

RAC AGENDA – November 2018

Revised October 23, 2018



1. Approval of Agenda
- RAC Chair
2. Approval of Minutes
- RAC Chair
3. Old Business
- RAC Chair
4. Regional Update
- DWR Regional Supervisor **INFORMATIONAL**
5. Agricultural Contributions to Wildlife Conservation Presentation
- Justin Shannon, Wildlife Section Chief **INFORMATIONAL**
6. Statewide Mountain Goat Management Plan
- Jace Taylor, Wildlife Biologist **ACTION**
7. Statewide Bighorn Sheep Management Plan
- Jace Taylor, Wildlife Biologist **ACTION**
8. Bucks, Bulls & OIAL 2019 Season Dates, Application Timeline and Rule Amendments
- Covy Jones, Big Game Coordinator **ACTION**
9. CWMU Management Plans and Permit Numbers for 2019 and Landowner Association Permit Numbers for 2019
- Mike Wardle, Public Wildlife/Private Lands Coordinator **ACTION**
10. R657-38 – Dedicated Hunter Rule Amendments
- Bryan Christensen, Dedicated Hunter Coordinator **ACTION**
11. Waterfowl Recommendations and Rule Amendments - 2019
- Blair Stringham, Waterfowl Program Coordinator **ACTION**

Meeting Locations

CR RAC – Nov. 6th 6:30 PM (Location Change)
Monte L. Bean Museum
645 E. 1430 N., Provo

SER RAC – Nov. 14th 6:30 PM
John Wesley Powell Museum
1765 E. Main St, Green River

NR RAC – Nov. 7th 6:00 PM
Brigham City Community Center
24 N. 300 W., Brigham City

NER RAC – Nov. 15th 5:30 PM
Wildlife Resources NER Office
318 North Vernal Ave., Vernal

SR RAC – Nov. 13th 5:00 PM
Cedar City Middle School
2215 W. Royal Hunte Dr, Cedar

Board Meeting – Nov. 29 - 9:00 AM
DNR Boardroom
1594 West North Temple, SLC



GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Wildlife Resources

MICHAEL D. FOWLKS
Division Director

MEMORANDUM

Date: October 18, 2018

To: Wildlife Board and Regional Advisory Council Members

From: Jace Taylor, Bighorn Sheep & Mountain Goat Biologist

Subject: Statewide Management Plan for Mountain Goats

The current statewide management plan for mountain goats was approved in 2013 and expires in 2018. The Utah Division of Wildlife Resources (UDWR) has drafted a new plan for management of mountain goats in collaboration with interested stakeholders.

Below is a summary of the major updates to the statewide management plan for bighorn sheep:

- 1) This plan is proposed as a 10-year plan that will be subject to review in 2028.
- 2) We have updated the population status, management, and habitat sections of the management plan to better reflect current conditions in Utah and to incorporate recent research findings.
- 3) We recommend increasing hunting opportunity to help address point creep.
- 4) In an effort to reduce the number of females that are harvested in populations where we desire more production, we are proposing that everyone who obtains a permit to hunt mountain goats be required to complete an orientation course so they are more able to differentiate males from females. If approved, this would require an edit to rule R657-5-40.



UTAH MOUNTAIN GOAT STATEWIDE MANAGEMENT PLAN



**UTAH DIVISION OF WILDLIFE RESOURCES
DEPARTMENT OF NATURAL RESOURCES**

UTAH DIVISION OF WILDLIFE RESOURCES

STATEWIDE MANAGEMENT PLAN FOR MOUNTAIN GOAT

I. PURPOSE OF THE PLAN

A. General

This document is the statewide management plan for mountain goats in Utah. The plan will provide overall guidance and direction to Utah's mountain goat management program. The plan assesses current information on mountain goats, identifies issues and concerns relating to mountain goat management in Utah, and establishes goals and objectives for future mountain goat management programs. Strategies are also outlined to achieve the goals and objectives. This plan will be used to help determine priorities for mountain goat management and provide the overall direction for management plans on individual mountain goat management units throughout the state.

B. Dates Covered

The statewide mountain goat plan was approved by the Utah Wildlife Board on (expected November 29, 2018) and will be subject to review within 10 years.

II. SPECIES ASSESSMENT

A. Natural History

Mountain goats (*Oreamnos amreicanus*) are not true goats as the name suggests, but share the family Bovidae with true goats (*Capra* spp.), gazelles (*Gazella* spp.) and cattle (*Bos* spp.). They are in the subfamily Caprinae along with 32 other species including sheep (*Ovis* spp.) and muskoxen (*Ovibos* spp.). Mountain goats are the only living species in the genus *Oreamnos*.

