtain a limited entry bull elk permit for the area.

(2)(a) A limited entry bull elk permit allows a person, using the prescribed legal weapon, to take one bull elk within the area and season specified on the permit, except as provided in Subsection (5) and excluding elk cooperative wildlife management units located within a limited entry unit. Spike bull elk restrictions do not apply to limited entry elk permittees.

(3)(a) The Wildlife Board may establish a multi-season hunting opportunity in the big game guidebooks for selected limited entry bull elk units.

(b) A person that obtains a limited entry bull elk permit with a multi-season opportunity may hunt during any of the following limited entry bull elk seasons established in the guidebooks of the Wildlife Board for the unit [specied]specified on the limited entry bull elk permit:

(i) archery season, using only archery equipment prescribed in R657-5-11 for taking elk;

(ii) muzzleloader season, using only muzzleloader equipment prescribed in R657-5-10 for taking elk; and

(iii) any weapon season, using any legal weapon prescribed in R657-5 for taking elk.

(c) A landowner association under R657-43 is not eligible to receive a multi-season hunting opportunity for limited entry units.

(4) A limited entry bull elk permit, including a permit with a multi-season opportunity, is valid only within the boundaries of the unit designated on the permit, excluding:

(a) areas closed to hunting;

(b) elk cooperative wildlife management units; and

(c) Indian tribal trust lands.

(5) A person who possesses any limited entry archery bull elk permit, including a permit with a multi-season opportunity, may hunt bull elk within any extended archery area during the established extended archery season for that area, provided the person:

(a) did not take a bull elk during the limited entry hunt;

(b) uses the prescribed archery equipment for the extended archery area;

(c) completes the annual Archery Ethics Course required to hunt extended archery areas during the extended archery season; and

(d) possesses on their person while hunting:

(i) the limited entry bull elk permit; and

(ii) the Archery Ethics Course Certificate of Completion.

(6) "Prescribed legal weapon" means for purposes of this subsection:

(a) archery equipment, as defined in R657-5-11, when hunting the archery season, excluding a crossbow or draw-lock;

(b) muzzleloader equipment, as defined in R657-5-10, when hunting the muzzleloader season[, excluding magnifying scopes]; and

(c) any [leagal]legal weapon, including a muzzleloader and crossbow with a fixed or variable magnifying scope or draw-lock when hunting during the any weapon season.

(7)(a) A person who has obtained a limited entry or cooperative wildlife management unit bull elk permit must report hunt information within 30 calendar days after the end of the hunting season, whether the permit holder was successful or unsuccessful in harvesting a bull elk.

(b) Limited entry and cooperative wildlife management unit bull elk permit holders must report hunt information by telephone, or through the division's Internet address.

(c) A person who fails to comply with the requirement in Subsection (a) shall be ineligible to apply for any once-in-a-lifetime, premium limited entry, limited entry, or cooperative wildlife management unit permit or bonus point in the following year.

(d) Late questionnaires may be accepted pursuant to Rule R657-42-9(2).

(8) A person who has obtained a limited entry bull elk permit may not hunt during any other elk hunt or obtain any other elk permit, except as provided in Subsections (5) and R657-5-33(3).

R657-5-33. Antlerless Elk Hunts.

(1) To hunt[-an] antlerless elk, a hunter must obtain an antlerless elk permit.

(2)(a) An antlerless elk permit allows a person to take one antlerless elk [using any legal]usingthe weapon type, within the area, and during season [as]dates specified on the permit and in the Antlerless guidebook of the Wildlife Board for taking big game.

(b) A person may not hunt <u>antlerless elk</u> on [any]<u>an elk</u> cooperative wildlife management [units]<u>unit</u> unless that person obtains an antlerless elk permit for [a]<u>that</u> <u>specific</u> cooperative wildlife management unit[as specified on the permit].

(3)(a) A person may obtain [two]three elk permits each year, [provided one or both of the elk permits is an antlerless elk permit.][(b]in combination as follows:

(i) a maximum of one bull elk permit;

(ii) a maximum of one antlerless elk permit issued through the division's antlerless big game drawing; and

(iii) a maximum of two antlerless elk permits acquired over the counter or on-line after the antlerless big game drawing is finalized, including antlerless elk:

(A) control permits, as described in Subsection (5);

(B) depredation permits, as described in R657-44-8;

(C) mitigation permit vouchers, as defined in R657-44-2(2); and

(D) private lands only permits, as described in Subsection (6).(b) Antlerless elk mitigation permits obtained by a landowner or lessee under R657-44-3 do not count towards the annual three elk permit limitation prescribed in this subsection.

(i) "Mitigation permit" has the same meaning as defined in R657-44-2(2).

(c) For the purposes of obtaining [two]multiple elk permits, a hunter's choice elk permit [may not be]is considered [an antlerless]a bull elk permit.

(4)(a) A person who obtains an antierless elk permit and any of the permits listed in Subsection (b) may use the antierless elk permit during the established season for the antierless elk permit and during the established season for the <u>applicable</u> permits listed in Subsection (b), provided:

(i) the permits are both valid for the same area;

(ii) the appropriate archery equipment is used, if hunting [with]antlerless elk during an archery [permit]season or hunt; and

(iii) the appropriate muzzleloader hunt equipment is used, if hunting [with]antlerless elk during a muzzleloader [permit]season or hunt.

(b)(i) General buck deer for archery, muzzleloader or any legal weapon;

(ii) [<u>general]General</u> bull elk for archery, muzzleloader or any legal weapon;

(iii) [limited]Premium limited entry buck deer for archery, muzzleloader, any weapon, or multi-season;

(iv) Limited entry buck deer for archery, muzzleloader[-or], any legal weapon[;], or multi-season;

([iv] v) Limited entry bull elk for archery, muzzleloader or any legal weapon. ([v) antlerless elk.]vi)Antlerless deer or elk.

(c) A person that possess an unfilled antlerless elk permit and harvests an animal under authority of a permit listed in Subsection (b), may continue hunting antlerless elk as prescribed in Subsections (a) and (b) during the remaining portions of the Subsection (b) permit season.

(5)(a) To obtain an antlerless elk control permit, a person must first obtain a big game buck, bull, or a once-in-a-lifetime permit.

(b) An antierless elk control permit allows a person to take one antierless elk using the same weapon type, during the same season dates, and within areas of overlap between the boundary of the buck, bull, or once-in-a-lifetime permit and the boundary of the antierless elk control permit, as provided in the Antierless guidebook by the Wildlife Board.

(c) Antlerless elk control permits are sold over the counter or online after the division's antlerless big game drawing is finalized.

(d) A person that possess an unfilled antlerless elk control permit and harvests an animal under the buck, bull, or once-in-a-lifetime permit referenced in Subsection (b), may continue hunting antlerless elk as prescribed in Subsection (b) during the remaining portions of the buck, bull, or once-in-a-lifetime permit season.

(6)(a) A private lands only permit allows a person to take one antierless elk on private land within a prescribed unit using any weapon during the season dates and area provided in the Big Game guidebook by the Wildlife Board.

(b) No boundary extension or buffer zones on public land will be applied to private lands only permits.

(c) Private lands only permits are sold over the counter or online after the division's antlerless big game drawing is finalized. (d) "Private lands" means, for purposes of this subsection, any land owned in fee by an individual or legal entity, excluding:

(i) land owned by the state or federal government;

(ii) land owned by a county or municipality;

(iii) land owned by an Indian tribe;

(iv) land enrolled in a Cooperative Wildlife Management Unit under R657-37; and (v) land where public access for big game hunting has been secured.

R657-5-35. Doe Pronghorn Hunts.

(1)(a) To hunt[-a] doe pronghorn, a hunter must obtain a doe pronghorn permit.
 (b) A person may obtain only one doe pronghorn permit or a two-doe pronghorn permit through the division's antlerless big game drawing.

(2)(a) A doe pronghorn permit allows a person to take one doe pronghorn[, per doe pronghorn tag,] using [any legal]the weapon type, within the area, and during the season [as-]specified on the permit and in the Antlerless guidebook of the Wildlife Board for taking big game.

(b) A two-doe pronghorn permit allows a person to take two doe pronghorn using the weapon type, within the area, and during the season dates specified on the permit and in the Antlerless guidebook of the Wildlife Board for taking big game.

(c) A person may not hunt <u>doe pronghorn</u> on any <u>pronghorn</u> cooperative wildlife management [<u>units]unit</u> unless that person obtains an antlerless pronghorn permit for [<u>a]that specific</u> cooperative wildlife management unit[as specified on the permit].

(3) A person who has obtained a doe pronghorn permit may not hunt pronghorn during any other pronghorn hunt or obtain any other pronghorn permit.

R657-5-36. Antlerless Moose Hunts.

(1) To hunt[-an] antlerless moose, a hunter must obtain an antlerless moose permit.

(2)(a) An antierless moose permit allows a person to take one antierless moose using any legal weapon within the area and season[-as] specified on the permit and in the Antierless guidebook of the Wildlife Board for taking big game.

(b) A person may not hunt <u>antierless moose</u> on [any]a moose cooperative wildlife management unit unless that person obtains an antierless moose <u>permit for that</u> <u>specific</u> cooperative wildlife management unit as specified on the permit.

(3) A person who has obtained an antlerless moose permit may not hunt moose during any other moose hunt or obtain any other moose permit.

KEY: wildlife, game laws, big game seasons

Date of Enactment or Last Substantive Amendment: March 16, 2015 Notice of Continuation: [October 5, 2015]November 1, 2010 Authorizing, and Implemented or Interpreted Law: 23-14-18; 23-14-19; 23-16-5; 23-16-6



State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER Executive Director

Division of Wildlife Resources GREGORY J. SHEEHAN

Division Director

MEMORANDUM

Date: October 23, 2015

To: Wildlife Board and Regional Advisory Council Members

From: Guy Wallace, SER Wildlife Manager

SUBJECT: Southeast/Central Region Mule Deer Management Plans

The attached documents are the Division's revised management plans for deer units in the Southeast and Central Regions.

Deer Unit Management Plans and recommended changes:

Central Mountains, Manti/San Rafael

- 1. We will present results from a survey of Manti hunters and from four open houses held in the region to obtain public input on splitting the Manti unit.
- 2. We recommend not splitting the Manti unit and maintaining the management objective for the buck-doe ratio at 15-17 bucks per 100 does.
- 3. We recommend that the Manti unit be included on the statewide priority list for deer transplants at specific sites identified in the management plan.
- 4. We recommend that the telemetry study being conducted on the northeast Manti be expanded to the southeast portion of the unit.

Central Mountains, Nebo

1. No changes recommended for the population or buck-doe ratio objectives.

La Sal, La Sal Mountains

1. No changes recommended for the population or buck-doe ratio objectives.

La Sal, Dolores Triangle

- 1. No changes recommended for the population or buck-doe ratio objectives.
- 2. Range trend studies for this subunit were not compiled at time of plan development. If changes to management objectives are needed when the range data is compiled and analyzed, we will submit an amendment to the management plan next year.

San Juan, Abajo Mountains

1. No changes recommended for the population or buck-doe ratio objectives.



San Juan, Elk Ridge

- 1. We recommend reducing the population management objective from 7,000 deer to 5,600 deer based on the loss of the Beef Basin winter range. This will be a short-term objective for the duration of this plan and will be re-evaluated when this plan is due for revision in 2020.
- 2. No change recommended to the buck-doe ratio management objective.

Henry Mountains

- 1. We recommend increasing the population management from 2,000 deer to 2,700 deer. The population estimate for this unit is currently above the management objective and fawn production continues to be good. Overall range trend information on this unit indicate the habitat is capable of supporting this increase.
- 2. No change recommended to the buck-doe ratio management objective.

DEER HERD UNIT MANAGEMENT PLAN Deer Herd Unit # 16BC/12 - Central Mountains, Manti/San Rafael and Deer Herd Unit 16A - Central Mountains, Nebo October 2015

BOUNDARY DESCRIPTIONS

Central Mountains, Manti/San Rafael Unit - Carbon, Emery, Sanpete, Sevier and Utah counties -Boundary begins US-6 and US-89 in Spanish Fork Canyon: southeast on US-6 to the Price River near Woodside; southeast along the Price River to the Green River; south along the Green River to the Swasey's Boat Ramp and the Hastings Road; south along the Hastings Road to SR-19 (I-70 frontage road); east along SR-19 to Exit 164 of I-70; west on I-70 to the Green River; south along this river to the Colorado River; south along this river (and the west shore of Lake Powell) to SR-95; north on SR-95 to a point two miles south of the SR-95/SR-24 Jct. at Hanksville; west along a line that is two miles south of SR-24 to the Burr Trail-Notom road; north along the Burr Trail-Notom road to SR-24; east on SR-24 to Caineville and the Caineville Wash road; north on this road to the Cathedral Valley road; northwest on the Cathedral Valley road to the Capital Reef National Park boundary; north and west on the CRNP boundary back to the Cathedral Valley road; west on this road to Rock Springs Bench and the Last Chance Desert road; north on this road to the Blue Flats road; north and east on this road to the Willow Springs road; north on this road to the Windy Peak road; north and west on this road to I-70; west on I-70 to US-89; north on US-89 to US-6 in Spanish Fork Canyon. Excludes all CWMUs. USGS 1:100,000 Maps: Hanksville, Hite Crossing, Huntington, La Sal, Loa, Manti, Nephi, Price, Salina, San Rafael Desert.

<u>Central Mountains, Nebo Unit</u> - Juab, Millard, Sanpete, Sevier and Utah counties - Boundary begins at US-6 and I-15 at Spanish Fork; southeast on US-6 to US-89 near Thistle; south on US-89 to US-50 at Salina; northwest on US-50 to I-15 at Scipio; north on I-15 to US-6 at Spanish Fork. Excludes all CWMUs. USGS 1:100,000 Maps: Maps: Delta, Manti, Nephi, Provo, Salina.

MANTI UNIT RANGE AREA AND APPROXIMATE OWNERSHIP

	Yearlong	range	Summer Range		Winter Range	
Ownership	Area (acres)	%	Area (acres)	%	Area (acres)	%
Forest Service	0	0%	721980	74%	300717	28%
Bureau of Land Management	24	2%	28187	3%	224215	21%
Utah State Institutional Trust Lands	1039	93%	14980	1.5%	110636	11%
Private	50	5%	198911	20%	353779	33%
Department of Defense	0	0%	0	0%	200	0%
Utah State Parks	0	0%	23	<1%	116	0%
Utah Division of Wildlife Resources	0	0%	14774	1.5%	72704	7%
TOTAL	1113	100%	978855	100%	1062367	100%

LAND OWNERSHIP

	Yearlong	range	Summer	Range	Winter R	ange
Ownership	Area (acres)	%	Area (acres)	%	Area (acres)	%
Bureau of Land Management	127,012	69%	0	0%	3,650	54%
Utah State Institutional Trust Lands	12,913	7%	0	0%	79	1%
Private	22,019	12%	0	0%	3,000	45%
National Parks	17,426	9%	0	0%	0	0%
National Recreation Area	4,458	2%	0	0%	0	0%
Utah Division of Wildlife Resources	314	<1%	0	0%	0	0%
TOTAL	184,142	100%	0	0%	6,729	100%

SAN RAFAEL UNIT RANGE AREA AND APPROXIMATE OWNERSHIP

NEBO UNIT RANGE AREA AND APPROXIMATE OWNERSHIP

	Yearlong	range	Summer Range		Winter Range	
Ownership	Area (acres)	%	Area (acres)	%	Area (acres)	%
Forest Service	184360	48%	147970	87%	36390	17%
Bureau of Land Management	24010	6%	866	<1%	23144	11%
Utah State Institutional Trust Lands	6113	2%	92	<1%	6021	3%
Private	116603	30%	15438	9%	101165	48%
Utah Division of Wildlife Resources	52002	14%	6269	3%	45733	21%
TOTAL	383088	100%	170635	100%	212453	100%

UNIT MANAGEMENT GOALS

Maintain a healthy mule deer population within the long term carrying capacity of the available habitat, based on winter range trend studies conducted by the DWR every five years.

Manage the deer population at a level capable of providing a broad range of recreational opportunities, including hunting and viewing.

Balance deer herd goals and objectives with impacts on human needs, such as private property rights, agricultural crops and local economies.

POPULATION MANAGEMENT OBJECTIVES

<u>Target Winter Herd Size</u> – Manage for a target population of 60,600 wintering deer (modeled number) during the five-year planning period unless range conditions become unsuitable, as evaluated by DWR. Range trend data coupled with annual browse monitoring will be used to assess habitat condition. Biologists will continue to carefully monitor winter ranges and make recommendations to improve and protect winter habitat. Should over-utilization and range damage by deer occur, recommendations will be made to reduce deer populations to sustainable levels in localized areas.

Long Term Objective-

Central Mountains, Manti/San Rafael subunit	38,000 deer
Central Mountains, Nebo subunit	22,600 deer
Total Central Mountains Objective	60,600 deer

<u>Herd Composition</u> – Maintain a three-year average postseason buck-doe ratio of 15 to 17 bucks per 100 does in accordance with the statewide plan.

<u>Harvest</u> – Continue general season unit by unit buck deer hunt management, using archery, any weapon, and muzzleloader hunts. Buck permits will be adjusted to maintain buck-doe ratio objectives. Caution and moderation will be used when adjusting buck permit numbers. Antlerless permits will only be issued to address specific localized crop depredation or range degradation concerns.

POPULATION MANAGEMENT STRATEGIES

Monitoring

<u>Population Size</u> – A population estimate will be made based on fall and spring herd composition counts conducted by biologists, harvest surveys, and mortality estimates based on radio collar studies and range rides. These data will be used in computer models to determine a winter deer herd population size. The modeled population estimate for the winter of 2015 was 25,100 deer on the Manti/San Rafael subunit and 14,000 deer on the Nebo subunit.

<u>Buck Age Structure</u> – Monitor age class structure of the buck population through the use of checking stations, postseason classification, uniform harvest surveys and field bag checks.

<u>Harvest</u> – The primary means of monitoring harvest will be through the statewide uniform harvest survey and the use of checking stations. Closely monitor hunters afield, harvest, and success rate on the San Rafael portion of the Manti subunit and consider creating a separate hunting unit for this low density population if overharvest is suspected based on these parameters. Hunters afield and harvest has increased significantly since it was placed in the Manti subunit beginning in 2012 (see San Rafael table below).

<u>Research</u> – Continue radio telemetry survival study on North Manti Unit. Consider initiating a gps/telemetry study on the South Manti to document deer habitat use, survival, and seasonal ranges.

Year	Buck	Fawns /	Bucks /	Population	Population	% of
rear	harvest	100 does	100 does	Estimate	Objective	Objective
2012	2083	72	19	23,600	38,000	62%
2013	2168	65	19	23,500	38,000	62%
2014	2232	67	23	25,100	38,000	66%
3 Year Avg	2161	68	20			

Population Trends and Harvest for the Central Mountains, Manti Deer Subunit

Population Trends and Harvest for the Central Mountains, Nebo Deer Subunit

Year	Buck	Fawns /	Bucks /	Population	Population	% of
	harvest	100 does	100 does	Estimate	Objective	Objective
2012	1029	58	14	14,000	22,600	62%
2013	1158	60	21	15,900	22,600	70%
2014	1020	57	18	14,000	22,600	62%
3 Year Avg	1069	58	18			

Harvest Trends for the San Rafael portion of the Manti Subunit

	2009	2010	2011	2012	2013	2014
Hunters Afield	956	864	1291	1649	1264	1463
Harvest	292	139	330	497	338	305

Population Augmentation

Pursue deer transplants to portions of the unit with low deer densities, particularly the southeast portions of the Manti subunit where numbers remain low while deer populations in other areas of the unit and around the state have increased. Consider transplant sources from areas with high deer densities and range over-utilization on this and other units as well as areas of urban nuisance populations.

Possible Transplant Locations (see Figure 1):

Emery County: East Mtn., Stump Flat, Danish Bench, Cedar Bench, North and South Horn Mtn./ Biddlecome Ridge, Black Dragon, Dry Mtn., Sage Flat, Muddy Creek Cyn., Link Cyn.

Sanpete County: McEwen Flat, The Pines/Greens Hollow/Wildcat Knolls

Sevier County: The Pines/Greens Hollow/Wildcat Knolls, Link Cyn, Quichupah Cyn./Water Hollow/Saleratus Benches, Trough and Mill Hollow/Gilson Valley

Disease Management

Investigate and manage diseases that threaten mule deer populations and continue monitoring for chronic wasting disease (CWD) as stated in the Statewide plan. This unit is a CWD positive unit. Continue surveillance through check stations and other methods to document prevalence, and location of positive animals.

Figure 1. Map of Potential Deer Transplant Sites on the Southeast Manti.



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Limiting Factors (may prevent achieving management objectives)

<u>Crop Depredation</u> – Take all steps necessary to minimize depredation as prescribed by state law and DWR policy.

<u>Habitat</u> – Winter range is a limiting factor for deer on this unit. Portions of critical winter ranges are in poor condition (see range trend summary below). Factors contributing to poor range conditions include recent droughts and range use by deer and domestic livestock. This has resulted in a reduction of winter range carrying capacity. Utilization of key shrub species on critical winter ranges will be closely monitored.

<u>Predation</u> – Follow DWR predator management policy:

- If the population estimate is less than 90% of objective and is stable or decreasing and fawn to doe ratio drops below 70 for 2 of the last 3 years or if the fawn survival rate drops below 50% for one year, then a Predator Management Plan targeting coyotes will be implemented on that subunit. If the population trend is increasing the population must be below 65% of objective and meet the above criteria in order to initiate Predator Management for Coyotes. In 2015, the Central Mountains unit did not qualify for predator management specific to coyotes as the population trend was increasing and was 66% of objective.
- If the population estimate is less than 90% of objective and the doe survival rate drops below 85% for 2 of the last 3 years or below 80% for one year, then a Predator Management Plan targeting cougar would be implemented on that subunit. This unit did not qualify for predator management specific to cougars in 2015 as the population is increasing.

<u>Highway Mortality</u> – Cooperate with the Utah Dept. Of Transportation in construction of highway fences, passage structures, warning signs, etc. Collect highway mortality data. A deer highway crossing study along SR-6 is ongoing. Propose analysis of SR-96, SR-31, and SR-264 to minimize highway mortalities in the future.

<u>Illegal Harvest</u> – Should illegal kill become an identified and significant source of mortality attempt to develop specific preventive measures within the context of an action plan developed in cooperation with the Law Enforcement section.

Special Considerations

When unit by unit deer management went into effect in 2011, the San Rafael unit remained part of the Manti general season deer hunt boundary. The majority of deer numbers are concentrated on the unit where there are agricultural corridors. These lands often times provide favorable food water and cover to deer. Deer numbers along these corridors are not in decline and provide hunting opportunity to local hunters. Most of the deer harvested on this unit occurs near to agricultural areas. Currently the decision to keep the San Rafael unit within the Manti general season unit was based on the following considerations:

- Deer hunters would continue to have the opportunity to hunt both the Manti and San Rafael sides of highway SR-10 on or near private land. Private land areas on the east side of SR-10 is where most of the deer occur on the San Rafael subunit.
- The agricultural areas on both sides of SR-10 should be within the same unit and delineation of a boundary to accomplish this would be difficult.
- Setting management objectives for San Rafael unit deer population and sex-ratios would be unreliable due to small and isolated deer herds resulting in inadequate sample sizes.

HABITAT MANAGEMENT OBJECTIVES

Protect, maintain, and/or improve deer habitat through direct range improvements to support and maintain herd population management objectives.

Work with private landowners and federal, state, and local governments to maintain and protect critical and existing ranges from future losses and degradation through grazing management and OHV and Travel Plan modifications.

Work with federal, private, and state partners to improve crucial deer habitats through the WRI process.

Work with federal and state partners in fire rehabilitation on crucial deer habitat through the WRI process.

Maintain and protect critical winter range from future losses. Acquire critical winter range when the opportunity arises.

Minimize and mitigate impacts from energy development activities.

Minimize deer vehicle collisions along highways on the unit.

HABITAT MANAGEMENT STRATEGIES

Continue to improve, protect, and restore sagebrush steppe habitats critical to deer. Cooperate with federal land management agencies and private landowners in carrying out habitat improvements such as pinion-juniper removal, reseedings, controlled burns, grazing management, water developments, etc. on public and private lands. Habitat improvement projects will occur on both winter ranges as well as summer range.

Continue to monitor permanent range trend studies located throughout the unit.

Conduct cooperative seasonal range assessments to evaluate forage condition and utilization. Determining opportunities for habitat improvements will be an integral part of these surveys. This will also be pivotal in determining if antlerless harvest is necessary.

Work toward long term habitat protection and preservation through the use of agreements with federal agencies and local governments and the use of conservation easements on private lands.

Support, cooperate with, and provide input to land management planning efforts dealing with actions affecting habitat security, quality and quantity.

Work with land management agencies and energy companies to minimize and mitigate impacts of energy development activities. Oil and gas specific habitat biologists will lead this effort.

Continue to monitor deer survival on this unit through radio telemetry studies. Use telemetry data to determine potential habitat improvement projects.

Manage vehicle access on Division of Wildlife Resources land to limit human disturbance during times of high stress, such as winter and fawning.

Manage riparian areas in critical fawning habitat to furnish water, cover and succulent forage from mid to late summer.

Protect deer winter ranges from wildfire by reseeding burned areas, creating fuel breaks and vegetated Page 7 of 19 green strips and reseed areas dominated by Cheat grass with desirable perennial vegetation.

Reduce expansion of pinion-juniper and other woodlands into sagebrush habitats and improve habitats dominated by pinion-juniper woodlands by completing habitat restoration projects like lop & scatter, bullhog, and chaining.

Manage conifer encroachment on important summer ranges by utilizing prescribed fire.

Seek opportunities to increase browse in burned areas of critical winter range.

Utilize antlerless deer harvest to improve or protect forage conditions when vegetative declines are attributed to deer over utilization.

PERMANENT RANGE TREND SUMMARIES – Central Mountains, Manti

Management Unit Description

Geography

Wasatch Plateau

Unit 16B covers the east and west sides of the Wasatch Plateau. Skyline Drive to Soldiers Summit roughly divides the eastern and western halves of the unit. This unit was previously called the Northeast Manti Deer Herd Unit 30. In the spring of 1998, this unit was incorporated into the much larger Wildlife Management Unit 16. Unit 16C was previously called Deer Herd Unit 31- South East Manti. It was enlarged in the spring of 1998 to include both the east and west sides of the Wasatch Plateau and renamed Wildlife Management Unit 16C. Unit 16C is a subunit of the very large management unit 16, which encompasses areas in Utah, Carbon, Juab, Sevier, and Sanpete Counties.

Wildlife Management Unit 16C covers the southern portion of the Wasatch Plateau. As with unit 16B, this subunit's western and eastern halves are divided roughly by Skyline Drive. The upper limits of the winter range on 16C generally follows the rim of the plateau and the 9,000 foot level of the south and west exposures of the large canyons and mountain slopes. Many of the plateaus drop steeply to the valley floor below to the very lowest portion of the herd unit that supports a low desert shrub type on unproductive shale hills. This acreage is not considered part of the winter range.

Management unit 16B and 16C is large with deer summer and winter ranges covering nearly 1.4 million acres. The U.S. Forest Service (USFS) administers 81% of the summer range and the BLM 1%. Fifty-one percent of the winter range is on federal land with another 30% on private lands (See Figure 2).

Central Mountains Manti North

Most of the winter range in subunit 16B lies on the east side of the Wasatch Plateau which is a broad alluvial fan ranging in elevation from 5500 to 7500 feet. It runs from Price Canyon south to Huntington Canyon. Other important winter ranges include a large section of land along the Price River in the Colton area, and below Scofield Reservoir. The winter range is made up of mountain big sagebrush and 8yoming big sagebrush communities with pinyon-juniper woodlands interspersed throughout the area.

Central Mountains Manti South

The key deer wintering areas are the lower end of Muddy Creek and Ferron Creek, Black Dragon, Biddlecome Hollow, Cottonwood Canyon, and Huntington Canyon. Elk winter higher on Trail Mountain,

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North and South Horn Mountain, Sage Flat and the foot hills along US 89 from salina to Mount Pleasant. Deer also utilize these areas during mild winters. On the Southeast Manti Unit, much of the key winter range is on Forest Service lands. Pinyon-juniper benches become more limited to the south and there are mostly low desert shrub foothills associated with Muddy Creek. Overall, the pinyon-juniper type occupies a fair amount of the winter range at low elevations, but is not critical to the trend monitoring program. However, the chained and seeded portions of this type provide important wintering areas and are monitored for trend. Chaining treatments are sampled in the foothills from Huntington Canyon to south of Dry Wash. Other key areas at Middle and Dry Mountains are also sampled. The big sagebrush/grass range type is found on many key areas, especially on the North East Manti Unit, but also on high elevation elk winter range on Trail, East, and Horn Mountains. Big sagebrush/grass is limited on crucial deer winter range, but key areas are found on Black Dragon and Muddy Creek.

Limiting Factors to Big Game Habitat

Central Mountains Manti North

The Manti-North area has historically supported a variety of wildlife and outdoor recreation, livestock grazing, ranches and farms, energy developments, and some forest industry. Industrial activities on the unit are associated primarily with coal production, electrical power generation, and oil and gas development. Exploration and development activities for oil and gas have the potential for future increases. Add to this a growing demand for low-sulfur Wasatch coal, and the demands placed upon winter ranges in this area will likely increase. Power plants, pipelines, slack piles, coal load-out facilities, ghost towns, railroads, and agriculture compete for valuable winter range property. An extensive road system provides year-round access to large portions of the winter range. Heavily used access roads to coal mines and gas wells dissect important winter ranges all along the east side of the Wasatch Plateau and are accountable for a large number of the highway deer mortality.

Central Mountains Manti South

The upper portions of the winter range on Forest Service lands are managed primarily for livestock grazing. Widespread watershed rehabilitation through contour trenching and seeding was done on this rangeland in the 1960's. An extensive road system provides access to a large percentage of the winter range. Many roads in crucial areas are open or maintained and used winter long in relation to various activities, namely mining, gas wells, the Horn Mountain TV towers, and for recreation. Access is more restricted further south in the Ferron and Muddy Creek drainages. The lowest foothill ranges are accessible year-round and are usually adjacent to agricultural areas. Coal mining and the power plants are the major economic activities in the area. Other associated impacts include road improvements, truck traffic, and an increased human population. Outdoor recreation is popular in the area. These activities include camping, hunting, fishing, four-wheeling, and snowmobiling and are facilitated by the extensive road system in the mountains and foothills.

Both

Encroachment by pinyon-juniper woodland communities also poses a substantial threat to important sagebrush rangelands. Pinyon-juniper woodlands dominate the vegetation cover within the deer winter range. Encroachment and invasion of these woodlands into sagebrush communities has been shown to decrease sagebrush and herbaceous cover, and therefore decreases available forage for wildlife.



Figure 2. Seasonal Ranges on the Manti Subunit Showing Range Trend Study Locations

Deer Winter Range Condition Assessment

The condition of deer winter range within the North and South Manti management units have slightly improved on the study sites sampled since 1994 with a slight majority being classified as fair to good most sample years. The majority of sites sampled within the unit are considered to be in fair to good condition based on the most current sample data (Figure 3), and the proportion of sites classified as being in poor or very poor condition has generally decreased since 1994; however, there was a substantial decrease in the poor and very poor categories in the 1997 and 1999 sample years (Table 1). The only undisturbed studies that are currently considered to be in very poor condition are the Jackson Unit, Hilltop, Slackpile, North Spring Bench, and Howard FS Chaining studies that have a depleted browse component and are dominated by pinyon and juniper trees. The condition of disturbed and treated sites typically improves with increased time after disturbance on these units. The majority of disturbed or treated study sites that ranked as being in poor or very poor condition 6 to 10 years after disturbance are those studies that were considered poor and very poor prior to treatment (Table 2). Additionally, these studies were not sampled in the 11 to 15 post sample years, which may have resulted in the increase of fair to good sites in proportion to poor to very poor sites. These study sites generally are still lacking in available browse species, and have typically experienced significant pinyon and juniper encroachment in the past and have not yet recovered their depleted browse understory. Additionally, many of these studies have vigorous herbaceous understories that are dominated by seeded perennial grass that may limit the recruitment of sagebrush and other preferred browse species.

Trend Sites on Manti Unit						
	1994	1997/1999	2002/04	2007/09	2014	
Good	4	9	6	10	17	
Fair	7	16	12	9	5	
Poor	6	3	9	7	8	

8

35

9

35

6

36

Table 1. Deer Winter Range Desirable Components Index (DCI) Summary by year of Undisturbed Range Trend Sites on Manti Unit

Table 2.	Deer winter range	Desirable Com	ponents Index	(DCI) s	summary l	by year o	of treated/disturb	bed
sites for t	the Manti Unit							

6

34

	Pre-Treatment	Post Year	Post Year	Post Year
		1-5	6-10	11-15
Good	9	9	12	3
Fair	6	9	8	2
Poor	11	12	4	2
Very Poor	16	12	6	1
Total	48	48	31	8

Very Poor

Total

5

22



Figure 3. Map of Range Trend Sites on the Manti Subunit showing site condition.

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Treatments/Restoration Work

There has been an active effort to address many of the limitations on these units through the Watershed Restoration Initiative (WRI). A total of 36,336 acres of land have been treated within the Manti North and South units since the WRI was implemented in 2004. As seen on the map (Figure 4), treatments occasionally overlap one another bringing the total treatment acres to 38,043 acres for this unit. Other treatments have occurred outside of the WRI through independent agencies and landowners, but the WRI comprises the majority of work done on deer winter ranges throughout the state of Utah. Treatments to reduce pinyon-juniper woodlands such as bullhog, chaining, and lop-and-scatter are common management practices on this unit (Table 3). Other common management treatments are those to rejuvenate sagebrush stands such as herbicide, disc, and harrow treatments. In addition to these treatments, many have had seeding treatments associated with it to increase desirable species.

Treatment Action	Acres
Lop and Scatter	11,428
Anchor Chain	6,956
Herbicide Application	5,478
Seeding	4,994
Bull hog	2,493
Harrow	2,472
Disc	1,963
Research	788
Prescribed Fire	718
Planting/Transplanting	496
PJ push	246
Greenstripping	11
Aerator	1
*Total Land Area Treated	36,336
Total Treatment Acres	38,043

Table 3. WRI treatment size (acres) for Manti Subunit.



Figure 4. Habitat Projects Completed on the Manti Subunit, 2005-2014.

PERMANENT RANGE TREND SUMMARIES – Central Mountains, Nebo

Management Unit Description

This management subunit incorporates most of the old North and South Nebo deer herd units. The old North Nebo deer herd unit included about 490,240 acres. Physiographically, the unit was dominated by high mountains such as Santaquin Peak, Bald Mountain, and Mount Nebo. Mount Nebo represents the southernmost extension of the Wasatch Range. These mountains constitute the heart of a diverse and productive summer range, making up about 29% of the unit. Normal winter range constitutes approximately 32% of the area. The Mount Nebo summer range has a long history of high hunting success and depredation problems, a growing elk herd, and limited winter range.

The San Pitch Mountains make up the majority of the old South Nebo herd unit. This low mountain range contains all of the summer range on the unit and 40% of the area. The surrounding foothills and western slopes provide winter range that makes up the remaining 60% of the range. The upper limit of the winter range is approximately 7,000 feet in elevation, but extends to 8,000 feet on the south exposures in canyons on the west side of the unit. Twenty-five percent of the winter range was classified as severe winter range in the 1976 range inventory. The upper limit of severe winter range is 6,000 feet, while the lower limit (5,200 feet) of the winter range is restricted by highways, reservoirs, agriculture, and small communities.

Deer Winter Range Condition Assessment

Twenty-one interagency range trend studies were sampled in Unit 16A during the summer of 2012. A total of twenty-four studies have been established within the Unit 16A since 1983 (Figure 5). The key areas identified and sampled with 12 trend studies in 1983 are still priority areas. Three new studies were added in 1989. The majority of the studies are on UDWR land. However, much of the critical range is under private ownership and was not sampled due to restricted access and limited management opportunities. The 15 permanently-marked trend studies originally sampled in early August 1983 were resampled in mid-July of the drier year of 1989, and in late May of 1997, 2002, 2007, and 2012. All sample big game winter range areas, although many sites had some evidence of summer deer occupancy. The studies range in elevation from approximately 5,400 feet (1,646 m) to 6,500 feet (1,981 m). The prominent winter range vegetation types that were sampled include: mixed oak/big sagebrush, sagebrush/grass, mountain brush, bitterbrush, and cliffrose. To access maps, discussions, and data tables for all range trend studies see: http://www.wildlife.utah.gov/range.

Occupancy: Pellet group transect data indicates that deer predominantly occupy these mid-level potential study areas. The mean abundance of deer pellet groups was high on most studies in 1997 and 2007, but was substantially lower in 2012. The decrease in pellet abundance is likely due to the mild winter of 2011-2012 which allowed animals to remain on higher elevation range. The mean abundance of elk and livestock sign has been generally low since 1998. Sheep pellet groups were abundant on the Deep Creek and Fountain Green Plateau studies in several sample years.

Discussion: Decreases in the preferred browse species sagebrush and cliffrose are a cause of concern on these mid-level potential sites (Table 4). Wildfire's on the Santaquin Bench, Nebo Creek, Hop Creek Browse, and Big Hollow studies has certainly contributed to the decrease in sagebrush, but are not the singular cause. Gambel oak is increasing on several sites and may be competing directly with sagebrush. This seems to be the case particularly on the Santaquin Bench, North Canyon, and Steele Ranch studies. Decreases in cover and density of cliffrose are particularly pronounced on the Tithing Mountain study, but are also occurring on the Gardner Canyon, Birch Creek, and Chicken Creek studies.



Management Unit 16A

Figure 5. Range Trend Study Locations on the Manti, Nebo Subunit Page 16 of 19

The abundance of weedy annual species and bulbous bluegrass is likely contributing to decreases in both the sagebrush and cliffrose populations on these mid-level potential sites. These weedy species can form dense mats of cover that compete with other more desirable herbaceous species and with seedlings and young shrubs which limits establishment of new plants into the population. Annual grass species can also increase fuel loads and increase the chance of a catastrophic fire event. Bulbous bluegrass is a particular concern on the Santaquin Bench, Rees Flat, Tithing Mountain, Old Pinery, and Triangle Ranch studies. Cheatgrass and other annual grasses are a particular concern on the Nebo Creek, Willow Creek, Gardner Canyon, Birch Creek, Tithing Mountain, Big Hollow, Old Pinery, Chicken Creek, and Flat Canyon studies.

Heavy utilization by animals may be compounding problems from competition. Deer pellet groups have been particularly abundant on the Santaquin Hill, Wash Canyon, Hop Creek Browse, Willow Creek, Gardner Canyon, Tithing Mountain Steele Ranch, and Old Pinery studies. Livestock utilization appears to be relatively light on most of these studies, but sheep pellets have been abundant at times on the Deep Creek and Fountain Green Plateau study.

Table 4. Mid-level potential scale mean deer DCI scores and rankings (n=20) by year for WMU 16A, Central Mountains, Nebo. The deer DCI rankings are divided into three categories based on ecological potentials which include low, mid-level and high.