Mountain goat males, females, and young are known as billies, nannies, and kids, respectively. Kids are born after a gestation period of approximately 190 days most often as singles, but twins are not uncommon. Kids are normally born in mid-May to early-June. Compared to similarly sized ungulates, mountain goats have a surprisingly late age of first reproduction. In established populations, females often do not give birth until 4 or 5 years old (Festa-Bianchet et al. 1994). In newly translocated populations, females can reproduce as early as 2 or 3 years old (Bailey 1991, Festa-Bianchet and Côté 2008).

Like many ungulates, mountain goats put on weight and fat reserves during the spring and summer months for use during winter. For this reason, weights vary greatly depending on when they are measured. In late summer, a typical mature male will weigh about 175-225 pounds. Females are smaller and typically average between 125 and 150 pounds. Both males and females continue to gain body mass until about 6 years old when they are considered fully-grown. The maximum life span of mountain goats is typically around 15 years old for males and 18–20 years old for females (Festa-Bianchet and Côté 2008).

Both male and female mountain goats have horns. For both sexes, horn growth begins at birth and the vast majority of horn growth occurs during the first 3 years of life. Horn growth for mature adult goats (4+) is minimal. There is little sexual dimorphism exhibited in mountain goats. Horn length of males and females is similar, but male horns tend to be 10-20% thicker at the base than females (Festa-Bianchet and Côté 2008).

The mating period for mountain goats peaks in mid-November and individual females come into estrus for about 2 days. During this time, males seek out females in estrus and defend them from other males. Unlike most ungulates where males fight by clashing or locking horns or antlers, mountain goats have an antiparallel fighting style. During these interactions, males circle each other with each goat's head aligned with the other's rump. Outside the mating season, males and females generally remain segregated.

B. Management

1. UDWR Regulatory Authority

The Utah Division of Wildlife Resources (UDWR) presently operates under authority granted by the Utah Legislature in Title 23 of the Utah Code. The UDWR was created and established as the wildlife authority for the state under Section 23-14-1 of the Code. This Code also vests UDWR with its functions, powers, duties, rights, and responsibilities. UDWR's duties are to protect, propagate, manage, conserve, and distribute protected wildlife throughout the state.

The UDWR is charged to manage the state's wildlife resources and to assure the future of protected wildlife for its intrinsic, scientific, educational, and recreational values. Protected wildlife species are defined in code by the Utah Legislature. Mountain goats have been listed as a protected species in Utah since 1919.

2. Population Status

Mountain goats currently inhabit several mountain ranges in Utah including numerous peaks along the Wasatch Front, Uinta Mountains, Tushar Mountains, and La Sal Mountains (Figure 1). All current populations are the result of introductions; the first of which occurred in 1967 when 6 mountain goats (2 billies, 4 nannies) were released in the Lone Peak area (Table 1). Within Utah, 30 separate transplant events have occurred and 276 mountain goats have been released. Initial transplants used mountain goats from Olympic National Park in Washington as the source herd. After those transplanted herds became established, they became source herds for future transplants. The Tushar Mountains population has been the most common Utah source herd because of its rapidly growing population and relative ease of accessibility. The number of mountain goats in Utah had generally increased from 1967 to 2011 reaching nearly 2,100 animals; since that time, the estimated number of mountain goats in Utah has decreased and stabilized at approximately 1,900 animals (Figure 2).

3. Past and Current Management

In Utah, mountain goat populations are surveyed via helicopter every 2-3 years (Table 2). During these flights, biologists survey all potential mountain goat habitat in August or September and classify all observed animals as adults, or kids. Previous studies have shown that sightability is usually around 80-85% for mountain goats (Rice et al. 2009). In addition to the helicopter surveys, most biologists conduct ground-based or fixed-wing classification counts on units during years when they are not surveyed with a helicopter. This provides biologists with data on annual production and greatly improves our population models for those units.

Mountain goats are managed as an once-in-a-lifetime species in Utah. The first mountain goat hunt in Utah was held on Lone Peak in 1981 where 1 permit was issued. Since 1981 the greatest number of permit issued in a given year was 175 in 2012 (Table 3). From 1981 to 2017, a total of 1,851 permits have been issued resulting in the harvest of 1,759 mountain goats (1,158 billies and 601 nannies). Success rates for mountain goats in Utah are high and average 95%. On the Beaver and Ogden units, where additional measures are needed to control goat populations, UDWR has issued nanny-only permits in addition to any-goat permits. On units where population control is not needed, any goat permits have been issued to harvest any adult goat. Historically, 66% of mountain goat hunters with any-goat permits have harvested billies. The average age of mountain goats harvested in Utah was 4.4 years old in 2017 (Table 4). Demand for permits is extremely high making these permits difficult to draw (Table 5). In 2017, a total of 12,657 hunters applied for the 104 public draw permits available resulting in drawing odds of 1 in 121.

C. Habitat

Mountain goats are obligate occupants of subalpine and alpine environments in Utah. Elevations of up to 13,000 feet are frequented in summer, and winter habitat may be high as 12,000 feet on windblown ridges of some units. Mountain goats prefer steep and rugged areas where these sure-footed animals can escape predators; typically selecting for escape terrain with an intermediate slope typically between 20 and 50 degrees (Gross et al. 2002). Mountain goats in Utah are often found above tree-line as well as in forested subalpine zones where they utilize a variety of grasses, forbs, shrubs, and lichens. Exposed, precipitous cliffs are an essential component of mountain goat habitat. Suitable sites encompass most aspects of mountain goat habitat needs including escape terrain, feeding sites, and birthing and nursery areas.

Food habits of goats are extremely variable among different geographic populations. In general, summer diets are typically dominated by succulent grasses and forbs. Winter diets may include a much higher browse or shrub component, and may even include Ponderosa pine, lodgepole pine, or alpine fir as well as the mosses and lichens that can be found on these trees. Other components of goat habitat that may be locally important include mineral licks and dusting areas used to alleviate heat or ectoparasite load.

III. ISSUES AND CONCERNS

A. Native Status

A number of records exist that document the historical presence of mountain goats in Utah prior to reintroduction efforts that began in 1967. An analysis of available information is included as an appendix to this document (Appendix A). However, there are not as many documented records as with some other wildlife native to Utah, which has led to some controversy about their native status. Regardless of the controversy, they are certainly native to the Northern Rocky Mountains and neighboring states to Utah. UDWR's position is that mountain goat habitat exists in Utah and that mountain goats are a valuable part of our wildlife resource diversity and are a legitimate part of our modern Utah faunal landscape. As with any other ungulate species in our now pervasively human-altered ecosystem, they require pro-active management.

B. Habitat Impacts

Mountain goat utilization of the available forage should be closely monitored. UDWR is committed to working closely with land management agencies to monitor habitat conditions in mountain goat habitat. Although goat densities in Utah are typically low, local areas may exhibit heavy use if animals congregate in specific areas. If mountain goat use is demonstrated to be excessive, UDWR will work cooperatively with the U.S. Forest Service (USFS) and Bureau of Land Management (BLM) to manage goat populations to acceptable numbers. As part of this plan, target population sizes for individual goat herd units will be reviewed for existing management units or developed for new units. Where habitat monitoring data exists, those data will be used to help determine the target population size.

In addition to their direct utilization of forage, mountain goats will also disturb soil to bed and dust bathe. In unregulated populations of mountain goats, this disturbance has caused concern. In regulated populations and at the densities observed in Utah, this disturbance is considered normal behavior of goats and other ungulates. Comparable disturbance is observed at elk wallows and on bighorn sheep lambing and wintering cliffs, even at low population densities. UDWR has observed habitat recovery in these disturbed sites, including at alpine elevations in Utah when the disturbance is caused by mountain goats.

C. Disease

Little information is available relative to disease in mountain goats (Côté and Festa-Bianchet 2003). However, there are some documented occurrences of disease that may be of concern for mountain goats in Utah including contagious ecthyma, Johne's disease, and respiratory pneumonia. Contagious ecthyma is a highly contagious parapox virus that causes blister-like sores to form on the face and muzzle of infected animals. The virus can lay dormant in soil for long periods and enters the host through skin abrasions. Lesions can be extremely painful causing an animal to not feed, leading to emaciation and ultimately death. It is believed that mountain goats may suffer severely from this disease with documented outbreaks resulting in deafness, blindness, and ultimately death (Samuel et al. 1975). Lesions typically last about 2-4

weeks after which an animal may recover. This disease has been observed in domestic sheep flocks for over 200 years (Lance et al. 1981).

Between 1972 -1978, the Colorado Division of Wildlife collected several bighorn sheep and a sympatric mountain goat carcass with lesions consistent with infection from the bacteria *Mycobacterium avium*, commonly referred to as Johne's disease or paratuberculosis (Williams et al. 1979). Mountain goats are believed to be highly susceptible to the disease, leading to severe gastrointestinal distress, emaciation, dry or rough hair coat, and death (Williams et al. 1983). The disease primarily affects lambs and transmission of the disease may occur *in utero* or in the first few months of life through ingestion of contaminated food, water, dust, or feces (Kimberling 1988). This disease is most commonly associated with cattle; however adult sheep, goats, and llamas can be carriers (Garde et al. 2005).

Respiratory pneumonia associated with *pasteurella* spp. and *mannheimia* spp. of bacterium have been reported sporadically in mountain goats, but large scale die-offs have rarely been documented (Garde et al 2005). Several strains of the bacteria are carried as common commensals in the upper respiratory tract. Transmission of these bacteria can occur through direct contact or aerosolization (Garde et al. 2005). In 2010, the Nevada Department of Wildlife documented a pneumonia related die-off in mountain goats and sympatric bighorn sheep in the Ruby Mountains (Peregrine Wolff, personal communication Nevada Department of Wildlife). Disease transmission between mountain goats and bighorn sheep is not well understood and UDWR will continue to investigate the important relationship between these two species. Other concerns include myopathy that may result from selenium deficiency (Côté and Festa-Bianchet 2003) and possibly some parasites such as lungworm.