Y e a r	Preferred Browse Cover	Preferred Browse Decadence	Preferred Browse Young	Perennial Grass Cover (-POBU)	Annual Grass Cover	Perennial Forb Cover	Noxious Weeds	Total Score	Ranking
97	13.4	8.0	6.1	18.8	-3.6	7.8	-1.2	49.2	Poor-Fair
02	14.9	4.9	3.2	17.6	-3.4	6.1	-1.2	42.1	Poor
07	11.8	5.6	2.5	18.6	-5.5	6.3	-1.2	38.1	Poor
12	14.1	8.2	4.4	20.0	-4.9	5.9	-1.2	46.6	Poor

Limiting Factors to Big Game Habitat – Nebo Subunit

The principal limiting factor and management concern in the old North Nebo unit is the lack of goodcondition winter range, especially severe winter range on the west side of the unit. In this area, from Spanish Fork Canyon south to Nephi, the normal winter range averages 2 miles or less in width. Severe winter range is even narrower, ranging from as narrow as a few hundred yards, up to 1.5 miles. Total severe winter range accounts for only about 12% of the area. However, the winter range on the east and south sides of the unit is more expansive, and not nearly as critical. Some of the major problems related to the limited winter range on the unit, especially low elevation severe winter range, include: restricted access to traditional wintering areas west of I-15, predominately private ownership of critical ranges (63% of normal winter range), and agricultural depredation. To remedy the situation, the UDWR has acquired approximately 12,800 acres of winter range in the unit (7% of winter range) and has attempted treatments and rehabilitation in these critical areas. The available winter range, especially critical areas on the west side of the unit, remains threatened by development and a high fire hazard from cheatgrass.

A major threat to deer winter habitat is the development of winter range on private property. Most of the winter range on the north end of the Nebo unit is private and there is continual expansion of new home building in the higher elevations of winter range in the communities of Spanish Fork, Salem, Woodland Hills and Elk Ridge. The same is true on the south end of the major portion of the Nebo Unit, along Water Hollow and Big Hollow, however the development there is more for cabin lots not for residential housing. Both of these areas have historically been very important winter ranges for large populations of mule deer. State owned WMAs along the east and west side of the unit are important areas of protection but may prove inadequate in the future to sustain the deer population at our desired objective

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as private development continue in the years to come. Further habitat acquisition and rehabilitation are necessary to adequately maintain the winter range.

Treatments/Restoration Work

There has been an active effort to address many of the limitations on these units through the Watershed Restoration Initiative (WRI). A total of 36,336 acres of land have been treated within the Nebo unit since the WRI was implemented in 2004 (Table 5). As seen on the map, treatments occasionally overlap one another bringing the total treatment acres to 38,043 acres for this unit. Other treatments have occurred outside of the WRI through independent agencies and landowners, but the WRI comprises the majority of work done on deer winter ranges throughout the state of Utah. Treatments to reduce pinyon-juniper woodlands such as bullhog, chaining, and lop-and-scatter are common management practices on this unit. Other common management treatments are those to rejuvenate sagebrush stands such as herbicide, disc, and harrow treatments. In addition to these treatments, many have had seeding treatments associated with it to increase desirable species.

Treatment Action	Acres
Lop and Scatter	11,428
Anchor Chain	6,956
Herbicide Application	5,478
Seeding	4,994
Bull hog	2,493
Harrow	2,472
Disc	1,963
Research	788
Prescribed Fire	718
Planting/Transplanting	496
PJ push	246
Greenstripping	11
Aerator	1
*Total Land Area Treated	36,336
Total Treatment Acres	38,043

Table 5. WRI treatment size (acres) for Nebo Subunit.

Discussion and Recommendations

Summer Range Habitats

Summer habitats at high elevations on this unit include spruce-fir, aspen, alpine, and mountain shrub habitat types. These areas are generally considered to be in good condition for deer summer range habitat. This community supports a diverse herbaceous understory that provides valuable forage during the summer months. While in generally good condition, major concerns include conifer encroachment in to aspen stands, an abundance of introduced aggressive perennial grasses, and noxious weeds. All of which have an impact on the quality and quantity of forb species important to mule deer It is recommended that monitoring of this community continue. When reseeding is necessary to restore herbaceous species, care should be taken in species selection and preference should be given to native grass species when possible. Additional actions may be necessary to reduce the presence of noxious weeds within this community type.

Habitat projects that promote aspen and forb communities as well as a diverse age structure of the forest are recommended. Such projects may include: prescribed fire, timber management, mechanical

treatment, and grazing management. If reseeding is necessary to restore herbaceous species, care should be taken in species selection and preference should be given to native grass species when possible. Monitoring should also continue in order to watch for the presence of noxious weeds within this community type.

Winter Range Habitats

Winter range habitats include sagebrush steppe, pinyon-juniper woodlands, and salt desert shrub habitats. These mid elevation upland communities are generally variable in deer winter range with many of the communities in poor to very poor condition; however, there are a few communities that are considered to be in good to excellent condition. These communities support many vegetation types including the following: black sagebrush, basin big sagebrush, Wyoming big sagebrush, mountain big sagebrush, antelope bitterbrush, and mahogany species. These communities support large, dense shrub populations that provide valuable browse in mild to moderate winters for deer. These communities are prone to encroachment from pinyon-juniper trees which can reduce understory shrub and herbaceous health if not addressed. Many of these stands show very high utilization by ungulates. As a result, many stands are decadent. Annual grasses, primarily cheatgrass, can be an issue within these communities. Increased amounts of cheatgrass can increase fuel loads and increase the threat of wildfire within these communities. If wildfire occurs within these communities they lose most of their value as deer winter range and reestablishment of valuable browse species is typically slow.

It is strongly recommended that work to prevent and reduce pinyon-juniper encroachment should continue in these communities. When reseeding is necessary to restore herbaceous species, care should be taken in species selection and preference should be given to native grass species when possible. Moreover, care should be taken in selecting treatment methods that will not increase annual grass loads. Treatments to reduce annual grass may be necessary on some sites. Work to diminish fuel loads and create fire breaks should continue in order to reduce the threat of catastrophic fire that results in the loss of preferred browse. If a treatment to rejuvenate sagebrush occurs, care should be taken in selecting treatment methods that will not increase annual grass loads.

DEER HERD UNIT MANAGEMENT PLAN Deer Herd Unit # 13 La Sal October 2015

BOUNDARY DESCRIPTIONS

Grand and San Juan counties - Boundary begins at the junction of I-70 and the Green River; south on the Green River to the Colorado River; north on the Colorado River to Kane Springs Creek; southeast along this creek to Hatch Wash; southeast along this wash to US-191; south on US-191 to the Big Indian Road; east on this road to the Lisbon Valley Road; east on this road to the Island Mesa Road; east on this road to the Colorado State Line; north on this line to I-70; west on I-70 to the Green River.

This boundary includes two subunits including:

<u>Subunit 13A - La Sal, La Sal Mountains</u> - Grand and San Juan counties—Boundary begins at I-70 and the Green River; south along the Green River to the Colorado River; north along this river to Kane Springs Creek; southeast along this creek to Hatch Wash; south east along this wash to US-191; south on US-191 to Big Indian Road; east on this road to Lisbon Valley Road; east on this road to Island Mesa Road; east on this road to the Utah-Colorado state line; north on this state line to the Dolores River; northwest along this river to the Colorado River; northeast along this river to the Utah-Colorado state line; north on this state line to I-70; west on I-70 to the Green River.

<u>Subunit 13B - La Sal, Dolores Triangle</u> - Grand County - Boundary begins at the Utah-Colorado state line and the Colorado River; south along the state line to the Dolores River; northwest along the Dolores River to the Colorado River; northeast along this river to the Utah-Colorado state line.

LAND OWNERSHIP

Subunit 13A - La Sal, La Sal Mountains

	Yearlong range		Summer Range		Winter Range	
Ownership	Area (acres)	%	Area (acres)	%	Area (acres)	%
Forest Service	0	0%	104267	57%	36273	12%
Bureau of Land Management	20389	46%	2302	1%	212749	73%
Utah State Institutional Trust Lands	1203	3%	29227	16%	16915	6%
Private	2417	5%	46231	25%	25542	9%
Department of Defense	32	<1%	0	0%	0	0%
National Parks	17900	41%	0	0%	0	0%
Utah Department of Transportation	0	0%	0	0%	70	<1%
Department of Natural Resources	2065	5%	0	0%	194	<1%
TOTAL	44007	100%	182027	100%	291743	100%

RANGE AREA AND APPROXIMATE OWNERSHIP

Subunit 13B - La Sal, Dolores Triangle

	Yearlong range		Summer Range		Winter Range	
Ownership	Area (acres)	%	Area (acres)	%	Area (acres)	%
Forest Service	0	0%	0	0%	0	0%
Bureau of Land Management	0	0%	0	0%	87718	87%
Utah State Institutional Trust Lands	0	0%	0	0%	9553	9%
Private	0	0%	0	0%	3514	4%
TOTAL	0	0%	0	0%	100785	100%

RANGE AREA AND APPROXIMATE OWNERSHIP

UNIT MANAGEMENT GOALS

Maintain a healthy mule deer population within the long term carrying capacity of the available habitat, based on winter range trend studies conducted by the DWR every five years.

Manage the deer population at a level capable of providing a broad range of recreational opportunities, including hunting and viewing.

Balance deer herd goals and objectives with impacts on human needs, such as private property rights, agricultural crops and local economies.

POPULATION MANAGEMENT OBJECTIVES

Target Winter Herd Size - Manage for a target population of 19,400 wintering deer (modeled number) during the five-year planning period unless range conditions become unsuitable, as evaluated by DWR. Range trend data coupled with annual browse monitoring will be used to assess habitat condition. Biologists will continue to carefully monitor winter ranges and make recommendations to improve and protect winter habitat. Should over-utilization and range damage by deer occur, recommendations will be made to reduce deer populations to sustainable levels in localized areas.

Long-term Objective - Achieve a winter target population of 19,400 deer.

(13,000 deer on La Sal Mountains subunit and 6,400 deer on Dolores Triangle subunit).

Short-term Objective

La Sal Mountains - No change needed in population objective. Desirable Components Index (DCI) scores from the 2014 range trend survey show that out of 9 undisturbed monitoring sites, 4 sites are in the "good" to "fair" classification range and 5 sites are in the "poor" to "very poor" classification range. Disturbed/treated sites have improved from "very poor" to "poor - fair" classification range, post disturbance/treatment. Trend of DCI scores from previous surveys is stable, however there is some continued declines in browse cover and perennial forb cover in concentrated areas. These areas are slated for habitat restoration projects in the near future.

Dolores Triangle - A 20% reduction in population objective to 5,100 deer was implemented in 2006 due to poor range conditions indicated by low DCI values. The reduced short-term population objective will remain until range conditions improve to an overall "fair" DCI rating.

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Antlerless removal is not needed immediately because the current deer population is <50% of objective and fawn production is poor. If the deer population approaches the short-term objective, antlerless removal in specific problem areas will be utilized. Although the DCI score from the 2010 range trend survey is at lower end of "poor" classification range, there is no apparent trend of DCI scores from previous surveys. Slight fluctuations in the DCI scores have been primarily due to changes in perennial and annual grass cover. The heaviest browse utilization is in small sagebrush parks in lower Westwater that are adjacent to agricultural fields. These fields concentrate large numbers of wintering deer in the area. Losses in browse cover and increases in annual grasses in the trend study plots in Westwater are largely responsible for the very poor DCI score. Browse utilization in other areas is not excessive however, 2010 DCI scores on three other sites are at very poor classification. Biologists will keep an eye on these areas throughout the life of this plan and act appropriately if habitat conditions continue to decline. This deer herd is primarily managed by Colorado hunting strategies. The number of deer wintering in this unit is dependent on winter severity, but even with normal snow levels, recent deer numbers using this winter range have declined considerably due to low population.

Subunit	Long-term Objective	2015-2019 Objective
La Sal Mountains	13,000	13,000
Dolores Triangle	6,400	5,100
UNIT TOTAL	19,400	18,100

Herd Composition

La Sal Mountains - Maintain a three-year average postseason ratio of 15-17 bucks per 100 does, in accordance with the statewide plan. Caution will be used when adjusting permits and trends of population indicators will be considered.

Dolores Triangle - Maintain a three-year average postseason ratio of 25-35 bucks per 100 does, in accordance with the statewide plan.

<u>Harvest</u>

La Sal Mountains - Continue general season unit by unit buck deer hunt management, using archery, rifle and muzzleloader hunts. Antlerless removal will be implemented when needed to achieve the target population size and to address specific localized crop depredation or range degradation concerns, using a variety of harvest methods and seasons. It is recognized that buck harvest may fluctuate due to climatic and productivity variables. Buck harvest strategies will be developed through the RAC and Wildlife Board process to achieve management objectives.

Dolores Triangle - Continue limited entry hunting to maintain herd composition objectives and quality hunting opportunities. Utilize antlerless harvest when population objectives are met or to address specific habitat and depredation concerns.

POPULATION MANAGEMENT STRATEGIES

Monitoring

Population Size

La Sal Mountains - Population estimate will be made based on fall and spring herd composition counts conducted by biologists, harvest surveys, and mortality estimates based on radio collar studies and range rides. These data will be used in computer models to determine a winter deer herd population size. The modeled population estimate for the winter of 2015 was 6,900 deer on the La Sal Mountains subunit.

Dolores Triangle - Deer population will be modeled by the Colorado Division of Parks and Wildlife as part of their Unit #40 deer herd. About 40% of this herd winters in Utah; therefore, 40% of Colorado's population estimate for Unit #40 was used as Utah's population estimate. The modeled population estimate for the winter of 2015 was 2,100 deer on the Dolores Triangle subunit.

<u>Buck Age Structure</u> - Monitor age class structure of the buck population through the use of check stations, postseason classification, uniform harvest surveys and field bag checks.

<u>Harvest</u> - The primary means of monitoring harvest will be through the statewide uniform harvest survey and the use of check stations.

<u>Research</u> - Continue radio telemetry survival study on regional representative unit (San Juan). At the conclusion of the San Juan study, consider switching the study to the La Sal Mountains to document habitat use, survival, and seasonal ranges of deer. Also consider cooperating with Colorado Division of Parks and Wildlife in initiating a black bear predation study.

Year	Buck harvest	Post- Season F/100 doe	Post- Season B/100 doe	Post- Season Population	Objective	% of Objective
2012	587	48	11	7,200	13,000	55%
2013	562	53	17	6,300	13,000	48%
2014	545	56	14	7,100	13,000	55%
3 Year Avg	565	52	14			

Population Trends and Harvest for the La Sal, La Sal Mountains (13a) Deer Subunit

Population Trends and Harvest for the La Sal, Dolores Triangle (13b) Deer Subunit

Year	Buck harvest	Post- Season F/100 doe	Post- Season B/100 doe	Post- Season Population	Objective (Short-term)	% of Objective
2012	10	65	22	2,500	5,100	49%
2013	13	65	24	2,600	5,100	51%
2014	13	47	19	2,300	5,100	45%
3 Year Avg	12	59	22			

Disease Management

Investigate and manage diseases that threaten mule deer populations and continue monitoring for chronic wasting disease (CWD) as stated in the Statewide plan. The La Sal Mountains subunit is a CWD positive unit. The deer population and sex ratio should be managed on this unit at levels necessary to reduce the risk of CWD transmission. Continue surveillance through check stations and other methods to document prevalence, and location of positive animals.

Limiting Factors (may prevent achieving management objectives)

<u>Crop Depredation</u> - Take all steps necessary to minimize depredation as prescribed by state law and DWR policy.

<u>Habitat</u> - Monitor range conditions and deer use to maintain habitat quality necessary to achieve population objectives (see <u>Habitat Management Strategies</u>). Identify areas on the **La Sal Mountains** where deer escapement could be enhanced through permanent or temporary road closures or other restrictions on motorized access. The **Dolores Triangle** subunit is entirely winter range for the Colorado unit #40 deer herd. Excessive habitat utilization will be addressed through antlerless harvest in specific problem areas.

<u>Predation</u> - Follow DWR predator management policy:

- If the population estimate is less than 90% of objective and is stable or decreasing and fawn to doe ratio drops below 70 for 2 of the last 3 years or if the fawn survival rate drops below 50% for one year, then a Predator Management Plan targeting coyotes will be implemented on that subunit. If the population trend is increasing the population must be below 65% of objective and meet the above criteria in order to initiate Predator Management for Coyotes. In 2015, the La Sal unit qualified for predator management specific to coyotes as the population trend was stable and <90% of objective with <70 fawns:100 does for 2 of the last 3 years.
- If the population estimate is less than 90% of objective and the doe survival rate drops below 85% for 2 of the last 3 years or below 80% for one year, then a Predator Management Plan targeting cougar would be implemented on that subunit. This unit qualified for predator management specific to cougars in 2015 as adult doe survival has been below 85% for 2 of the past 3 years.

<u>Highway Mortality</u> - Cooperate with the Utah Dept. of Transportation in construction of highway fences, passage structures and warning signs, etc. Collect highway mortality data. Propose analysis of SR-46 to minimize highway mortalities in the future. Highway mortality will be monitored and the need for additional highway fences, passage structures and warning signs will be evaluated.

<u>Illegal Harvest</u> - Should illegal kill become an identified and significant source of mortality attempt to develop specific preventive measures within the context of an action plan developed in cooperation with the Law Enforcement section.

HABITAT MANAGEMENT OBJECTIVES

Protect, maintain, and/or improve deer habitat through direct range improvements to support and maintain herd population management objectives.

Work with private landowners and federal, state, and local governments to maintain and protect critical and existing ranges from future losses and degradation through grazing management and OHV and Travel Plan modifications.

Work with federal, private, and state partners to improve crucial deer habitats through the WRI process.

Work with federal and state partners in fire rehabilitation on crucial deer habitat through the WRI process

Maintain and protect critical winter range from future losses. Acquire critical winter range when the opportunity arises.

Minimize and mitigate impacts from energy development activities. Page 5 of 11 Minimize deer vehicle collisions along highways on the unit.

HABITAT MANAGEMENT STRATEGIES

Continue to improve, protect, and restore summer and winter range habitats critical to deer, such as aspen and sagebrush steppe communities. Cooperate with federal land management agencies and private landowners in carrying out habitat improvements such as pinion-juniper removal, reseedings, controlled burns, mechanical treatments, grazing management, water developments etc. on public and private lands. Continue to monitor permanent range trend studies located throughout the unit.

Conduct cooperative seasonal range assessments to evaluate forage condition and utilization. Determining opportunities for habitat improvements will be an integral part of these surveys. This will also be pivotal in determining if antlerless harvest is necessary.

Work toward long term habitat protection and preservation through the use of agreements with federal agencies and local governments and the use of Conservation Easements etc. on private lands.

Support, cooperate with, and provide input to land management planning efforts dealing with actions affecting habitat security, quality and quantity.

Work with land management agencies and energy companies to minimize and mitigate impacts of energy development activities.

Work with land management agencies in managing riparian areas in critical fawning habitat to furnish water, cover and succulent forage from mid- to late summer.

Protect deer winter ranges from wildfire by reseeding burned areas, creating fuel breaks and vegetated green strips and reseed areas dominated by annual grasses with desirable perennial vegetation.

Reduce expansion of Pinion-Juniper woodlands into sagebrush habitats and improve habitats dominated by Pinion-Juniper woodlands by completing habitat restoration projects like lop & scatter, bullhog, and chaining.

Seek opportunities to increase browse in burned areas of critical winter range.

Utilize antlerless deer harvest to improve or protect forage conditions when vegetative declines are attributed to deer over utilization.