D. Predation

Predation does not seem to be a limiting factor to mountain goat population growth in Utah. This is likely due to the absence of many mountain goat predators from Utah. Festa-Bianchet and Côté (2008) found that grizzly bears (*Ursus arctos*), wolves (*Canis lupus*) and cougars (*Puma concolor*) were the most effective predators of mountain goat in British Columbia. Cougars are potential predators of mountain goats in Utah, but are more likely to target easier prey such as mule deer, elk, and bighorn sheep. If predation is shown to be an issue on a particular unit, UDWR can increase predator hunting in specific areas or establish a predator management plan for that unit.

E. Wilderness and Park Management

Many wilderness areas in Utah currently have populations of mountain goats. These areas include the High Uintas, Lone Peak, Mt. Olympus, Twin Peaks, and Mt. Timpanogos. In order to properly manage mountain goat populations in these areas, it is critical that biologists have all possible management tools available to them if needed. These include but are not limited to the use of aircraft for surveys, transplants (captures and releases), hunting, and research projects. Any future wilderness designations or park expansions should also allow for these activities. UDWR must continue to work cooperatively with the USFS and BLM on wilderness-related issues to ensure the proper management of mountain goats in these areas. Certain activities

proposed in wilderness areas may necessitate coordination with appropriate land management agencies.

F. Competition with Bighorn Sheep

Mountain goats and Rocky Mountain bighorn sheep typically occur in broadly similar habitats, at similar elevations, and consume many of the same forages. Thus, the potential exists for competition between these two species, particularly when seasonal habitat overlap occurs (Hobbs et al. 1990, Laundre 1994, Gross 2001). However, even where both are present, resource partitioning appears to minimize conflicts (Laundre 1994). Specifically, there is enough disparity in site selection, seasonal use, and forage preference such that range overlap does not result in as much direct competition as expected when each species' habitat requirements are considered separately.

In Utah, sympatric bighorn sheep and goat populations are found only in the eastern Uinta Mountains and to a lesser extent along the Wasatch Front. In these areas, the abundance of alpine habitat combined with the low densities of mountain goats and bighorn sheep, greatly minimizes any interspecies competition. Range overlap of mountain goats and bighorn sheep does not currently occur in other areas of Utah, largely due to domestic and wild sheep disease issues that prohibit wild sheep. In some areas, there is also a general lack of suitable bighorn sheep wintering areas.

G. Poaching

Poaching of mountain goats is less common than other ungulate species due to the remote nature of their habitat. There are some documented cases of mountain goat poaching in Utah, but they are rare. Poaching likely has no population level effect, but does reduce hunting opportunity for law-abiding hunters. Mountain goat populations are small and due to their low reproductive rate, only a small proportion of the population can be harvested. With less than 200 permits currently issued, one poached animal is proportionately a large loss in opportunity.

Most poaching cases of mountain goats occur when a hunter with a female-only permit mistakenly identifies an animal and accidentally harvest a male. Typically, the hunters report their mistake, but this situation can lead to overharvesting males if this becomes too prevalent. Other poaching incidents usually occur when a hunter cannot access the goat he shot due to the rugged terrain or the animal was damaged from falling after it was shot. UDWR investigates all reported poaching cases. The high profile nature of mountain goats and their limited distribution adds concern to these investigations.

H. Transplants

All of the mountain goat populations that currently exist in Utah are a result of transplants or dispersal from transplants. Although mountain goats can pioneer to new areas when densities are sufficiently high, transplants continue to be the preferred method used to establish new mountain goat populations and supplement existing ones. Mountain goat transplants in Utah have typically been successful provided the habitat on the site is suitable and a sufficient number

of goats have been released. Transplant sites are carefully selected using habitat models, vegetation surveys, and meetings with interested stakeholders.

Although most suitable mountain goat habitat in Utah is already occupied, several potential sites for new transplants still exist (Appendix B). Additionally, some existing units may need to be augmented to bolster population growth. It is critical that UDWR work closely with the USFS and BLM to ensure the success of any future relocation efforts. Careful monitoring of vegetation will be needed to alleviate concerns for alpine vegetation.

There are a number of mountain goat populations in Utah that could serve as source herds for augmentation or to start new populations within Utah or in other states. For many of these populations, wilderness designated lands are one of the largest barriers to catching animals. UDWR, USFS, and BLM will need to work cooperatively to determine the suitability of helicopter access for possible transplant and GPS collaring projects.

IV. USE AND DEMAND

In Utah, mountain goats are one of the easier to draw permits for an once-in-a-lifetime species, likely due to the extremely rugged terrain they inhabit. Even so, the demand for these permits is still high and far exceeds permit supply. In Utah for 2012, applications exceeded available permits by 68:1 for residents and 621:1 for nonresidents. Applications for both resident and nonresidents have increased every year since the initiation of Utah's draw system (Table 5).

In addition to hunting, viewing mountain goats is one of the most exhilarating and memorable experiences available to users of high alpine areas in Utah. The closeness of some of Utah's mountain goat populations to the Wasatch front helps contribute to the interest of wildlife viewers in watching mountain goats. Public perception of goat viewing opportunities is overwhelmingly positive, and the Watchable Wildlife events for mountain goats are some of the most popular events hosted by the UDWR. UDWR's goal is to foster and promote these opportunities wherever possible and enable people to see this unique species.

V. CONCLUSION

Mountain goats personify the high lonesome reaches of western North America. Goats are adapted to live in the highest, coldest, snowiest and most precipitous reaches of our classic western mountain ranges. The image of a solitary goat on a ridiculously narrow rock ledge on a seemingly inaccessible cliff is one that once seen is never forgotten. For over 50 years, UDWR has carefully managed Utah's mountain goat populations so herds are productive and balanced with available habitat. UDWR plans to continue this management approach, while also establishing new mountain goat populations where possible. This will allow UDWR to expand both hunting and viewing opportunities for mountain goats while ensuring their long-term viability in Utah.

VI. STATEWIDE MANAGEMENT GOALS AND OBJECTIVES

A. Population Management Goal: Establish sustainable populations of mountain goats by utilizing suitable habitat within the state to create and foster individual populations.

Objective 1: Increase mountain goat populations within the state as conditions allow.

Strategies:

- a. Develop or revise all management plans for individual units making sure to include population goals and objectives.
- b. Survey all herd units by helicopter every 1–3 years to monitor population size and composition.
- c. Use population or sightability models to determine the relationship between population surveys and population size.
- d. Utilize GPS collars to better understand movements and aid in estimating abundance of mountain goats.
- e. Translocate and/or harvest animals from populations where habitat concerns exist due to high goat densities or where populations are above objective.
- f. Augment existing populations where needed to improve herd distribution, link small populations, and improve genetic diversity (Appendix B). Depending on location, augmentation activities may need to be coordinated with the appropriate federal land management agency.
- g. Transplant mountain goats to establish new populations in accordance with Utah Code 23-14-21 (Appendix B). Depending on location, augmentation activities may need to be coordinated with the appropriate federal land management agency.
- h. Participate in research efforts to monitor adult and kid survival and determine reasons for poor kid recruitment and population declines in units where needed.
- i. Support law enforcement efforts to reduce illegal taking of mountain goats.

B. Habitat Management Goal: Provide good quality habitat for healthy populations of mountain goats.

Objective: Maintain or improve mountain goat habitat to enhance individual population success and promote the overall sustainability of mountain goats statewide.

Strategies:

- a. Identify mountain goat habitats and work with land managers to protect and enhance these areas.
- b. Assist land management agencies in monitoring mountain goat habitat. Habitat monitoring by the land management agencies will be contingent on available funding and personnel.
- c. Work with land managers to minimize and mitigate loss of mountain goat habitat.
- d. Inform and educate the public concerning the needs of mountain goats.

C. Recreation Goal: Provide quality opportunities for hunting and viewing mountain goats.

Objective 1: Increase hunting opportunities as populations allow while maintaining high quality hunting experiences.

Strategies:

- a. Recommend mountain goat permits (including female only permits) to make progress towards population objectives contained in unit management plans.
- b. Recommend mountain goat permits to harvest 5%-25% of the counted adult population.
- c. Use subunits to maximize hunting opportunities and improve hunter distribution.
- d. When feasible, use multiple seasons to maximize hunting opportunities and minimize hunter conflicts.
- e. Require mountain goat orientation course for all hunting permit holders. Encourage hunters to avoid harvesting nannies with hunter's choice permits.
- f. Explore providing a greater variety of hunting opportunities by utilizing more primitive weapons, variation in season length, and more variable season dates.

Objective 2: Increase public awareness and expand opportunities to view mountain goats.

Strategies:

- a. Look for ways to expand mountain goat viewing opportunities for the public.
- b. Ensure that information about mountain goats published on the Division's website, social media channels, and print products is current and accurate.
- c. Work with partner entities (state and federal agencies, conservation groups, agricultural stakeholders, etc.) to help educate the public about the value of mountain goats on the landscape, as well as the threats the species faces.

Figure 1. Mountain goat distribution, Utah 2017.