PERMANENT RANGE TREND SUMMARIES

Unit 13A - La Sal, La Sal Mountains

Deer Winter Range Condition Assessment

The condition of deer winter range within the La Sal Mountains management unit has continually changed on the sites sampled since 1994. The undisturbed sites samples within the unit are considered to be in very poor to good condition as of the 2014 sampling year (Figure 1.44). Amasas Back and round Mountain remained in poor condition due to the amount of annual grass present, having few perennial forbs, and the lack of diversity within the sagebrush demographics. Two Mile Chaining, Buck Hollow, and Lower Lackey Fan ranged from fair to poor, Slaughter Flat and Below Polar Rim ranged from poor to good, and North Beaver Mesa and Hideout Mesa remained mostly in good condition. The treated study sites have gone from very poor to poor (Figure 1.45). The three treated studies that fall within winter range are Black Ridge, Black Ridge Fuels Reduction, and Pack Creek. They all started out in very poor condition prior to treatment and since treatment have improved to fair condition (Map 1). It is possible given more time and continual monitoring that these sites will continue to improve. See Utah Big Game Range Trend Unit Summaries 2014 Wildlife Management Units 13A, 14, 15, 16B/16C (Publication No. 15-10) for more information.







Figure 1.45: Deer winter range Desirable Components Index (DCI) summary by year of treated/disturbed sites for WMU 13A, La Sal Mountains.



Map 1: Deer winter range Desirable Components Index (DCI) ranking distribution by study site of most current sample date as of 2014 for WMU 13A, La Sal Mountains.

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Treatments/Restoration Work

There has been an active effort to address many of the limitations on this unit through the Watershed Restoration Initiative (WRI). A total of 8,502 acres of land have been treated within the La Sal Mountains unit since the WRI was implemented in 2004. Treatments frequently overlap one another bringing the total treatment acres to 11,442 acres for this unit (Table 1) (Map 2). Other treatments have occurred outside of the WRI through independent agencies and landowners, but the WRI comprises the majority of work done on deer winter ranges throughout the State of Utah.

Herbicide application to remove weeds is the most common management practice. The use of seeding to supplement the herbaceous understory is also very common. Other management practices include bullhog and anchor chain for pinyon pine and Utah juniper removal, greenstripping, and other similar vegetation removal techniques.

Treatment Action	Acres
Anchor chain	627
Bullhog	773
Greenstripping	877
Harrow	21
Herbicide Application	6,139
PJ push	4
Planting/transplanting	16
Prescribed fire	48
Road	147
Roller chopper	1
Seeding (primary)	2,269
Vegetation removal / hand crew	520
*Total Land Area Treated	8,502
Total Treatment Acres	11,442

Table 1: WRI treatment action size (acres) for WMU 13A, La Sal Mountains.

 *Does not include overlapping treatments.



Map 2: WRI treatments by fiscal year completed for WMU 13A, La Sal Mountains.

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Discussion and Recommendations

Summer Range Habitats

Summer habitats at high elevations on this unit include spruce-fir, aspen, alpine, and mountain shrub habitat types. These areas are generally considered to be in good condition for deer summer range habitat. This community supports a diverse herbaceous understory that provides valuable forage during the summer months. While in generally good condition, major concerns include conifer encroachment in to aspen stands, an abundance of introduced aggressive perennial grasses, and noxious weeds. All of which have an impact on the quality and quantity of forb species important to mule deer.

It is recommended that monitoring of this community continue. When reseeding is necessary to restore herbaceous species, care should be taken in species selection and preference should be given to native grass species when possible. Additional actions may be necessary to reduce the presence of noxious weeds within this community type.

Habitat projects that promote aspen and forb communities as well as a diverse age structure of the forest are recommended. Such projects may include: prescribed fire, timber management, mechanical treatment, and grazing management. If reseeding is necessary to restore herbaceous species, care should be taken in species selection and preference should be given to native grass species when possible. Monitoring should also continue in order to watch for the presence of noxious weeds within this community type.

Winter Range Habitats

Winter range habitats include sagebrush steppe, pinyon-juniper woodlands, and salt desert shrub habitats. These mid elevation upland communities are generally variable in deer winter range with many of the communities in poor to very poor condition; however, there are a few communities that are considered to be in good to excellent condition. These communities support many vegetation types including the following: black sagebrush, basin big sagebrush, Wyoming big sagebrush, mountain big sagebrush, antelope bitterbrush, and mahogany species. These communities support large, dense shrub populations that provide valuable browse in mild to moderate winters for deer. These communities are prone to encroachment from pinyon-juniper trees which can reduce understory shrub and herbaceous health if not addressed. Many of these stands show very high utilization by ungulates. As a result, many stands are decadent. Annual grasses, primarily cheatgrass, can be an issue within these communities. Increased amounts of cheatgrass can increase fuel loads and increase the threat of wildfire within these communities. If wildfire occurs within these communities they lose most of their value as deer winter range and reestablishment of valuable browse species is typically slow.

It is strongly recommended that work to prevent and reduce pinyon-juniper encroachment should continue in these communities. When reseeding is necessary to restore herbaceous species, care should be taken in species selection and preference should be given to native grass species when possible. Moreover, care should be taken in selecting treatment methods that will not increase annual grass loads. Treatments to reduce annual grass may be necessary on some sites. Work to diminish fuel loads and create fire breaks should continue in order to reduce the threat of catastrophic fire that results in the loss of preferred browse. If a treatment to rejuvenate sagebrush occurs, care should be taken in selecting treatment methods that will not increase annual grass loads.

Proposed and recommended project locations to improve deer winter habitat on the La Sal Mountains are: Buck Hollow, Middle Mesa, and Adobe Mesa.

DEER HERD UNIT MANAGEMENT PLAN Deer Herd Unit # 14 San Juan October 2015

BOUNDARY DESCRIPTIONS

Grand and San Juan Counties - Boundary begins at the confluence of the San Juan and Colorado rivers; north along the Colorado river to Kane Springs Creek; southeast along this creek to Hatch Wash; southeast along this wash to US-191; south on this road to the Big Indian road; east on this road to the Lisbon Valley road; southeast on this road to the Island Mesa road; east on this road to the Colorado state line; south on this line to the Navajo Indian Reservation boundary; southwest along this boundary to the San Juan River; west on this river to the Colorado River.

This boundary includes two subunits including:

<u>Unit 14A - San Juan, Abajo Mountains</u> - Grand and San Juan Counties - Boundary begins at the junction of Highway US-163 and South Cottonwood Creek (near Bluff); then north along this creek to Allen Canyon; north along this canyon to Chippean Canyon; north along this canyon to Deep Canyon; north along this canyon to Mule Canyon; north along this canyon to the Causeway; north from the Causeway to Trough Canyon; north along this creek to the Colorado River; north along this river to Kane Springs Creek; southeast along this creek to Hatch Wash; southeast along this wash to Highway US-191; south on this road to the Big Indian road; east on this road to the Lisbon Valley road; southeast on this road to the Island Mesa road; east on this road to the Colorado state line; south on this line to the Navajo Indian Reservation boundary; west and south along this boundary to the San Juan River; west on this river to Highway US-163; then east on this highway to South Cottonwood Creek.

<u>Unit 14B - San Juan, Elk Ridge</u> - San Juan County - Boundary begins at the junction of highway US-163 and South Cottonwood Creek (near Bluff); north along this creek to Allen Canyon; north along this canyon to Chippean Canyon; north along this canyon to Deep Canyon; north along this canyon to Mule Canyon; north along this canyon to the Causeway; north from the Causeway to Trough Canyon; north along this canyon to North Cottonwood Creek; north along this creek to Indian Creek; north along this creek to the Colorado River; south on this river to the San Juan River; east on this river to highway US-163; east on this highway to South Cottonwood Creek.

LAND OWNERSHIP

Subunit 14A - San Juan, Abajo Mountains

RANGE AREA AND APPROXIMATE OWNERSHIP

	Yearlong range Summer Range			Winter Range		
Ownership	Area (acres)	%	Area (acres)	%	Area (acres)	%
Forest Service			130454	38%	1670	<1%
Bureau of Land Management			75780	22%	420722	61%
Utah State Institutional Trust Lands			9219	3%	59981	9%
Native American Trust Lands			0	0%	12	<1%
					· · · · · ·	1

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Private	125767	37%	210695	30%
National Parks	0	0%	390	<1%
Utah State Parks	0	0%	0	0%
Division of Wildlife Resources	0	0%	0	0%
TOTAL	341220	100%	693470	100%

Subunit 14B - San Juan, Elk Ridge

	Yearlong	range	Summer	Range	Winter Range	
Ownership	Area (acres)	%	Area (acres)	%	Area (acres)	%
Forest Service	225	<1%	168372	65%	19210	3%
Bureau of Land Management	64649	94%	50048	19%	505156	76%
Utah State Institutional Trust Lands	4055	6%	4688	2%	50213	8%
Native American Trust Lands	0	0%	0	0%	7	<1%
Private	0	0%	3076	1%	6042	<1%
National Parks	15	<1%	69	<1%	54196	8%
National Recreation Area	0	0	0	0	10983	2%
USFS & BLM Wilderness Area	106	<1%	32973	13%	12679	2%
Utah Division of Wildlife Resources	0	0%	0	0%	0	0%
TOTAL	69050	100%	259226	100%	658486	100%

RANGE AREA AND APPROXIMATE OWNERSHIP

UNIT MANAGEMENT GOALS

Maintain a healthy mule deer population within the long term carrying capacity of the available habitat, based on winter range trend studies conducted by the DWR every five years.

Manage the deer population at a level capable of providing a broad range of recreational opportunities, including hunting and viewing.

Balance deer herd goals and objectives with impacts on human needs, such as private property rights, agricultural crops and local economies.

POPULATION MANAGEMENT OBJECTIVES

Target Winter Herd Size - Manage for a target population of 20,500 wintering deer (modeled number) during the five-year planning period unless range conditions become unsuitable, as evaluated by DWR. Range Trend data coupled with annual browse monitoring will be used to assess habitat condition.

Biologists will continue to carefully monitor winter ranges and make recommendations to improve and protect winter habitat. Should over-utilization and range damage by deer occur, recommendations will be made to reduce deer populations to sustainable levels in localized areas.

Long-term Objective - Achieve a winter target population of 20,500 deer.

(13,500 deer on Abajo Mountains subunit and 7,000 deer on Elk ridge subunit).

Short-term Objective

Abajo Mountains – No change needed in population objective. Desirable Components Index (DCI) scores from the 2014 range trend survey show that out of 14 undisturbed monitoring sites, 8 sites are in the "good" to "fair" classification range and 6 sites are in the "poor" to "very poor" classification range. Disturbed/treated sites have improved with 11 sites in the "good" to "fair" classification range and 5 sites in the "poor" to "very poor" classification range, post disturbance/treatment.

Elk Ridge – A 20% reduction in population objective to 5,600 deer will be implemented in 2015 due to poor, localized range conditions. Beef Basin, which represents approximately 20% of crucial deer winter range on the subunit, has experienced severe reductions in sagebrush abundance since 1994, promoting an increase in annual grasses, mostly cheat grass. The 2014 DCI overall rating for sites in this area are "very poor". The reduced short-term population objective will remain until range conditions improve to an overall "fair" DCI rating. Antlerless removal is not needed immediately because the current deer population is <50% of objective and fawn production is poor. If the deer population approaches the short-term objective, antlerless removal in specific problem areas will be considered.

Subunit	Long-term Objective	2015-2019 Objective	Change
Abajo Mountains	13,500	13,500	0
Elk Ridge	7,000	5,600	-1,400
UNIT TOTAL	20,500	19,100	-1,400

Herd Composition

Abajo Mountains – Maintain a three-year average postseason ratio of 15-17 bucks per 100 does, in accordance with the statewide plan. Caution will be use when adjusting permits and trends of population indicators will be considered.

Elk Ridge – Maintain a three-year average postseason ratio of 25-35 bucks per 100 does, in accordance with the statewide plan.

<u>Harvest</u>

Abajo Mountains - Continue general season unit by unit buck deer hunt management, using archery, rifle and muzzleloader hunts. Antlerless removal will be implemented when needed to achieve the target population size and to address specific localized crop depredation or range degradation concerns, using a variety of harvest methods and seasons. It is recognized that buck harvest may fluctuate due to climatic and productivity variables. Buck harvest strategies will be developed through the RAC and Wildlife Board process to achieve management objectives.

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Elk Ridge - Continue limited entry hunting to maintain herd composition objectives and quality hunting opportunities. Utilize antlerless harvest when population objectives are met or to address specific habitat and depredation concerns.

POPULATION MANAGEMENT STRATEGIES

Monitoring

<u>Population Size</u> - The **Abajo Mountains** and **Elk Ridge** population estimates will be made based on fall and spring herd composition counts conducted by biologists, harvest surveys, and mortality estimates based on radio collar studies and range rides. These data will be used in computer models to determine a winter deer herd population size. The modeled population estimate for the winter of 2015 was 10,700 deer on the Abajo Mountains subunit and 700 deer on the Elk Ridge subunit.

<u>Buck Age Structure</u> - Monitor age class structure of the buck population through the use of check stations, postseason classification, uniform harvest surveys and field bag checks.

<u>Harvest</u> - The primary means of monitoring harvest will be through the statewide uniform harvest survey and the use of check stations.

<u>Research</u> - Continue radio telemetry survival study on the San Juan unit as a regional representative unit.

Year	Buck harvest	Post- Season F/100 doe	Post- Season B/100 doe	Post- Season Population	Objective	% of Objective
2012	873	53	14	11,200	13,500	83%
2013	945	62	17	8,300	13,500	62%
2014	904	52	20	9,900	13,500	73%
3 Year Avg	907	56	17			

Population Trends and Harvest for the San Juan, Abajo Mountains (14a) Deer Subunit -

Population Trends and Harvest for the San Juan, Elk Ridge (14b) Deer Subunit -

Year	Buck harvest	Post- Season F/100 doe	Post- Season B/100 doe	Post- Season Population	Objective	% of Objective
2012	43	42	24	2,000	7,000	29%
2013	46	51	24	800	7,000	11%
2014	44	38	36	600	7,000	9%
3 Year Avg	44	44	28			

Disease Management

Investigate and manage diseases that threaten mule deer populations and continue monitoring for chronic wasting disease (CWD) as stated in the Statewide plan. This unit is a CWD positive unit. Continue surveillance through check stations and other methods to document prevalence, and location of positive animals.

Urban Deer Management

Continue working with municipalities on localized urban deer control management actions. Work cooperatively with municipalities in developing urban deer management plans, within the guidelines set by state law and agency policies.

Limiting Factors (may prevent achieving management objectives)

<u>Crop Depredation</u> - Take all steps necessary to minimize depredation as prescribed by state law and DWR policy.

<u>Habitat</u> - Monitor range conditions and deer use to maintain habitat quality necessary to achieve population objectives (see <u>Habitat Management Strategies</u>). Identify areas where deer escapement could be enhanced through permanent or temporary road closures or other restrictions on motorized access.

<u>Predation</u> - Follow DWR predator management policy:

- If the population estimate is less than 90% of objective and is stable or decreasing and fawn to doe ratio drops below 70 for 2 of the last 3 years or if the fawn survival rate drops below 50% for one year, then a Predator Management Plan targeting coyotes will be implemented on that subunit. If the population trend is increasing the population must be below 65% of objective and meet the above criteria in order to initiate Predator Management for Coyotes. In 2015, the San Juan unit qualified for predator management specific to coyotes as the population trend was decreasing and <90% of objective with <70 fawns:100 does for 2 of the last 3 years.
- If the population estimate is less than 90% of objective and the doe survival rate drops below 85% for 2 of the last 3 years or below 80% for one year, then a Predator Management Plan targeting cougar would be implemented on that subunit. This unit qualified for predator management specific to cougars in 2015 as adult doe survival has been below 85% for 2 of the past 3 years.

<u>Highway Mortality</u> - Cooperate with the Utah Dept. of Transportation in construction of highway fences, passage structures and warning signs, etc. Highway mortality will continue to be monitored and the need for additional highway fences, passage structures and warning signs will be evaluated.

<u>Illegal Harvest</u> - Should illegal kill become an identified and significant source of mortality attempt to develop specific preventive measures within the context of an action plan developed in cooperation with the Law Enforcement section.

HABITAT MANAGEMENT OBJECTIVES

Protect, maintain, and/or improve deer habitat through direct range improvements to support and maintain herd population management objectives.

Work with private landowners and federal, state, and local governments to maintain and protect critical and existing ranges from future losses and degradation through grazing management and OHV and Travel Plan modifications.

Work with federal, private, and state partners to improve crucial deer habitats through the WRI process.

Work with federal and state partners in fire rehabilitation on crucial deer habitat through the WRI process

Maintain and protect critical winter range from future losses. Acquire critical winter range when the opportunity arises.

Minimize and mitigate impacts from energy development activities.

Minimize deer vehicle collisions along highways on the unit.

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HABITAT MANAGEMENT STRATEGIES

Continue to improve, protect, and restore summer and winter range habitats critical to deer, such as aspen and sagebrush steppe communities. Cooperate with federal land management agencies and private landowners in carrying out habitat improvements such as pinion-juniper removal, reseedings, controlled burns, mechanical treatments, grazing management, water developments etc. on public and private lands. Continue to monitor permanent range trend studies located throughout the unit.

Coordinate with and support Universities and land management agencies on habitat research projects. Specifically, Utah State University's current sagebrush restoration project on four of the main winter ranges within the San Juan unit.

Continue to monitor permanent range trend studies located throughout the unit.

Conduct cooperative seasonal range assessments to evaluate forage condition and utilization. Determining opportunities for habitat improvements will be an integral part of these surveys. This will also be pivotal in determining if antlerless harvest is necessary.

Work toward long term habitat protection and preservation through the use of agreements with federal agencies and local governments and the use of conservation easements on private lands.

Support, cooperate with, and provide input to land management planning efforts dealing with actions affecting habitat security, quality and quantity.

Work with land management agencies and energy companies to minimize and mitigate impacts of energy development activities.

Work with land management agencies in managing riparian areas in critical fawning habitat to furnish water, cover and succulent forage from mid- to late summer.

Protect deer winter ranges from wildfire by reseeding burned areas, creating fuel breaks and vegetated green strips and reseed areas dominated by annual grasses with desirable perennial vegetation.

Reduce expansion of pinion-juniper woodlands into sagebrush habitats and improve habitats dominated by pinion-juniper woodlands by completing habitat restoration projects like lop & scatter, bullhog, and chaining.

Seek opportunities to increase browse in burned areas of critical winter range.

Utilize antlerless deer harvest to improve or protect forage conditions when vegetative declines are attributed to deer over utilization.

PERMANENT RANGE TREND SUMMARIES

Unit 14 - San Juan

Deer Winter Range Condition Assessment

The condition of deer winter range within the San Juan management unit has fluctuated on the study sites sampled since 1992/94. The majority of the sites sampled within the unit are considered to be in good to poor condition based on the most current sample data. The sites classified as being in poor or very poor condition are sites with decreasing or little amounts of sagebrush and little to no recruitment of young sagebrush plants to the community (Figure 2.43 and Figure 2.44). The condition of disturbed and treated sites typically improves with increased time after treatment or disturbance. The majority of disturbed or treated study sites that ranked as being in poor or very poor condition 6-10 years after disturbance are sagebrush improvement and pinyon-juniper reduction projects. These study sites are generally still lacking in available browse species (Map 1). See Utah Big Game Range Trend Unit Summaries 2014 Wildlife Management Units 13A, 14, 15, 16B/16C (Publication No. 15-10) for more information.





Figure 2.43: Deer winter range Desirable Components Index (DCI) summary by year of undisturbed sites for WMU 14, San Juan.

Figure 2.44: Deer winter range Desirable Components Index (DCI) summary by year of treated/disturbed sites for WMU 14, San Juan.



Map 1: Deer winter range Desirable Components Index (DCI) ranking distribution by study site of most current sample date as of 2014 for WMU 14, San Juan.

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Treatments/Restoration Work

There has been an active effort to address many of the limitations on this unit through the Watershed Restoration Initiative (WRI). A total of 16,721 acres of land have been treated within the San Juan unit since the WRI was implemented in 2004. Treatments occasionally overlap one another bringing the total treatment acres to 17,502 acres for this unit (Table 1) (Map 2). Other treatments have occurred outside of the WRI through independent agencies and landowners, but WRI projects comprise the majority of work done on deer winter range throughout the State of Utah.