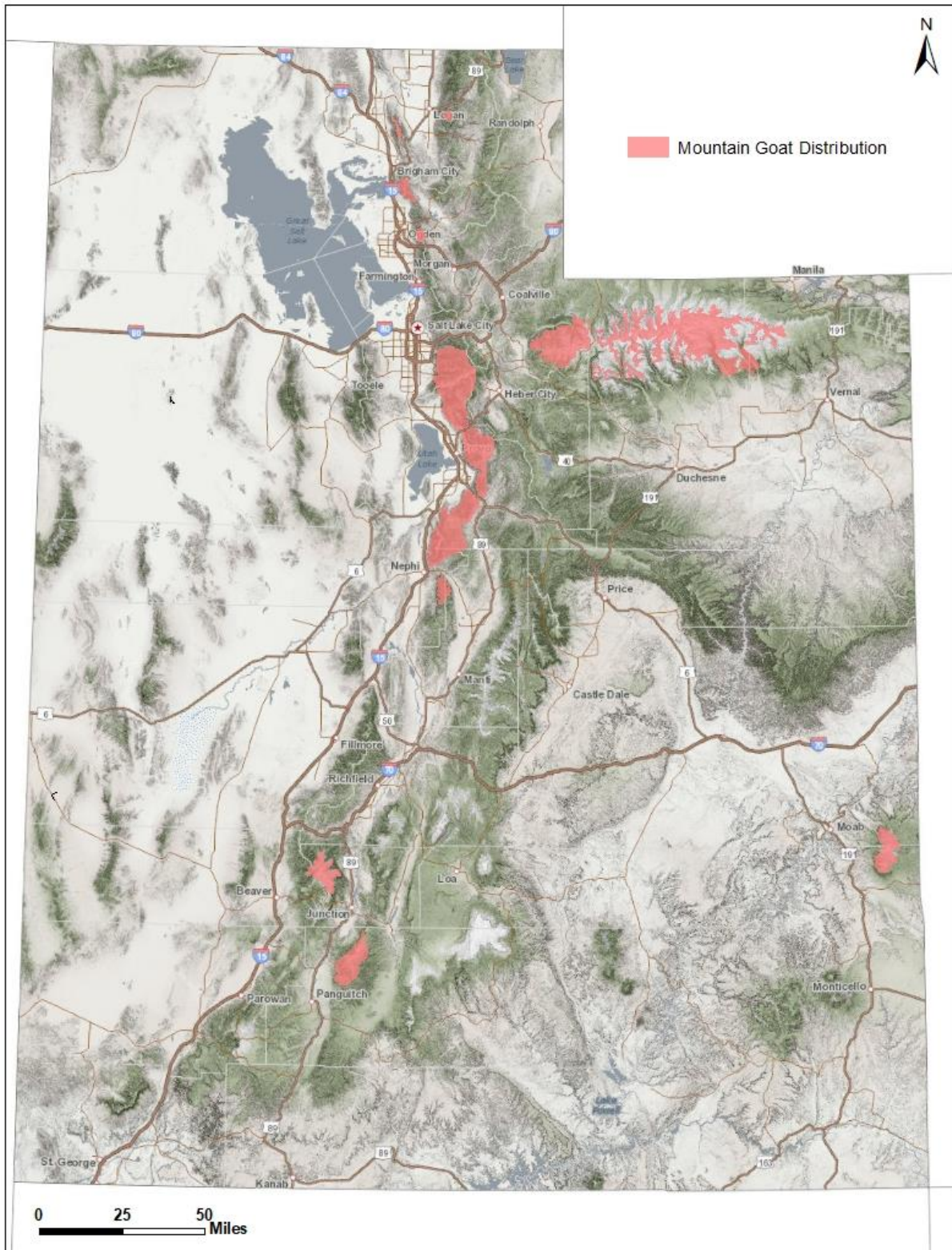


Figure 2. Mountain goat population trends, Utah 1975–2017.