Treatments to reduce pinyon-juniper woodlands such as bullhog, chaining, and lop-and-scatter are common management practices on this unit. Other common management treatments are those to rejuvenate sagebrush stands such as herbicide, disc, and harrow. In addition, many of these treatments have been seeded to increase more desirable plant species.

Treatment Action	Acres
Bullhog	5,269
Seeding	4,665
Harrow	2,351
Anchor Chain	1,947
Lop and Scatter	1,862
Herbicide	1,107
Disc	276
Prescribed Fire	22
Aerator	4
*Total Land Area Treated	16,721
Total Treatment Acres	17,502

 Table 1: WRI treatment action size (acres) for WMU 14, San Juan.

 *Does not include overlapping treatments.



Map 2: WRI treatments by fiscal year completed for WMU 14, San Juan.

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Discussion and Recommendations

Summer Range Habitats

Summer habitats at high elevations on this unit include conifer, aspen, alpine, and mountain shrub habitat types. These areas are generally considered to be in good condition for deer summer range habitat. This community supports a diverse herbaceous understory that provides valuable forage during the summer months. While in generally good condition, major concerns include conifer encroachment in to aspen stands, an abundance of introduced aggressive perennial grasses, and noxious weeds. All of which have an impact on the quality and quantity of forb species important to mule deer.

It is recommended that monitoring of this community continue. When reseeding is necessary to restore herbaceous species, care should be taken in species selection and preference should be given to native grass species when possible. Additional actions may be necessary to reduce the presence of noxious weeds within this community type.

Habitat projects that promote aspen and forb communities as well as a diverse age structure of the forest are recommended. Such projects may include: prescribed fire, timber management, mechanical treatment, and grazing management. If reseeding is necessary to restore herbaceous species, care should be taken in species selection and preference should be given to native grass species when possible. Monitoring should also continue in order to watch for the presence of noxious weeds within this community type.

Proposed and recommended habitat project locations for these community types are: North Elk Ridge, Maverick Point and Mormon Pasture Mountain.

Winter Range Habitats

Winter range habitats include sagebrush steppe, pinyon-juniper woodlands, and salt desert shrub habitats. These mid elevation upland communities are generally variable in deer winter range with many of the communities in poor to very poor condition; however, there are a few communities that are considered to be in good to excellent condition. These communities support many vegetation types including the following: black sagebrush, basin big sagebrush, Wyoming big sagebrush, mountain big sagebrush, antelope bitterbrush, and mahogany species. These communities support large, dense shrub populations that provide valuable browse in mild to moderate winters for deer. These communities are prone to encroachment from pinyon-juniper trees which can reduce understory shrub and herbaceous health if not addressed. Many of these stands show very high utilization by ungulates. As a result, many stands are decadent. Annual grasses, primarily cheatgrass, can be an issue within these communities. Increased amounts of cheatgrass can increase fuel loads and increase the threat of wildfire within these communities. If wildfire occurs within these communities they lose most of their value as deer winter range and reestablishment of valuable browse species is typically slow.

It is strongly recommended that work to prevent and reduce pinyon-juniper encroachment should continue in these communities. When reseeding is necessary to restore herbaceous species, care should be taken in species selection and preference should be given to native grass species when possible. Moreover, care should be taken in selecting treatment methods that will not increase annual grass loads. Treatments to reduce annual grass may be necessary on some sites. Work to diminish fuel loads and create fire breaks should continue in order to reduce the threat of catastrophic fire that results in the loss of preferred browse. If a treatment to rejuvenate sagebrush occurs, care should be taken in selecting treatment methods that will not increase annual grass loads.

Proposed and recommended habitat project locations for these community types are: Alkali Ridge, Cedar Point, Harts Draw, Mustang Flat, Beef Basin, Dark Canyon Plateau, East Rim Cottonwood Canyon, and Pickett Fork.

DEER HERD UNIT MANAGEMENT PLAN Deer Herd Unit # 15 Henry Mountains October 2015

BOUNDARY DESCRIPTION

Garfield, Kane and Wayne counties—Boundary begins on SR-95 at a point two miles south of Hanksville; south on SR-95 to Lake Powell; south along the west shore of Lake Powell to SR-276 at Bullfrog; north on SR-276 to the Burr Trail-Notom road; north on this road to the Capitol Reef National Park boundary; north on this boundary to the Burr Trail-Notom road at The Narrows and Divide Canyon; north on this road to a point two miles south of SR-24; east along a line that is two miles south of SR-24 to SR-95. EXCLUDES ALL NATIONAL PARKS. USGS 1:100,000 Maps: Escalante, Hanksville, Hite Crossing, Loa.

RANGE AREA AND APPROXIMATE OWNERSHIP							
	Yearlong	range	Summer	Range	Winter Range		
Ownership	Area (acres)	%	Area (acres)	%	Area (acres)	%	
Bureau of Land Management	26,714	80%	32,507	85%	263,516	88%	
Private	3,848	11%	1,362	4%	6,492	2%	
Utah State Institutional Trust Lands	3,029	9%	4,396	11%	31,001	10%	
UDOT	0	0%	0	0%	27	<1%	
TOTAL	33,591	100%	38,265	100%	100785	100%	

LAND OWNERSHIP

UNIT MANAGEMENT GOALS

Maintain a healthy mule deer population at a level that is within the long term carrying capacity of the available habitat, based on winter range trend studies conducted by the DWR every five years.

Manage the deer population in a Premium Limited Entry unit capable of providing a broad range of recreational opportunities, including hunting and viewing.

Balance deer herd goals and objectives with impacts on human needs, such as private property rights, agricultural crops and local economies.

POPULATION MANAGEMENT OBJECTIVES

Target Winter Herd Size

Manage for a target population of 2,700 wintering deer (modeled number) during the five-year planning period unless range conditions become unsuitable, as evaluated by DWR. This population target is an increase of 700 deer from previous management plan objective and 500 above the 2014 estimate of 2200 wintering deer on the unit. Deer population estimates over the past 10 years indicate an increasing population. Fawn production and survival has been very good overall during this time period and remains high. Range trend data coupled with annual browse monitoring, used to assess the habitat condition, has been reviewed to support the increase in the population objective.

Herd unit management directives require deer populations to be managed according to range conditions based on DCI scores on winter ranges. Management toward the population objective should consider the following;

- Management efforts should focus on improving deer habitat and carrying capacity.
- Declines in winter range carrying capacity are currently not entirely a result of over utilization by deer.
- Population control (if needed) and habitat improvement projects should be focused on areas where range degradation is most prevalent.
- Biologists should closely monitor summer range on the unit which is the limiting habitat carrying capacity as well as winter range.

Herd Composition

Manage premium limited entry units for a 3-year average of 40-55 bucks per 100 does with greater than 40% of harvested deer being 5 years of age or older.

POPULATION MANAGEMENT STRATEGIES

<u>Harvest</u>

<u>Premium Limited Entry</u> - As outlined in the Statewide Deer Management Plan, hunting seasons will include three weapon types based on the following percentages: 20% archery, 20% muzzleloader, and 60% any weapon which includes a multi-season hunting opportunity that will allow 3% of the hunters to hunt all seasons. Baseline premium limited entry permits for the public draw will be recommended at the 2014 level of 48 PLE permits on the Henry Mountains. Buck to doe ratio trends will also be considered when determining permit numbers. If 40% of harvested bucks (3-year average) are 5 years of age or older, premium limited entry permits will be recommended at the 2014 baseline number.

<u>Management Hunt</u> - Continue to provide a management buck hunt to allow additional hunting opportunity with a minimum of 10 permits. If the 3-year average buck-doe ratio exceeds 55 bucks per 100 does, management buck permits will be increased to bring the population towards objective.

Additional strategies to increase the management buck harvest may need to be developed in order to lower the buck-doe ratio to the management objective. Other strategies may be considered to address perceptions of hunter crowding. The check-in requirement has created situations where conservation officers are regularly needed to determine if a harvested buck is a "management buck" by definition.

Monitoring

<u>Population Size</u> - A population estimate will be made based on fall and spring herd composition counts conducted by biologists, harvest surveys, and mortality estimates based on radio collar studies and range rides. These data will be used in a computer model to determine a winter deer herd population size.

<u>Buck Age Structure</u> - Monitor age class structure of the buck population through the use of checking stations, postseason classification, uniform harvest surveys, field bag checks, and tooth analysis of harvested bucks.

 $\underline{\text{Harvest}}$ - Monitor harvest through the state wide uniform harvest survey and field bag checks.

Year	PLE	Mgt	PLE	PLE	Fawns/	Bucks/	Рор	Рор	% of
	Buck	Buck	Buck	Buck %	100	100	Est.	Obj.	Рор
	Harvest	Harvest	Avg	Age 5+	does	does			Obj.
			Age						
2012	45	28	4.9	64%	74	52	1900	2000	95%
2013	46	28	6.2	89%	60	55	1800	2000	90%
2014	47	28	6.6	63%	81	48	2200	2000	110%
3-Year Avg	46	28	5.9	72%	72	52			

Harvest and Population Trends for the Henry Mountains

Disease Management

Identify, understand, and monitor diseases that threaten mule deer, particularly Chronic Wasting Disease (CWD), Bluetongue and Epizootic Hemorrhagic Disease (EHD) as outlined in the State Mule Deer Management Plan.

Limiting Factors (may prevent achieving management objectives)

<u>Crop Depredation</u> - Take all steps necessary to minimize depredation as prescribed by state law and DWR policy. Depredation has not been a major factor on this unit.

<u>Habitat</u> - Quality summer range is more limiting than winter range on this unit. Sagebrush communities have persisted through the drought during the past decade on deer winter range.

<u>Pinyon-Juniper encroachment</u> - Maintenance on existing chainings began in 2007 to remove pinyon-juniper encroachment on both BLM and SITLA public lands. This work will enhance critical deer summer habitat for years to come.

<u>Predation</u> - The DWR predator management policy gives direction to managing predators on deer units:

- If the population estimate is less than 90% of objective and is stable or decreasing and fawn to doe ratio drops below 70 for 2 of the last 3 years or if the fawn survival rate drops below 50% for one year, then a Predator Management Plan targeting coyotes will be implemented on that subunit. If the population trend is increasing the population must be below 65% of objective and meet the above criteria in order to initiate Predator Management for Coyotes. The Henry's deer population has an increasing trend with a higher fawn to doe ratio and does not meet the conditions set forth in the Predator Management Plan for coyote removal at this time.
- If the population estimate is less than 90% of objective and the doe survival rate drops below 85% for 2 of the last 3 years or below 80% for one year, then a Predator Management Plan targeting cougar would be implemented. Currently under the new objective the Henry's deer population is at 81% of objective but doe survival is above the threshold and does not meet the conditions set forth in the Predator Management Plan for coyote removal.

<u>Highway Mortality</u> - Highway vehicle collisions with deer are very low on this unit. As a result, the construction of highway fences, passage structures and new warning signs etc. is not being considered at this time.

<u>Illegal Harvest</u> - Should illegal kill become an identified and significant source of mortality, actions will be taken to develop specific preventive measures within the context of an action plan developed in cooperation with the Law Enforcement Section.
\underline{Elk} - It is estimated that there are fewer than 30 elk on the unit. The elk population objective is zero animals. It is managed by hunter harvest to reach this objective. Elk do not pose a limiting factor to the deer herd on the Henry Mountain unit.

HABITAT MANAGEMENT OBJECTIVES

Protect, maintain, and/or improve deer habitat through direct range improvements to support and maintain herd population management objectives.

Work with private landowners and federal, state, and local governments to maintain and protect critical and existing ranges from future losses and degradation through grazing management and OHV and Travel Plan modifications.

Work with federal, private, and state partners to improve crucial deer habitats through the WRI process.

Work with federal and state partners in fire rehabilitation on crucial deer habitat through the WRI process.

Maintain and protect critical winter range from future losses. Acquire critical winter range when the opportunity arises.

Minimize and mitigate impacts from energy development activities.

Minimize deer vehicle collisions along highways on the unit if vehicle collisions become common.

HABITAT MANAGEMENT STRATEGIES

Continue to improve, protect, and restore sagebrush steppe habitats critical to deer. Cooperate with federal land management agencies and private landowners in carrying out habitat improvements such as pinion-juniper removal, reseedings, controlled burns, grazing management, water developments etc. on public and private lands. Habitat improvement projects will occur on both winter ranges as well as summer range.

Continue to monitor UDWR permanent range trend studies located throughout the unit to evaluate deer habitat health and trend based on important deer use areas.

<u>Winter Range</u> - Continue using the Desirable Components Index (DCI) which was created as an indicator of the general health of big game (deer) winter ranges. The index incorporates shrub cover, density, and age composition as well as other key vegetation variables. Decreases in DCI can suggest that winter range capacity has decreased. The relationship between a decrease in DCI and the reduction of deer carrying capacity is difficult to quantify and is not known.

 $\underline{Summer Range}$ - Develop an index/s to monitor trend on the unit's summer range such as a Bare Ground index.

Conduct cooperative seasonal range assessments to evaluate forage condition and utilization. Determining opportunities for habitat improvements will be an integral part of these surveys. This will also be pivotal in determining if antlerless harvest is necessary.

Work toward long term habitat protection and preservation through the use of agreements with federal agencies and local governments and the use of conservation easements, etc. on private lands.

Support, cooperate with, and provide input to land management planning efforts dealing with actions affecting habitat security, quality and quantity.

Work with land management agencies and energy companies to minimize and mitigate impacts of energy development activities.

Continue to monitor deer survival on this unit through radio telemetry studies. Use telemetry data to determine potential habitat improvement projects.

Manage vehicle access on Division of Wildlife Resources land to limit human disturbance during times of high stress, such as winter and fawning.

Manage riparian areas in critical fawning habitat to furnish water, cover and succulent forage from mid to late summer.

Protect deer winter ranges from wildfire by reseeding burned areas, creating fuel breaks and vegetated green strips and reseed areas dominated by cheat grass with desirable perennial vegetation.

Reduce expansion of pinion-juniper woodlands into sagebrush habitats and improve habitats dominated by pinion-juniper woodlands by completing habitat restoration projects like lop & scatter, bullhog, and chaining.

Seek opportunities to increase browse in burned areas of critical winter range.

Utilize antlerless deer harvest to improve or protect forage conditions when vegetative declines are attributed to deer over utilization.

PERMANENT RANGE TREND SUMMARIES

Deer Winter Range Condition Assessment

The condition of deer winter range within the Henry Mountains management unit has remained fairly consistent on the sites sampled since 1994 (Map 1). The undisturbed sites sampled within the unit are considered to be in very poor to good condition as of the 2014 sampling year (Figure 1). Cave Flat was sampled in 1994, 1999, 2001, and 2014 and has remained in good condition; as was Copper Creek, which was added in 2014. Steven's Mesa has ranged from very poor to poor, Swap Mesa remained fair, and Cave Flat Chaining very poor all due to a lack of browse cover and density. Dugout Creek, which has been very poor to fair, was good in 2009 because of an increase in density as well as a diversification of sagebrush demographics. The treated study sites range from very poor to good (Figure 2). In general, the treated sites have improved as time since treatment increases. South Creek Chaining, Bates Knob, and Sidehill Spring all went from poor to good; Eagle Bench and Airplane Spring went from fair to good; and Box Springs Chaining went from very poor to fair. Tarantula Mesa Lop and Scatter, Quaking Aspen Spring, and Coyote Spring all remained good, poor, and very poor, respectively. It is possible given more time and continual monitoring that these sites will continue to improve.

Deer Winter Range Condition Assessment taken from <u>Utah Big Game Range Trend Summaries 2014</u>, Publication 15-10, page 106.



Map 1: Deer winter range Desirable Components Index (DCI) ranking distribution by study site of most current sample date as of 2013 for WMU 15, Henry Mountains. From <u>Utah Big Game Range Trend Summaries 2014</u>, Publication 15-10, page 107.

Desirable Components Index







DCI graphs taken from Utah Big Game Range Trend Summaries 2014, Publication 15-10, page106

* Two undisturbed range trend sites, *Stevens Mesa (Very Poor) and Swap Mesa (Fair)*, were established to assess bison habitat and trend specifically for bison management and are not used for analyzing deer winter range in this plan. *Excluding these two sites from the 2014 Deer DCI, results in three sites in the Fair to Good category and one in the Poor category.*

* One treated range trend site, *Coyote Spring (Very Poor)*, was established to assess bison habitat and trend specifically for bison management and are not used for analyzing deer winter range in this plan. *Excluding this site from the 2014 Deer DCI, the results are three sites in the Good category and one in the Poor category.*

Treatments/Restoration Work

There has been an active effort to address many of the limitations on this unit through the Watershed Restoration Initiative (WRI). A total of 6,613 acres of land have been treated within the Henry Mountains unit since the WRI was implemented in 2004. Treatments frequently overlap one another bringing the total treatment acres to 9,199 acres for this unit. Other treatments have occurred outside of the WRI through independent agencies and landowners, but the WRI comprises the majority of work done on deer winter ranges throughout the State of Utah (Map 2).

The use of an aerator to diversify sagebrush demographics is the most common management practice in this unit. Seeding to augment the herbaceous understory is also very common. Other management practices include harrow, hand crews, anchor chain, and other similar vegetation removal techniques (Table 1).

Treatment Action	Acres
Aerator	3,180
Anchor chain	919
Bullhog	132
Harrow	1,296
Herbicide	17
Application	
Seeding (primary)	1,926
Vegetation	1,729
removal/hand crew	
*Total Land Area	6,613
Treated	
Total Treatment	9,199
Acres	

Table 1. WRI treatment action size (acres) for WMU 15, Henry Mountains. *Does not include overlapping treatments



Map 2 : WRI treatments by fiscal year completed for WMU 15, Henry Mountains. From <u>Utah Big Game Range Trend Summaries 2014</u>, Publication 15-10, page 89.

Discussion and Recommendations

Summer Range Habitats

Summer habitats at high elevations on this unit include mixed conifer (ponderosa pine, limber pine, douglas-fir, spruce, subalpine fir, and white fir), aspen, and mountain shrub summer habitat types. The mixed conifer and aspen areas are generally considered to be in good condition for deer summer range habitat. This community supports a diverse herbaceous understory that provides valuable forage during the summer months. While in generally good condition, major concerns include conifer encroachment into aspen stands, an abundance of introduced aggressive perennial grasses, and noxious weeds. All of which have an impact on the quality and quantity of forb species important to mule deer.

The mountain shrub habitat is generally considered to be in fair condition for deer winter range habitat on this unit. This community supports robust shrub populations that provide valuable browse in mild and moderate winters. This community can be susceptible to invasion from annual grasses, primarily cheatgrass. Increased amounts of cheatgrass can boost fuel loads and increase the threat of wildfire in these communities. The mountain shrub community is also prone to encroachment from pinyon-juniper trees, which can reduce understory shrub and herbaceous health if not addressed.

It is recommended that monitoring of summer range habitats continue. Habitat projects that promote aspen and forb communities as well as a diverse age structure of the forest are recommended. Such projects may include: prescribed fire, timber management, mechanical treatment, and grazing management. If reseeding is necessary to restore herbaceous species, care should be taken in selecting treatment methods that will not increase annual grass loads. When reseeding, species selection and preference should be given to native grass species when possible. It is recommended that work to reduce pinyon-juniper encroachment (e.g. bullhog, chaining, lop and scatter, etc.) should continue in these communities. Additional actions may be necessary to reduce the presence of noxious weeds within this community type. Monitoring should also continue in order to watch for the presence of noxious weeds within this community type followed with appropriate actions when discovered.

Winter Range Habitats

Winter range habitats include mid to low elevation areas and include Wyoming big sagebrush, black sagebrush, four-wing saltbush, and shadscale semidesert communities. The mid elevation semidesert communities of Wyoming big sagebrush and black sagebrush are considered to be in good condition. Lower elevation semidesert communities of four-wing saltbush is considered to be in fair condition and the shadscale community is considered to be in poor condition. These semidesert communities support shrub populations that provide valuable browse in moderate to severe winters but are susceptible to invasion from annual grasses, primarily cheatgrass. Increased amounts of cheatgrass can increase fuel loads and increase the threat of wildfire within these communities. If wildfire occurs within these communities they lose most of their value as deer winter range and reestablishment of valuable browse species is typically slow. This ecological site is also prone to encroachment from pinyon-juniper trees, which can reduce understory shrub and herbaceous health if not addressed.

It is recommended that work to reduce pinyon-juniper encroachment should continue in these communities. Moreover, care should be taken in selecting treatment methods that will not increase annual grass loads. Treatments to reduce annual grass may be necessary on some sites. When reseeding is necessary to restore herbaceous species, care should be taken in species selection and preference should be given to native grass species when possible.



State of Utah DEPARTMENT OF NATURAL RESOURCES MICHAEL R. STYLER Executive Director Division of Wildlife Resources GREGORY SHEEHAN Division Director

MEMORANDUM

Date: October 21, 2015

To: Wildlife Board and Regional Advisory Council Members

From: Scott McFarlane, Private Lands – Public Wildlife Coordinator

Subject: 2016 BUCK/BULL CWMU AND LANDOWNER ASSOCIATION RECOMMENDATIONS AND PROPOSED CHANGES TO R657-37, COOPERATIVE WILDLIFE MANAGEMENT UNITS FOR BIG GAME OR TURKEY

The following is a summary of the 2016 Bucks and Bulls CWMU and Landowner Association recommendations. There are three types of applications received for the CWMUs: New, Renewal, and Change applications.

- There are 7 new applications:
 - \circ 2 due to >34% land ownership changes.
 - \circ 5 Brand new applications
 - o 1 with DWR recommendation to deny (Blue Mountain Mulies)
- 12 CWMUs submitted applications for renewal for 2016.
- 9 applications were received for changes to permit number, splits, or season date changes requiring RAC and Board approval.
- 4 CWMUs did not re-apply
 - 127 CWMUS for the 2016 hunting season based on DWR recommendations



The total recommended CWMU permits for 2016 are:

	PRIVATE PERMITS	PUBLIC PERMITS
BUCK DEER	1996	264
MANAGEMENT BUCK	2	1
DEER		
BULL ELK	943	140
BUCK PRONGHORN	83	62
BULL MOOSE	48	30
TOTALS	3,072	497 (14%)

Please find attached a summary of the CWMU applications that require board action. Applications for individual CWMU units are available upon request. Applications for new CWMUs have been provided for review.

2016 LANDOWNER ASSOCIATION RECOMMENDATIONS

- 12 Landowner Association were approved in 2015 for three years and require no RAC or Wildlife Board action
- 1 Split recommendation
- 1 New landowner association
- 1 Landowner Association requests a change in permit numbers
- A total of 113 buck deer permits, 1 management buck deer, 73 elk, and 8 pronghorn vouchers are recommended for Landowner Associations for the 2016 season.
- Book Cliffs Landowner Association has made revisions to by-laws and permit distribution plans for approval

The split recommendation with the Division is as follows:

LOA NAME	SPECIES	PERMITS	PERMITS	DIVISION	REASON
		REQUESTED	FOR	RECOMMEND	
Book Cliffs	Buck deer	15	13	13	Qualifies based on percentage of
					land in habitat in the Book Cliffs
					LE unit
Book Cliffs	Bull elk	9	3	6	LOA requests 9, only qualify for 3
					based on the percentage of habitat
					in unit, DWR recommends 6 due
					to high elk numbers on private
					lands and crop depredation on
					private lands in the Association

The new Landowner Association request is as follows:

LOA Name	Acres	% Private Acres in unit	Qualified Permits	Recommended Permits
Oak Creek LOA	31,429	96%	6	6

PROPOSED CHANGES TO COOPERATIVE WILDLIFE MANAGEMENT UNITS FOR BIG GAME OR TURKEY R657-37

The Division is proposing changes to the Cooperative Wildlife Management Units for Big Game or Turkey Rule. The proposed changes are the result of several meetings throughout the year with the CWMU Advisory Committee and division personnel. By Rule, one of the responsibilities of the Advisory Committee is to review the operation of the CWMU program and make recommendations. The committee is comprised of sportsmen representatives, CWMU, agriculture, at-large representative, an elected official, and a Regional Advisory Council chair or member.

Recommendations for changes to R657-37 are as follows:

- 1. Change the hunt dates for buck pronghorn and antlerless hunt dates for deer, elk, and doe pronghorn
 - Buck pronghorn may begin the beginning of the statewide archery buck season with archery equip. (usually the Sat. nearest August 15)
 - Antlerless deer, elk, and doe pronghorn hunts may begin Aug. 1
- 2. Change the minimum required days for public antlerless hunts from two to three days
- 3. Change the variance application process from a 1-year waiting period to Feb. 1 prior to the Aug. 1 general application deadline
- 4. Change that public lands may not be used to meet minimum acreage requirements to establish a new CWMU
- 5. Added the definition of CWMU President and specifies as a member of the landowner association
 - President has the ultimate responsibility over the CWMU
 - Cannot apply for their own permits through the public drawing
- 6. Added an annual training requirement for all CWMU operators
- 7. Added that donated unused vouchers can be used in the reciprocal hunting program
- 8. Sunday hunt days may not be included in minimum hunt days except by mutual agreement between the permittee and the operator
- 9. With permit allocations that may deviate from the standards, Board may approve a modified distribution scheme of private/public permits

- 10. Added to the duties of the CWMU Advisory Committee to review acreage totals that fall below minimum requirements for evaluation of continued participation in the program
- 11. Division must be notified of any changes of operator, membership, or acreage within 30 days of change
- 12. Any decreases in acreage > 33% over the 3-year COR term, must apply as a new CWMU
- 13. Any changes > 33% in landownership over the 3-year COR term, must apply as a new CWMU
- 14. Any decreases in acreage that cause the CWMU to fall below the minimum acreage requirements, must go before the Advisory Committee for review
- 15. CWMUs currently under minimum acreages will be reviewed by the Advisory Committee if there are any reductions in acreage
- 16. Added language to clarify that landowner association members and operators, and their spouses and dependent children, cannot apply for their own CWMU permits in the public drawing
- 17. Clerical changes throughout the rule
- 18. A non-trophy youth buck deer hunt was proposed but is not recommended at this time

2015 COOPERATIVE WILDLIFE MANAGEMENT UNITS

CENTRAL REGION

Chrises Creek			Private A	cres	8270	100 %		Public Ac	res	0	0 %
Unit # 16		<u>CWM</u>	<u>U Request</u>					DWR Re	commenda	tion (if	f Different)
	Private	Public	Season Dates	Ratio			Private	Public	Season D	ates	Ratio
DEER	9	1	9/11-11/10/2016	90:10							
Heartland West			Private A	cres	12280	%		Public Ac	res		%
Unit # 16		<u>CWM</u>	<u>U Request</u>					DWR Re	commenda	tion (if	f Different)
	Private	Public	Season Dates	Ratio			Private	Public	Season D	ates	Ratio
DEER	8	2	9/11-11/10/2016	80:20							

NORTHEASTERN REGION

Blue Mountain M	ulies		Private A	cres	5914	100 %		Public Ac	res	0	0 %
Unit # 8		<u>CWM</u>	<u>U Request</u>					DWR Re	commend	<u>ation (i</u>	f Different)
	Private	Public	Season Dates	Ratio			Private	Public	Season	Dates	Ratio
DEER	9	1	9/11-11/10/2016	90:10							
PRONGHORN	4	2	9/01-10/31/2016	60:40			1	1			
							DWR r	ecommen	ds denial	of app	olication
West Willow Cree	k Ranch	1	Private A	cres	19200	86 %		Public Ac	res 32	200	14 %
Unit # 10		CWM	<u>U Request</u>					DWR Re	commend	<u>ation (i</u>	f Different)
	Private	Public	Season Dates	Ratio			Private	Public	Season	Dates	Ratio
DEER	7	3	9/11-11/10/2016	90:10							
		4	0/04 40/04/0040	00.40							

2 additional public buck deer permits- 20% additional public permits

NORTHERN REGION

Causey Sprin Unit # 4	g	<u>CWM</u>	Private A	cres	8726	94 %	Drivoto	Public Acres 537 5.8 % DWR Recommendation (if Different)
DEER	g	Public 1	9/11-11/10/2016	90·10)		Privale	Public Season Dates Ratio
FLK	q	1	9/01-10/31/2016	90.10)			
MOOSE	2	2	9/01-10/31/2016	60:40	,)			
Compensation	for public land .	. Access t	o Wheat Grass Cany	00.10	,		Forme	rly Bastian Banch
Wilderness. 4	88 acres not poste	ed.	o wheat Grass Carry	on			i onne	
Cotton Thoma	as		Private A	cres	13113	95 %		Public Acres 730 5.3 %
Unit # 1		<u>CWN</u>	I <u>U Request</u>					DWR Recommendation (if Different)
	Private	Public	Season Dates	Ratio			Private	Public Season Dates Ratio
DEER	9	1	9/11-11/10/2016	90:10				
ELK	2	1	9/01-10/31/2016	90:10)			
9000 acres op	en to public for 7	20 acres	included in CWMU					
Deseret			Private A	cres	225031	94 %		Public Acres 15359 6.4 %
Unit # 4		<u>CWN</u>	IU Request					DWR Recommendation (if Different)
	Private	Public	Season Dates	Ratio			Private	Public Season Dates Ratio
DEER	93	17	9/11-11/10/2016	90:10				
ELK	###	20	9/01-11/22/2016	90:10)			
MOOSE	3	2	9/01-10/31/2016	60:40)			
PRONGHOP	RN 41	33	9/01-10/31/2016	60:40)			
Compensation permits - 6 de pronghorn.Gr	n for inclusion of er, 5 elk, 2 buck _l anted bull elk var	public la pronghor iance to 1	nd 7.1% additional p n and 3 doe 11/22.	ublic				
George Creek	(Private A	cres	11879	94 %		Public Acres 783 6.2 %
Unit # 1		<u>CWN</u>	IU Request					DWR Recommendation (if Different)
	Private	Public	Season Dates	Ratio			Private	Public Season Dates Ratio
DEER	9	1	9/11-11/10/2016	90:10)			
800 acres of c make a better	comparable trade l enforceable boun	lands for dary.	783 acres of public la	ands to				
Grass Valley/	Clark Canyo	n	Private A	cres	63699	100 %		Public Acres 0 0%
Unit # 6		CWM	IU Request					DWR Recommendation (if Different)
	Private	Public	Season Dates	Ratio			Private	Public Season Dates Ratio
DEER	###	15	9/11-11/10/2016	90:10)			
ELK	90	10	9/01-11/30/2016	90:10)			
MOOSE	5	3	9/01-10/31/2016	60:40)			
CWMU has r	equested an elk se	eason var	iance of 9/1-11/30, D	Division				

is in agreement.

NORTHERN REGION

Jacob's Creek			Private A	cres	13017	100 %		Public Acres 0	0 %
Unit # 5		<u>CWM</u>	<u>U Request</u>					DWR Recommendation	on (if Different)
	Private	Public	Season Dates	Ratio			Private	Public Season Da	tes Ratio
DEER	18	2	9/01-10/31/2016	90:10					
ELK	18	2	9/01-10/31/2016	90:10					
MOOSE	1	0	9/01-10/31/2016	60:40					
Junction Valley			Private A	cres	28988	100 %		Public Acres 0	0 %
Unit # 1		<u>CWM</u>	<u>U Request</u>					DWR Recommendation	on (if Different)
	Private	Public	Season Dates	Ratio			Private	Public Season Da	tes Ratio
DEER	45	5	9/11-11/10/2016	90:10					
ELK	3	1	9/01-10/31/2016	90:10					
Park Valley			Private A	cres	9672	100 %		Public Acres C	0 %
Unit # 1	D · · ·	<u>CWM</u>	<u>U Request</u>	D //			D · · ·	DWR Recommendation	on (if Different)
	Private	Public	Season Dates	Ratio			Private	Public Season Da	tes Ratio
PRONGHORN	2	1	9/01-10/31/2016	90:10					
Pine Canyon		CWM	Private A	cres	6340	100 %		Public Acres C	0 % on (if Different)
	Private	Public	Season Dates	Ratio			Private	Public Season Da	tes Ratio
DEER	27	3	9/11-11/10/2016	90:10					
Rabbit Creek			Private A	cres	7588	93 %		Public Acres 560	6.9 %
Unit # 2		<u>CWM</u>	<u>U Request</u>					DWR Recommendation	on (if Different)
	Private	Public	Season Dates	Ratio			Private	Public Season Da	tes Ratio
PRONGHORN	3	2	9/01-10/31/2016	60:40					
240 acres of private trade lands will pro state land that is oth a good trade.	e lands will b vide access herwise land	be provid for the pu l locked.	ed as trade lands. Tl ablic to 1,423.82 acro The Division consid	hese es of lers this					
Rattlesnake Pass			Private A	cres	7740	100 %		Public Acres 0	0 %
Unit # 1		<u>CWM</u>	<u>U Request</u>					DWR Recommendation	<u>on (if Different)</u>
	Private	Public	Season Dates	Ratio			Private	Public Season Da	tes Ratio
DEER	25	3	9/01-10/31/2016	90:10					
Riverview Ranch	LLC		Private A	cres	19817	59 %		Public Acres 13895	5 41 %
Unit # 1		<u>CWM</u>	<u>U Request</u>					DWR Recommendation	<u>on (if Different)</u>
	Private	Public	Season Dates	Ratio			Private	Public Season Da	tes Ratio
ELK	5	2	9/01-10/31/2016	80:20					

Compensation for inclusion of public land - 9,514 private acres open to public and 13% additional permits.

NORTHERN REGION

SJ Ranch			Private A	cres	6476	100 %		Public Ac	res 0	0 %
Unit # 2		<u>CWM</u>	<u>U Request</u>					DWR Red	commendation ((if Different)
	Private	Public	Season Dates	Ratio			Private	Public	Season Dates	Ratio
ELK	8	1	9/01-10/31/2016	90:10						
MOOSE	1	0	9/01-10/31/2016	60:40						
PRONGHORN	3	2	9/01-10/31/2016	60:40						
Strawberry Ridge	•		Private A	cres	23915	100 %		Public Ac	res 0	0 %
Unit # 2		<u>CWM</u>	<u>U Request</u>					DWR Red	commendation ((if Different)
	Private	Public	Season Dates	Ratio			Private	Public	Season Dates	Ratio
DEER	18	2	9/11-11/10/2016	90:10						
ELK	18	2	9/01-11/30/2016	90:10						
MOOSE	1	2	9/01-10/31/2016	60:40						
PRONGHORN	3	2	9/01-10/31/2016	60:40						
CWMU has reques in agreement.	ted an elk so	eason vari	ance until 11/30. Div	vision is						
Whites Valley			Private A	cres	11463	97 %		Public Ac	res 320	2.7 %
Unit # 1		<u>CWM</u>	<u>U Request</u>					DWR Red	commendation ((if Different)
	Private	Public	Season Dates	Ratio			Private	Public	Season Dates	Ratio
DEER	8	2	9/11-11/10/2016	90:10						

Compensation for inclusion of public land - 1 additional public deer during three year plan.

SOUTHEASTERN REGION

Black Hawk			Private A	cres	10110	100 %		Public Ac	res	0	0 %
Unit # 16		CWM	IU Request					<u>DWR Re</u>	commen	dation (i	f Different)
	Private	Public	Season Dates	Ratio			Private	Public	Season	Dates	Ratio
DEER	3	1	9/11-11/10/2016	90:10)						
ELK	4	1	9/01-11/30/2016	80:20)						
Deer Haven			Private A	cres	15394	100 %		Public Ac	res	0	0 %
Unit # 14		CWM	IU Request					<u>DWR Re</u>	commen	<u>dation (i</u>	f Different)
	Private	Public	Season Dates	Ratio			Private	Public	Season	Dates	Ratio
DEER	13	2	9/01-10/31/2016	90:10)						
J.B. Ranch			Private A	cres	9162	100 %		Public Ac	res	0	0 %
Unit # 13		CWM	IU Request					<u>DWR Re</u>	commen	<u>dation (i</u>	f Different)
	Private	Public	Season Dates	Ratio			Private	Public	Season	Dates	Ratio
DEER	18	2	9/01-10/31/2016	90:10)						
ELK	6	1	9/01-10/31/2016	80:20)						
							Varian approv	ce for bei ved 12/6/2	ng under 012 by W	[.] acreag /ildlife E	le Board.
Scofield Canyon	S		Private A	cres	15610	100 %		Public Ac	res	0	0 %
Unit # 16		CWM	IU Request					<u>DWR Re</u>	commen	dation (i	f Different)
	Private	Public	Season Dates	Ratio			Private	Public	Season	Dates	Ratio
DEER	9	1	9/11-11/10/2016	90:10)						
ELK	6	1	9/01-10/31/2016	80:20)						
Scofield East			Private A	cres	11420	100 %		Public Ac	res	0	0 %
Unit # 16		CWM	IU Request					DWR Re	commen	dation (i	f Different)
	Private	Public	Season Dates	Ratio			Private	Public	Season	Dates	Ratio
ELK	6	1	9/01-10/31/2016	80:20)						
Spring Creek/Do	dge		Private A	cres	83899	100 %		Public Ac	res	0	0 %
Unit # 14		CWM	IU Request					<u>DWR Re</u>	commen	<u>dation (i</u>	f Different)
	Private	Public	Season Dates	Ratio			Private	Public	Season	Dates	Ratio
DEER	54	6	9/01-10/31/2016	90:10)						
FLK	10	2	9/01-10/31/2016	80:20)						

SOUTHERN REGION

East Zion			Private A	cres	5543	100 %		Public Ac	res	0	0 %
Unit # 29		<u>CWM</u>	IU Request					DWR Re	commend	dation (i	if Different)
	Private	Public	Season Dates	Ratio			Private	Public	Season	Dates	Ratio
DEER	18	2	9/11-11/10/2016	90:10							
Grazing Pasture			Private A	cres	6940	100 %		Public Ac	res	0	0 %
Unit # 25		<u>CWM</u>	IU Request					DWR Re	commenc	dation (i	if Different)
	Private	Public	Season Dates	Ratio			Private	Public	Season	Dates	Ratio
DEER	9	1	9/01-10/31/2016	90:10							
ELK	5	1	9/01-10/31/2016	80:20							
							CWMU variano CWMU variano Board	needs ap ce to inclu advisory ce. Varian 12/2012.	proval fo ide elk. D committe ce grante	or acrea Divisior ee both ed by V	age 1 and 1 agree to Vildlife
Johnson Mountai	in Ranch	า	Private A	cres	13200	99 %		Public Ac	res	91	0.7 %
Unit # 25		<u>CWM</u>	IU Request					DWR Re	commend	dation (if Different)
	Private	Public	Season Dates	Ratio			Private	Public	Season	Dates	Ratio
DEER	9	1	9/01-10/31/2016	90:10							
ELK	17	2	9/01-10/31/2016	90:10							

91 acres of comparable private property traded for 91 acres public with no access included in CWMU to make definable boundary.