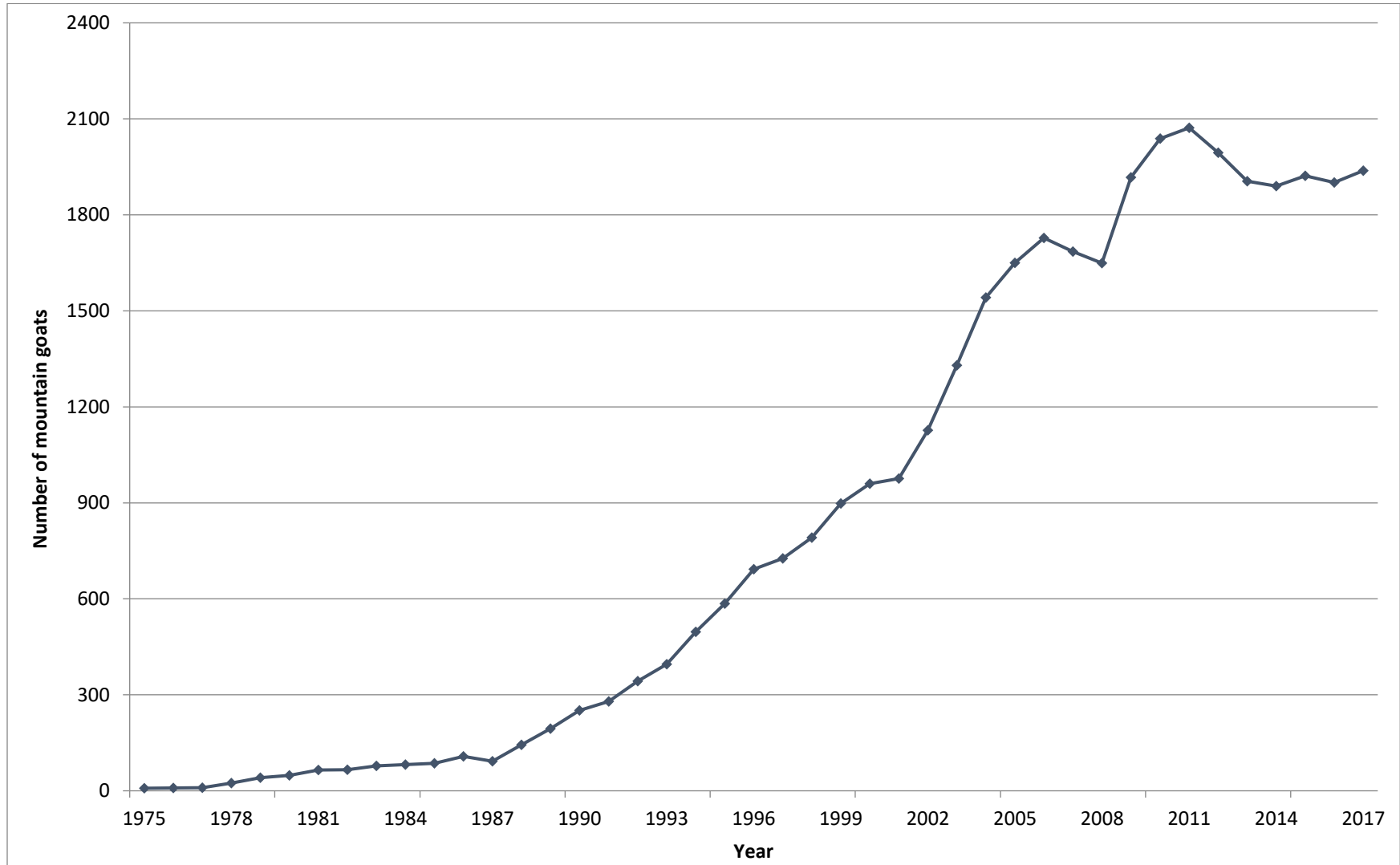


Table 1. History of mountain goat transplants, Utah 1967–2017.

Unit #	Unit	Area Released	Year	# Released	Source
3	Ogden	Willard Peak	1994	5	Lone Peak, UT
3	Ogden	Willard Peak	2000	4	Provo Peak, UT
7	Kamas	Bald Mountain, Uintas	1987	7	Lone Peak, UT
7	Kamas	Bald Mountain, Uintas	1988	16	Olympic NP, WA
8 / 9	North Slope/South Slope	Whiterocks Canyon, Uintas	1989	9	Olympic NP, WA
8 / 9	North Slope/South Slope	Whiterocks Canyon, Uintas	1989	1	Kamas, UT
8 / 9	North Slope/South Slope	Whiterocks Canyon, Uintas	1992	13	Lone Peak, UT
8 / 9	North Slope/South Slope	Chepeta Lake, Uintas	1996	7	Tushar Mountains, UT
8 / 9	North Slope/South Slope	Liedy Peak, Uintas	1996	3	Tushar Mountains, UT
8 / 9	North Slope/South Slope	Marsh Peak, Uintas	1996	5	Tushar Mountains, UT
8 / 9	North Slope/South Slope	Brown Duck Peak, Uintas	1997	7	Tushar Mountains, UT
8 / 9	North Slope/South Slope	South Fork of Rock Creek, Uintas	1997	5	Tushar Mountains, UT
8 / 9	North Slope/South Slope	Center Park, Uintas	2000	8	Tushar Mountains, UT
8 / 9	North Slope/South Slope	Jefferson Park, Uintas	2000	9	Tushar Mountains, UT
13	La Sal Mountains	Beaver Basin	2013	20	Tushar Mountains, UT
13	La Sal Mountains	Beaver Basin	2014	15	Tushar Mountains, UT
16	Central Mountains	Loafer Mountain	2007	20	Tushar Mountains, UT
16	Central Mountains	Nebo	2013	10	Tushar Mountains, UT
16	Central Mountains	Nebo	2013	11	Willard Peak, UT
17	Wasatch Mountains	Lone Peak	1967	6	Wantachee, WA
17	Wasatch Mountains	Mount Olympus	1981	10	Olympic NP, WA
17	Wasatch Mountains	Mount Olympus	1981	4	Unknown
17	Wasatch Mountains	Mount Timpanogos	1981	10	Olympic NP, WA
17	Wasatch Mountains	Provo Peak	1989	7	Olympic NP, WA
17	Wasatch Mountains	Provo Peak	1990	5	Mount Timpanogos, UT
22	Beaver	Tushar Mountains	1986	6	Lone Peak, UT
22	Beaver	Tushar Mountains	1986	1	Mount Timpanogos, UT
22	Beaver	Tushar Mountains	1988	17	Olympic NP, WA
24	Mt Dutton	Cottonwood Peak & Mt Dutton Peak	2013	25	Willard Peak, UT
24	Mt Dutton	Cottonwood Peak & Mt Dutton Peak	2015	21	Willard Peak, UT
—	Idaho	Lemhi Mountains	2007	24	Tushar Mountains, UT
—	South Dakota	Black Hills	2013	22	Tushar Mountains, UT