CWMU's 2016

RENEWALS

CWMU NAME	REGION	CHANGE FROM PREVIOUS APPLICATION					
Bastian Ranch	NR	Name change to Causey Spring.					
Chrises Creek	CR	No changes					
Cotton Thomas	NR	ange operator and president. Requests additional elk permits (3) 2 priv./1 pub. Added 2013 ac.					
Grazing Pasture	SR	hanged deer season dates to 9/1-10/31, 100% private land, buck deer ratio/permit change - 90:10					
		9 private:1 public, requests 1 additional bull elk permit, 1 additional antlerless elk permit					
Heartland West	CR	President and operator change, deer hunt change to 9/1-10/31, deer permit number change from 9/1 to 8/2					
J.B. Ranch	SER	Changed operator, requests increase in antlerless elk permits by 5					
Johnson Mountain Ranch	SR	Added 91 ac.public land with 91 acres private land trade					
Junction Valley	NR	Decreased deer permits from 60 to 50 (45 priv/5 public), decreased antlerless deer permits					
Pine Canyon	NR	Added 155 ac.					
Rabbit Creek	NR	Increase buck pronghorn permits from 3 to 5 (3 private/2 public)					
Strawberry Ridge	NR	President and operator change, elk season variance request to 11/30					
Whites Valley	NR	Changed operator/president, reduced deer permits to 10, added 2959 acres					

New CWMUs

George Creek	NR	Deer CWMU Box Elder Co. 12,662 acres
Rattlesnake Pass	NR	Changed landownership
Riverview Ranch	NR	Decreased acreage by 37%. New Category. Elk CWMU only. Request additional 3 private elk permits.
West Willow Creek Ranch	NER	Deer CWMU 22,400 acres. Request 10 total deer permits, 7 private-3 public, 86% private lands.
Blue Mountain Mulies	NER	Deer/pronghorn CWMU, 5,914 acres, division recommends denial of application
East Zion	SR	Deer CWMU, 5,543 acres,100% private property, requesting 20 total permits - 18 private, 2 public
Black Hawk	SER	Deer/elk CWMU, Carbon County, requests elk season variance to 11/30

CWMU Changes

Deseret	NR	Change President, request an increase of 8 buck deer permits (1additional public), increase bull elk permits		
		by 6 (1 additional public), 1 additionalbull moose permit (private), decrease pronghorn permits by 7		
		(3 public, 4 private), Added 9674 private ac.		
Jacobs Creek	NR	Proposes a boundary swap on north end of unit, division is not in agreement.Requests inc. of 10 bull elk		
Twin Peaks	NR	No board action required - changed operator/president		
Twin Peaks/Goose Creek	NR	No board action required - changed operator/president		
West Hills	NR	No board action required - changed boundary, added 320 acres?		
Scofield East	SER	Added 1320 acres - requests additional bull elk permit		

SJ Ranch		Requests additional 2 bull elk permits		
Chimney Rock		lo board action required - added 3205 acres -		
Stillman Creek Ranch		Io board action requied - president/operator change, reduced acreage 81 acres		
Grass Valley/Clark Canyon	NR	Change deer permits from 130 to 150, elk permits from 90 to 100, elk variance request to Nov. 30		
Park Valley	NR	Remove deer from CWMU, pronghorn only.		
Patmos Ridge	SER	No board action required - Decreased 1800 acres,		
Scofield Canyons	SER	Increased acreage 120 acres, requests 2 additional bull elk permits, does not qualify for additional permits		
Summit Point	SER	Decreased acres 4,695 acres, request to decrease antlerless elk permits 10		
Deer Haven	SER	Removed elk from CWMU		
Spring Creek Dodge	SER	Request and qualify for 1 additional bull elk permit		

CWMU's Did not Re-apply

Sage Valley Outfitters	NR	Did not re-apply
Allen Ranch	CR	Did not re-apply
Deer Creek	Cr	Withdrew application
Hell Canyon	NR	Property purchased and added into Deseret CWMU

2016 Landowner Associations

		Acres private								
Landowner Association		land/habitat in	Acres Private land/habitat	% Private lands ≥			2016	2016	2016 DWR	
Name	Limited Entry Unit Name	Associaion	in Limited Entry Unit	51%	Species	2015 Permits	Qualified	Requested	Recommendation	Comments
Deep Creek Landowner	West Desert, Deep Creek	1,722	2,897	59%	Bull elk	2	2	2	2	
Association										
										Private lands
										have higher
										proportion of
										elk in the unit.
Vernon Landowner	West Desert, Vernon	60,924	90,264	67%	Buck deer	30	30	30	30	
Association										
Book Cliffs LOA	Book Cliffs	67,398	96,279	70%	Buck deer	21	21	21	13	
Book Cliffs LOA	Book Cliffs	67,398	96,279	70%	Bull elk	9	9	9	9	
Book Cliffs LOA	Book Cliffs	67,398	96,279	70%	Buck pronghorn	2	2	2	2	
	South Slope, Diamond									
Diamond Mountain LOA	Mountain	82,144	82,144	100%	Buck deer	44	44	44	44	
	South Slope, Diamond									
Diamond Mountain LOA	Mountain	82,144	82,144	100%	Bull elk	34	31	31	31	
Three Corners LOA	North Slope, Three Corners	4,310	7,169	60%	Bull elk	5	5	5	5	
Elk Ridge LOA	San Juan, Elk Ridge	3,778	4,640	81%	buck deer	2	2	2	2	
San Juan Elk Landowner										
Association	San Juan, Elk Ridge	35,511	57,200	62%	Bull elk	5	5	5	5	
Indian Peaks Landowner										
Association	Southwest Desert	19,066	28,306	67%	Bull elk	3	3	3	3	
Monroe Mountain LOA	Monroe Mountain	16,873	26,598	63%	Bull elk	4	4	4	4	
Pahvant Mountain LOA	Pahvant	21,110	41,617	51%	Bull elk	5	5	5	5	
Panguitch Lake LOA	Panguitch Lake	38,251	66,346	58%	Bull elk	7	7	7	7	
Paunsaugunt Landowner										
Wildlife Association	Paunsaugunt	46,633	73,362	64%	Buck deer	18	18	18	18	
Paunsaugunt Landowner										
Wildlife Association	Paunsaugunt	46,633	73,362	64%	Buck deer management	1	1	1	1	
Paunsaugunt Elk LOA	Paunsaugunt	20,513	36,054	57%	Bull elk	5	5	5	5	
South Fork of Sevier River	Mount Dutton and									
LOA	Paunsaugunt	16,357	27,550	59%	Buck pronghorn	6	6	6	6	
										Qualifies for a
										permit in
Pilot Mountain LOA	Pilot Mountain	4,086	7,886	52%	Bull elk	1	0	0	0	2018
										Qualifies for a
										permit in
Henry Mountains LOA	Henry Mountain Deer					0	0	0	0	2017
Oak Creek LOA (New)	Oak Creek	31,429	32,736	96%	Buck Deer	0	6	6	6	
	Total	702,249				203	200	200	198	3
17 Total Landowner										

Associations

buck deer	116	116	116	108
bull elk	79	76	77	76
buck pronghorn	8	8	8	8

R657. Natural Resources, Wildlife Resources.

R657-37. Cooperative Wildlife Management Units for Big Game or Turkey. R657-37-1. Purpose and Authority.

(1) Under authority of Section 23-23-3, this rule provides the standards and procedures applicable to Cooperative Wildlife Management [<u>units]Units</u> organized for the hunting of big game or turkey.

(2) Cooperative Wildlife Management [units]Units are established to:

- (a) increase wildlife resources;
- (b) provide income to landowners;

(c) provide the general public access to private and public lands for hunting big game or turkey within a Cooperative Wildlife Management Unit;

(d) create satisfying hunting opportunities; [and]

(e) provide adequate protection to landowners who open their lands for hunting; and

(f) provide landowners an incentive to manage lands to protect and sustain wildlife habitat and benefit wildlife.

R657-37-2. Definitions.

(1) Terms used in this rule are defined in Sections 23-13-2 and 23-23-2.

(2) In addition:

(a) "CWMU" means Cooperative Wildlife Management Unit.

(b) "CWMU agent" means a person appointed by [the]a landowner association member [or the landowner association operator]to protect private property within the CWMU.

(c) "General public" means all persons except landowner association members[, landowner association operators] and their spouse or [dependent]dependent children.

(d) "Landowner association " means a landowner or group of landowners of private land organized as a single entity for the purpose of applying for, becoming and operating a CWMU.

(e) "Landowner association member" means:

(i) an individual landowner [participating in the]or the managing members of a legal entity holding a fee interest in private property enrolled in a CWMU;

(ii) a landowner association president; and

(iii) a landowner association operator.

(f) "Landowner association operator" means a person designated by the landowner association to operate the CWMU and handle day-to-day interactions of the landowner association with the public.

(g) "Landowner association president" means a representative of the landowner association who is responsible for all internal operations of the landowner association and is ultimately responsible for the CWMU.

([g]h) "Voucher" means a document issued by the division to a landowner association member[-or landowner association operator], allowing a landowner association member [or landowner association operator,]to designate who may purchase a CWMU big game or turkey hunting permit from a division office.

R657-37-3. Requirements for the Establishment of a Cooperative Wildlife Management Unit.

(1)(a) The minimum allowable acreage for a CWMU is 10,000 contiguous acres, except as provided in Subsection (3).

(b) Land parcels that adjoin corner-to-corner shall not be considered contiguous for the purpose of meeting minimum acreage requirements for CWMUs except as specifically authorized by the Wildlife Board pursuant to Subsection (3)(b) and R657-37-6.

(c) The land comprising Domesticated Elk Facilities and Domesticated Elk Hunting Parks, as defined in Section 4-39-102(2) and Rules R58-18 and R58-20, shall not be included as part of any big game or turkey CWMU.

([2)(a]d) No land parcel shall be included in more than one CWMU.

([b]e) Separate hunt boundaries by species on a CWMU are not permitted.

(f) For the purpose of issuing a certificate of registration under R657-37-5, public lands cannot be used to attain minimum acreages.

(g) All lands included within a CWMU shall provide quality hunting opportunity in order to qualify towards minimum acreage requirements.

(2) The Wildlife Board may approve a new CWMU having at least 10,000 contiguous acres, provided:

(a) the property is capable of independently maintaining the presence of the respective species and harboring them during the period of hunting:

(b) the property is capable of accommodating the anticipated number of hunters and providing a reasonable hunting opportunity;

(c) the property exhibits enforceable boundaries clearly identifiable to both the public and private hunters; and

(d) the CWMU contributes to meeting division wildlife management objectives.

(3)(a) The Wildlife Board may [renew a CWMU that is less than 10,000 acres with-land parcels that adjoin corner-to-corner or containing noncontiguous parcels provided the CWMU legally possessed a CWMU Certificate of Registration during the previous year, allowing for acreage less than 10,000 contiguous acres, corner-to-corner land parcels, or noncontiguous land parcels.][(b) The Wildlife Board may]approve a new CWMU for deer, pronghorn or turkey that is at least 5,000 contiguous acres provided[:] that it otherwise satisfies the requirements of Subsections (1) and (2).

([i) the property is capable of independently maintaining the presence of the respective.] [species and harboring them during the period of hunting;]

[______(ii) the property is capable of accommodating the anticipated number of hunters and providing a reasonable hunting opportunity;]

[<u>(iii)</u> the property exhibits enforceable boundaries clearly identifiable to both the public and private hunters; and]

[(iv) the CWMU contributes to meeting division wildlife management objectives][(c]b) The Wildlife Board may[<u>renew or</u>] approve a new CWMU for deer, pronghorn, elk or moose that fails to meet the acreage or parcel configuration requirements in Subsection (1), [or the exceptions in Subsection (3)(a) and(b), provided the following procedures are satisfied.]provided: (i) the applicant submits a written request for special considerations to the CWMU Advisory Committee [on or before]by February 1st prior to the annual August 1st [annually]application deadline;

(ii)[<u>the applicant submits to a one year waiting period while the CWMU Advisory</u> Committee, Division and Wildlife Board consider, verify and decide the merits of the request for special considerations.][<u>(iii)</u>] upon receipt of a request for special considerations, the CWMU Advisory Committee will immediately forward the request to [<u>DWR]the division</u> for review and recommendations[-];

([iv]iii) the [DWR]division will review the request for special considerations and make recommendations to the CWMU Advisory Committee within [180]60 days of receipt[-]; and

([**y**]iv) the CWMU Advisory Committee will consider the request for special considerations and the [**Division**]division's recommendations, and make recommendations to the Wildlife Board on the advisability of granting the CWMU application.

(4)(a) Cooperative Wildlife Management Units organized for hunting big game or turkey[,] shall consist of private land to the extent practicable.

(b) The Wildlife Board may approve a CWMU containing public land only if:

(i) the public land is completely surrounded by private land or is otherwise inaccessible to the general public;

(ii) the public land is necessary to establish an enforceable boundary clearly identifiable to both the general public and public and private permit holders; or

(iii) the public land is necessary to achieve statewide and unit management objectives.

(c) If any public land is included within a CWMU, the landowner association must meet applicable federal and state land use requirements on the public land.

(d) The Wildlife Board shall increase the number of permits or hunting opportunities made available to the general public to reflect the [proportional habitat on]proportion of public [land]lands to private [land_]lands within the CWMU pursuant to Subsection R657-37-4(3)(a)(iv).

(5[) Land parcels that adjoin corner-to-corner shall not be considered contiguous for the purpose of meeting minimum acreage requirements for new CWMU's except as specifically authorized by the Wildlife Board pursuant to Subsection (3)(c)).][(6]) The intent is to establish CWMUs consisting of blocks of land that function well as hunting units. The Wildlife Board may deny a CWMU that meets technical requirements but does not constitute a good hunting unit.

R657-37-4. Cooperative Wildlife Management Unit Management Plan.

(1)(a) The landowner association [member]must manage the CWMU in compliance with a CWMU Management Plan consistent with statewide and unit management objectives for the respective big game or turkey management unit and approved by the Wildlife Board.

(2)(a) The CWMU Management Plan may be approved by the Wildlife Board for a period of three years[, concurrent with] and is incorporated into the CWMU[-Certificate of Registration]'s certificate of registration.

(b) [The]Amendments to the CWMU Management Plan may be[-amended as] requested by the Wildlife Board, the division or the CWMU landowner association member or operator[-] and may result in an amendment to the certificate of registration, consistent with R657-37-5.5.

(3)(a) The CWMU Management Plan must include:

(i) species management objectives for the CWMU that are consistent with statewide and unit management objectives for the respective big game or turkey management unit[;];

(ii) antlerless harvest objectives;

(iii)($[\underline{1}]\underline{A}$) dates that the general public with buck or bull CWMU permits will be allowed to hunt in accordance with R657-37-7(3)(a); $[\underline{\text{or}}]and$

[(2](B) a detailed explanation of how comparable hunting opportunities will be provided to both the private and public permit holders on the CWMU as required in Section 23-23-7.5;

(iv) a clear explanation of the purpose for including public land within the CWMU boundaries, if public land is included;

(v) an explanation of how the public is compensated by the CWMU when public land is included;

(vi) rules and guidelines used to regulate a permit holder's conduct as a guest on the CWMU;

(vii) County Recorder Plat Maps or equivalent maps, dated by receipt of purchase within 30 days of the initial or renewal application deadline for a certificate of registration, depicting boundaries and ownership for all property within the CWMU;

(viii) two original 1:100,000 USGS maps, which must be filed in the appropriate regional division office and the Salt Lake office, depicting all interior and exterior boundaries of the proposed CWMU;

(ix) strategies and methods that avoid adverse impacts to adjacent landowners resulting from the operation of the CWMU, including the provisions provided in Section R657-37-7(6); and

(x) any request for reciprocal agreements.

(b) The division shall, review all CWMU Management Plans and make recommendations to the Wildlife Board.

(4)(a) CWMU operators are required to complete a CWMU training session provided by the division on an annual basis.

(b) Failure to complete the CWMU training session may result in the CWMU operator being referred to the CWMU Advisory Committee described in R657-37-15 or may result in administrative action taken against a certificate of registration as described in R657-37-14.

R657-37-5. Application for Certificate of Registration.

(1)(a) An application for a CWMU [Certificate of Registration]certificate of registration that doesn't include special considerations identified in R657-37-3(3)(b) must be completed and returned to the regional division office where the proposed CWMU is located no later than August 1.

(b) An application including special considerations described in R657-37-3(3)(b) must be submitted to the CWMU Advisory Committee by February 1.

(2) The application must be accompanied by:

(a) the CWMU Management Plan as described in R657-37-4(3), including all maps;

(b)(i) a petition containing the signature and acreage of each participating landowner agreeing to establish and operate the CWMU as provided in this rule and Title 23, Chapter 23 of the Wildlife Resources Code; or

(ii) a copy of a legal contract or agreement identifying:

(A) the private land;

(B) the duration of the contract or agreement; and

(C) the names and signatures of landowners conveying the hunting rights to the CWMU landowner association[<u>member_or landowner association operator.]</u>;

(c) the name of the [designated] landowner association operator;

(d) the name of the landowner association president; and

([d]e) the nonrefundable handling fee.

(3)(a) The division may reject any application that is incomplete or completed incorrectly.

(b) Applicants must update the division regarding any changes to the substance of their application while it is under consideration or it may be considered incomplete or incorrect.

(4) The division shall forward the complete and correct application[-and], required documentation, and any recommendation provided by the CWMU Advisory Committee to the Regional Advisory Councils and Wildlife Board for consideration.

(5) Upon receiving the application and recommendation from the division, the Wildlife Board may:

(a) authorize the issuance of a certificate of registration, for three years, allowing the landowner association member to operate a CWMU; or

(b) deny the application and provide the landowner association[-member] with reasons for the decision.

(6) The Wildlife Board shall consider any violation of the provisions of Title 23, Wildlife Resources Code and any information provided by the division, landowners, and the public in determining whether to authorize the issuance of a certificate of registration for a CWMU.

(7) A [CWMU Certificate of Registration]certificate of registration is issued on a three year basis and shall expire on January [31, providing:]31.

[(a) no changes in CWMU boundaries occur; and]

[(b) the certificate of registration is not suspended or revoked prior to the expiration date.]

(8) The CWMU application [<u>/] and the management plan</u> agreement [<u>is]are</u> binding upon the landowner association members[, landowner association operators] and all successors in interest to the CWMU property or the hunting rights thereon as it pertains to allowing public permit holders reasonable access to all CWMU property during the applicable hunting seasons for purposes of filling the permit.

R657-37-5.5. [Amendments]Amendment to a Certificate of Registration; Termination of Certificate of Registration.

(1)[<u>A request for an amendment to a certificate of registration must be made in</u> writing and submitted to the appropriate regional division office where the CWMU is <u>located for any](a)</u> A CWMU must notify the division in writing regarding any requested change in:

([a]i) permit numbers or allocation;

[(b)](ii)_season dates;

[(c) landownership;](iii) landowner association membership;

(iv) acreage of the CWMU;

[(d)](v)_operator; [or]

(vi) the CWMU Management Plan; or

([e]vii) any other matter related to the management and operation of the CWMU not originally included in the certificate of registration.

(b) Written notification of a requested change must be submitted to the appropriate regional division office where the CWMU is located.

(c) The division must be notified of all changes in landowner association membership, acreage, and operator within 30 days of such changes occurring.

(d) Changes in the CWMU described in R657-37-5.5(1)(a) require an amendment to the certificate of registration.

(2) Requests [for amendments dealing with]to amend buck and bull permit numbers, permit allocation, or season dates:

(a) may be initiated by the CWMU or the division;

(b) are due on August 1 of the year prior to when hunting is to occur; and

(c) <u>shall be forwarded to the Regional Advisory Councils and Wildlife Board for</u> <u>consideration; and</u>

(d) [(c) [shall be forwarded to the Regional Advisory Councils and Wildlife Board for consideration and]upon approval by the Wildlife Board, an amendment to the original certificate of registration shall be issued in writing.[-]

(3) Requests to amend antlerless permit numbers:

(a) may be initiated by the CWMU or the division;

(b) must be submitted to the division by the last day of February;

(c) shall be forwarded to the Regional Advisory Councils and Wildlife Board for consideration; and

(d) upon approval by the Wildlife Board, an amendment to the original certificate of registration may be issued in writing.

([3]4)(a) If acreage totals in the CWMU decrease by more than 33% or

landowner membership within a landowner association changes by more than 33% over the term of the certificate of registration, the certificate of registration shall:

(i) remain effective for the hunting season beginning in that calendar year; and

(ii) following completion of that hunting season, the certificate of registration shall terminate.

(b) A CWMU whose certificate of registration is terminated under this section may reapply consistent with R657-37-5.

(c)(i) If a reduction in acreage occurs on a CWMU that does not trigger the 33% threshold identified in subsection 4(a) and the resulting acreage total is below the

standard totals generally required by R657-37-3, the CWMU will be reported to the CWMU Advisory Committee for review and recommendation to the Wildlife Board for action.

(ii) Review by the CWMU Advisory Committee and subsequent action by the Wildlife Board shall be taken consistent with R657-37-15.

(5)(a) All other requests for amendments shall be reviewed by the [region and Wildlife Section and upon]division.

(b) If the division recommends approval of the amendment, the division will submit that recommendation to the director.

(c) Upon approval by the director, an amendment to the original certificate of registration shall be issued in writing.

R657-37-6. Renewal of a Certificate of Registration.

(1)(a) [A CWMU Certificate of Registration must be renewed every three years if no changes in CWMU boundaries occur, or annually if boundary changes occur and may be approved by the division, except as provided in Subsections (b) and (c).]At the end of a certificate of registration term, the certificate of registration may be renewed, consistent with this section.

(b) [If any changes occur in the activities or information authorized in the current]A certificate of registration [or CWMU Management Plan, the renewal must be considered for approval by the Wildlife Board]terminated pursuant to R657-37-5.5 or R657-37-14 is not eligible for renewal.

(c)(i) A CWMU Certificate of Registration shall not be renewed if:]

[(Å) thirty-four percent or more of the private lands included in the renewal application were not included in the previous certificate of registration; or]

[_____(B) thirty-four percent or more of the private land within the CWMU is under new ownership.]

(2)(a) An application for renewal of a certificate of registration that does not require special considerations identified in R657-37-3(b) must be completed and returned to the regional division office where the CWMU is established no later than August [1,] of the year preceeding the expiration of the certificate of registration term.

(b) An application for renewal of a certificate of registration requiring an exception to the minimum acreage requirements or parcel configurations identified in R657-37-3(b) must be submitted to the CWMU Advisory Committee by February 1 of the year preceeding the expiration of the certificate of registration term.

(3) The renewal application must identify all changes from the previous [CWMU Certificate of Registration or]certificate of registration and CWMU Management Plan.

- (4) The renewal application must be accompanied by:
- (a) the CWMU Management Plan as described in Section R657-37-4(3); and

(b) all maps as described in Section R657-37-4(3) if the CWMU boundaries have changed; and

(c)(i) a petition containing the signature and acreage of each participating landowner agreeing to establish and operate the CWMU as provided in this rule and Title 23, Chapter 23 of the Wildlife Resources Code; or

(ii) a copy of a legal contract or agreement identifying:

(A) the private land;

(B) the duration of the contract or agreement; and

(C) the names and signatures of landowners conveying the hunting rights to the CWMU agent or landowner association operator;

(d) the name of the designated landowner association operator; and

(e) the nonrefundable handling fee.

([5]6) The division may reject any application that is incomplete or completed incorrectly.

([6]7) The division shall consider:

(a) the contents of the renewal application;

(b) the previous performance of the CWMU, including the actions of [the]all landowner association members; and

([7) The]8) After evaluating a complete renewal application, the division shall:

(a) [approve the]recommend approving renewal [Certificate of Registration]of the certificate of registration and forward the permit recommendations to the Regional Advisory Councils and Wildlife Board; or

(b) [deny]recommend denying the renewal [Certificate of Registration]certificate of registration and state the reasons for denial in writing to the applicant; and

(i) forward the application, reason for denial and recommendation to the Regional Advisory Councils and Wildlife Board; and

([iii]ii) provide the applicant with information for seeking Wildlife Board review of the denial.

([8]9)(a) Upon receiving the division's recommendation as provided in Subsection ([b)(i]6), the Wildlife Board may consider:

([a]i) the contents of the renewal application;

(ii) the previous performance of the CWMU, including the actions of the landowner association member or landowner association operator when reviewing renewal of the certificate of registration; [and]

([b]iii) any violation of Title 23, Wildlife Resources Code, this rule, stipulations contained in the certificate of registration and all other relevant information provided from any source related to the applicant's fitness to operate a CWMU[-];

([9) A CWMU Certificate of Registration]iv) any recommendation provided by the CWMU Advisory Committee if the landowner association has been referred to the CWMU Advisory Committee during the renewal process; and (v) the recommendation by the division. (b) The Wildlife Board may renew a certificate of registration for a CWMU that does not meet minimum acreage requirements and includes land parcels that adjoin corner-to-corner or containing noncontiguous parcels, provided:

(i) the CWMU legally possessed a CWMU certificate of registration during the previous year that allowed for corner-to-corner land parcels or noncontiguous land parcels; and

(ii) the CWMU's renewal application does not add additional corner-to-corner or noncontiguous parcels from the previously approved CWMU certificate of registration.

(10) A certificate of registration for renewal is authorized for three years and shall expire on January 31, providing the certificate of registration is not revoked[-or], suspended, or terminated prior to the expiration date.

R657-37-7. Operation by Landowner Association.

(1)(a) A CWMU must be operated by a landowner association [member who owns land within the CWMU]who is represented by a president or a landowner association operator[-who leases or otherwise controls hunting on land within the CWMU].

(b) A landowner association [member]president or landowner association operator may appoint CWMU agents to protect private property within the CWMU; however, the landowner association [member]president, or landowner association operator must assume ultimate responsibility for the operation of the CWMU.

(2)(a) A landowner association member or landowner association operator may enter into reciprocal agreements with other landowner association members or landowner association operators to allow hunters who have obtained a CWMU permit to hunt within each other's CWMUs as provided in Subsections R657-37-4(3) (a)(x).

- (b) Reciprocal hunting agreements may be approved only to:
- (i) raise funds to address joint habitat improvement projects;
- (ii) address emergency situations limiting hunting opportunity on a CWMU; [or]

(iii) raise funds to aid in essential management practices for the benefit of CWMU species, including obtaining age or species population data as recommended by regional division personnel and approved by the division's wildlife section chief; or

(iv) or be used with unused vouchers as provided in R657-37-9(12)(a).

(c) If a person is authorized to hunt in one or more CWMUs as provided in Subsection (a), written permission from the landowner association member or landowner association operator and written authorization from the division must be in the person's possession while hunting.

(3)(a) A landowner association member or landowner association operator must provide general public CWMU [permitteesa]permittees a minimum of:

(i) five days to hunt with buck, bull or turkey permits; and

(ii) [two]three days to hunt with antlerless permits.

(b) Sunday hunt days may not be included in minimum hunt days except by mutual agreement of the permittee and the operator.

(b) General public CWMU permitees shall be allowed to hunt the entire CWMU except areas that are excluded from hunting to all permittees.

(i) a landowner association may identify in the management plan areas within the CWMU boundary that are open to specific species only. These areas must be open to all permit holders for that species.

(c) A person who has obtained a CWMU permit may hunt only in the CWMU for which the permit is issued, except as provided under Subsection (2).

(4)(a) Each landowner association member or landowner association operator must:

(i) clearly post all boundaries of the CWMU at all corners, fishing streams crossing property lines, road, gates, and rights-of-way entering the land with signs that are a minimum of 8 ½ by 11 inches on a bright yellow background with black lettering, and that contain the language provided in Subsection (b); and

(ii) if a CWMU uses public land for the purpose of making a definable boundary for the CWMU then that boundary shall be posted every three hundred yards.

(b) A CWMU is created under an agreement between private landowners and the division, and approved by the Wildlife Board. Only persons with a valid CWMU permit for the CWMU may hunt moose, deer, elk, pronghorn or turkey within the boundaries of the CWMU. The general public may use accessible public land portions of the CWMU for all legal purposes, other than hunting big game or turkey for which the CWMU is authorized.

(5) A landowner association member or landowner association operator must provide a written copy of its guidelines used to regulate a permit holder's conduct as a guest on the CWMU to each permit holder.

(6)(a) A CWMU and the division shall cooperatively address the needs of landowners who are negatively impacted by big game animals or turkeys associated with the CWMU.

(b) The CWMU and the division shall cooperatively seek methods to prevent or mitigate agricultural depredation caused by big game animals or turkeys associated with the CWMU.

R657-37-8. Cooperative Wildlife Management Unit Agents.

(1) A landowner association member may appoint <u>a CWMU [agents]agent</u> to monitor access and protect the private property of the CWMU.

(2) Each CWMU agent must wear or have in possession a form of identification prescribed by the Wildlife Board which indicates the agent is a CWMU agent.

(3) A CWMU agent may refuse entry [into the private land portions of]to or remove from a CWMU [to-]any person[, except owners of land within the unit and their employees,] who:

(a) does not [have in their possession]possess a valid CWMU permit;

- (b) endangers or has endangered human safety;
- (c) damages or has damaged[-private] property within a CWMU; [or]

(d) fails or has failed to comply with reasonable rules of a landowner association;

<u>or</u>

(e) does not have the legal right to be on lands within a CWMU.

(4) A CWMU agent may not refuse entry to the general public onto any public land within the boundaries of a CWMU that is otherwise accessible to the public for purposes other than hunting big game or turkey for which the CWMU is authorized.

(5) In performing the functions described in this section, a CWMU agent must comply with the relevant laws of this state.

R657-37-9. Permit Allocation.

(1) The division shall issue CWMU permits for hunting big game or turkey to permittees:

(a) qualifying through a drawing conducted for the general public as defined in Subsection R657-37-2(2)(c); or

(b) named by the landowner association member or landowner association operator.

(2) CWMU landowner association members and their spouses and dependent children cannot apply for CWMU permits specific to their CWMU that are offered in the public drawing.

([2]3) A landowner association member or landowner association operator shall be issued vouchers that may be used to purchase hunting permits from division offices.

([3]4) The division and the landowner association member must, in accordance with Subsection (4), determine:

(a) the total number of permits to be issued for the CWMU; and

(b) the number of permits that may be offered by the landowner association member to the general public as defined in Subsection R657-37-2(2)(c).

([4]5)(a) Big game permits may be allocated using an option from:

- (i) table one for moose and pronghorn; or
- (ii) table two for elk and deer.

(b)[<u>During a three year management plan period, permit allocations for moose</u> permits available in the public draw will not drop below 40%](i) Over the term of the certificate of registration, and at all times during the its term, at least 40% of the total permits for bull moose and <u>at least</u> 60% [for]of the antlerless moose <u>permits will be</u> allocated to the public and distributed via the public drawing.

(ii) Notwithstanding subsection (b)(i) above and Tables 1 and 2, if the proportion of permits allocated to the public over consecutive certificate of registration terms substantially deviates from that identified in subsection (b)(i), the Wildlife Board may approve a modified permit distribution scheme that fairly allocates public and private permits.

(c) At least one buck or bull permit or at least 10% of the bucks or bulls permits, whichever is greater, must be made available to the general public through the big game drawing process.

(d) Permits shall not be issued for spike bull elk.

(e) Turkey permits shall be allocated in a ratio of fifty percent to the CWMU and fifty percent to the general public, with the public receiving the extra permit when there is an odd number of total permits.

TABLE 1

MOOSE AND PRONGHORN Cooperative Wildlife Management Unit's Share Option Bucks/Bulls Does/Antlerless 1 60% 40%

Public's Share Option Bucks/Bulls Does/Antlerless

1 40% 60%

TABLE 2

ELK AND DEER

Cooperative Wildlife Management Unit's Share

Option	Bucks/Bulls	Antlerless
1	90%	0%
2	85%	25%
3	80%	40%
4	75%	50%

Public's Share

Option	Bucks/Bulls	Antlerless
1	10%	100%
2	15%	75%
3	20%	60%
4	25%	50%

([5]6)(a) The landowner association member or landowner association operator must meet antlerless harvest objectives established in the CWMU management plan under subsection R657-37-4(3)(a)(ii).

(b) Failure to meet antlerless harvest objectives based on a three year average may result in discipline under section R657-37-14.

([6]7) A landowner association member or landowner association operator must provide access free of charge to any person who has received a CWMU permit through the general public big game or turkey drawings, except as provided in Section 23-23-11.

([7]8) If the division and the landowner association member disagree on the number of permits to be issued, the number of permits allocated, or the method of take, the Wildlife Board shall make the determination based on the biological needs of the big game or turkey populations, including available forage, depredation, and other mitigating factors.

([8]9) A CWMU permit entitles the holder to hunt the species and sex of big game or turkey specified on the permit and only in accordance with the certificate of registration and the rules and proclamations of the Wildlife Board.

([9]10) Vouchers for antlerless permits may be designated by a landowner association member to any eligible person as provided in Rule R657-5 and the proclamation of the Wildlife Board for taking big game, and Rule R657-42.

([10]11) (a) If a landowner association has a CWMU voucher that is not redeemed during the previous year, a landowner association may donate that voucher to a 501(c)(3) tax exempt organization, provided the following conditions are satisfied:

(i) The voucher donation is approved by the [Wildlife Board]director prior to transfer;

(ii) No more than one voucher is donated per year by a landowner association;

(iii) The voucher is donated for a charitable cause, and the landowner association does not receive compensation or consideration of any kind other than tax benefit; and

(iv) The recipient of the voucher is identified prior to obtaining the [Wildlife Board]director's approval for the donation.

(b) A CWMU voucher approved for donation under this section may be extended no more than one year.

(c) The division must be notified in writing and the donation completed before [April]May 1st the year the CWMU voucher is to be redeemed.

(d) vouchers may be used in reciprocal hunting agreements described in accordance with R657-7-(2)(b).

([11]12)(a) A complete list of the current CWMUs, and number of big game or turkey permits available for public drawing shall be published in the respective proclamations of the Wildlife Board for taking big game or turkey.

(b) The division reserves the exclusive right to list approved CWMUs in the proclamations of the Wildlife Board for taking big game or turkey. The division may unilaterally decline to list a CWMU in the proclamation where the unit is under investigation for wildlife violations, a portion of the property comprising the CWMU is transferred to a new owner, or any other condition or circumstance that calls into question the CWMUs ability or willingness to allow a meaningful hunting opportunity to all the public permit holders that would otherwise draw out on the public permits.

R657-37-10. Permit Cost.

The fee for permits allocated to any CWMU is the same as the applicable:

(a) limited entry permit fee for elk and pronghorn;

(b) general season, limited entry or premium limited entry permit fee for deer or turkey; and

(c) once-in-a-lifetime permit fee for moose.

R657-37-11. Possession of Permits and License by Hunters - Restrictions.

(1) A person may not hunt in a CWMU without having in his possession:

- (a) a valid CWMU permit; and
- (b) the necessary hunting licenses, permits and tags.
- (2) A CWMU permit:

(a) entitles the holder to hunt only on the CWMU specified on the permit pursuant to the rules of the Wildlife Board and does not entitle the holder to hunt on any other public or private land, except as provided under Subsection R657-37-7(2)(a); and

(b) constitutes written permission for trespass as required under Section 23-20-

14.

(3) Prior to hunting on a CWMU each permittee must:

(a) contact the relevant landowner association member or landowner association operator and request the CWMU rules and requirements; and

(b) make arrangements with the landowner association member or landowner association operator for the hunt.

R657-37-12. Season Lengths.

(1) A landowner association member or landowner association operator may arrange for permittees to hunt on the CWMU during the following dates:

(a) an archery buck deer season may be established beginning with the opening of the general archery deer season through August 31 and during the sixty-one consecutive day buck deer season;

(b) an archery bull elk season may be established beginning with the opening of the general archery elk season through October 31 and during a bull elk season variance;

(c) an archery buck pronghorn season may be established beginning with the opening of the statewide limited entry archery buck pronghorn season through October 31;

([e]d) general season bull elk, <u>buck</u> pronghorn, and moose seasons may be established September 1 through October 31, or the closing date of the general season for the respective species, whichever is later;

([d]e)(i) general buck deer seasons may be established for no longer than sixtyone consecutive days from September 1 through November 10;

(ii) a landowner association member or landowner association operator electing to establish buck deer hunting in November must:

(A) meet the CWMU management plan objectives;

(B) not exceed average hunter density exhibited on the surrounding deer wildlife management units;

(C) provide positive hunter satisfaction; and

(D) maintain a harvest success rate at least equal to the surrounding deer wildlife management units;

(E) designate the CWMU's sixty-one consecutive day season in the application, or if the sixty-one day consecutive season is not designated the season shall begin September 1;

(F) allow all public hunters the option to hunt in November;

([e]f) muzzleloader bull elk seasons may be established September 1 through the end of the general muzzleloader elk season and during a bull elk season variance;

([f]g) antlerless elk seasons may be established August [45]1 through January 31;

([g]h) antlerless deer seasons may be established August [15]1 through December 31;

(i) doe pronghorn seasons may be established August 1 through October 31, unless August 1 falls on a Sunday, in which case the season shall start on the following Monday; and

([h]j) turkey seasons may be established the second Saturday in April through May 31.

(2) The Wildlife Board may authorize bull elk hunting season variances only if the CWMU landowner association member or landowner association operator clearly demonstrates that November hunting is necessary on the CWMU.

(3) Notwithstanding the season length provisions in this section, any season described in Subsection (1) that begins on a Sunday will default to and commence the Saturday before.

R657-37-13. Rights-of-Way.

A landowner association member may not restrict established public access to public land enclosed by the CWMU.

R657-37-14. [Discipline or Violation]Violations.

(1) The Wildlife Board may refuse to issue, <u>renew</u>, <u>or amend</u> a certificate of registration to an applicant,[-and may refuse to renew</u>] or may revoke, restrict, place on probation, change permits or allocations or otherwise act upon a certificate of registration where the landowner association member[-or landowner association operator] has:

(a) violated any provision of this rule, the Wildlife Resources Code, the certificate of registration, or the CWMU [application/agreement]Management Plan; or

(b) engaged in conduct that results in the conviction of, a plea of no contest to, or a plea held in abeyance to a crime of moral turpitude, or any other crime that when considered with the functions and responsibilities of a CWMU operator bears a reasonable relationship to the operator's or applicant's ability to safely and responsibly operate a CWMU.

(2) The procedures and rules governing any adverse action taken by the division or the Wildlife Board against a certificate of registration or an application for certificate of registration are set forth in Rule R657-2.

R657-37-15. Cooperative Wildlife Management Unit Advisory Committee.

(1) A CWMU Advisory Committee shall be created consisting of [seven]eight members nominated by the director and approved by the Wildlife Board.

- (2) The committee shall include:
- (a) two sportsmen representatives;
- (b) two CWMU representatives;
- (c) one agricultural representative;
- (d) one at-large public representative;
- (e) one elected official; and

(f) one Regional Advisory [Committee]Council chairperson or Regional Advisory [Committee]Council member .

(3) The committee shall be chaired by the Wildlife Section Chief, who shall be a non-voting member.

(4) The committee shall:

(a) hear complaints dealing with fair and equitable treatment of hunters on CWMUs;

- (b) review the operation of the CWMU program;
- (c) review failure to meet antlerless objectives;
(d) hear complaints from adjacent landowners;

(e) review changes in acreage totals for CWMUs that are under standard minimum acreage or parcel configuration requirements and evaluate the appropriateness of their continued participation in the program; and

([e]f) make advisory recommendations to the director and Wildlife Board on the matters in Subsections (a), (b), (c)[-and], (d), and (e).

(5) The Wildlife Section Chief shall determine the agenda, and time and location of the meetings.

(6) The director shall set staggered terms of appointment of members in order to assure that all committee members' terms shall expire after four years, and at least three members shall expire after the initial two years.

[]KEY: wildlife, cooperative wildlife management unit Date of Enactment or Last Substantive Amendment: February 7, 2013 Notice of Continuation: May [14, 2008]6, 2013 Authorizing, and implemented or Interpreted Law: 23-23-3