Table 2. Mountain goat trend counts by unit, Utah 2008–2017.

Unit	Year established	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Beaver	1986	133	206	—	240	—	222	—	215	—	—
Mt Dutton	2013	—	—	—	—	—	25*	—	—	47	—
Central Mountains, Loafer Mountain	2007	—	—	—	—	26	—	19	37	—	20
Central Mountains, Nebo	2007	—	—	—	—	22	—	20	29	—	91
Kamas / Chalk Creek	1987	37	108	—	91	—	—	129	—	—	103
North / South Slope, High Uintas Central	1989	153	210	—	197	—	—	206	—	—	220
North / South Slope, High Uintas East	1996	95	81	—	89	—	—	64	—	—	55
North / South Slope, High Uintas Liedy Peak	1996	58	77	—	41	—	—	44	—	—	52
North / South Slope, High Uintas West	1987	236	294	—	440	—	—	392	—	—	303
Ogden, Willard Peak	1994	115	193	218	252	—	205	197	188	148	—
Wasatch Mountains, Box Elder Peak	1967	—	—	54	—	30	—	34	31	—	36
Wasatch Mountains, Lone Peak	1967	—	—	67	—	13	5	27	41	—	44
Wasatch Mountains, Provo Peak	1989	—	—	104	—	79	—	75	76	—	53
Wasatch Mountains, Timpanogos	1981	—	—	118	—	64	—	76	92	—	81
La Sal, La Sal Mountains	2013	—	—	—	—	—	20*	—	—	43	56

*Initial transplant

Table 3. Mountain goat harvest statistics, Utah 1981–2017.

Year	Permits issued	Billy harvest	Nanny harvest	Total harvest	Hunters afield	Success rate (%)	Mean days hunted
1981	1	1	0	1	1	100	2
1982	1	0	1	1	1	100	2
1983	3	3	0	3	3	100	4.3
1984	4	2	1	3	4	75	4
1985	3	3	0	3	3	100	5.3
1986	4	2	2	4	4	100	6.5
1987	4	3	1	4	4	100	3.8
1988	4	3	1	4	4	100	3.5
1989	5	4	1	5	5	100	3.6
1990	6	4	0	4	6	67	4.8
1991	6	3	3	6	6	100	7
1992	8	8	0	8	8	100	5.8
1993	7	6	1	7	7	100	4.3
1994	10	10	0	10	10	100	—
1995	12	10	2	12	12	100	—
1996	19	16	2	18	19	95	4.2
1997	19	17	2	19	19	100	—
1998	19	18	0	18	19	95	3.5
1999	20	18	2	20	20	100	—
2000	29	19	9	28	29	97	3.2
2001	30	21	9	30	30	100	—
2002	36	25	10	35	36	97	—
2003	41	32	9	41	41	100	2.3
2004	46	31	15	46	46	100	2.6
2005	68	42	21	63	65	97	3.5
2006	94	48	38	86	93	92	3.3
2007	96	55	36	91	96	95	3.3
2008	95	58	30	88	93	95	2.9
2009	108	77	30	107	107	100	2.8
2010	115	70	41	111	114	97	3.0
2011	143	91	42	133	142	94	3.4
2012	175	94	73	167	174	96	2.6
2013	170	87	70	157	166	95	2.7
2014	115	74	36	110	115	96	3.1
2015	118	77	35	112	117	96	3.2
2016	106	63	40	103	104	99	3.8
2017	111	63	38	101	107	94	3.5

Table 4. Mountain goat average age of harvest, Utah 2010–2017.

Management unit	Average age							3-year average	
	2010	2011	2012	2013	2014	2015	2016		2017
Beaver	4.9	4.9	5.0	3.5	5.1	4.7	4.6	3.9	4.4
Kamas/Chalk Creek	4.6	6.5	3.3	6.3	5.0	5.3	6.7	2.0	4.7
North / South Slope, High Uintas Central	5.8	4.0	3.6	4.8	3.5	4.8	5.4	3.2	4.5
North / South Slope, High Uintas East	5.0	11.0	7.0	4.7	6.5	7.8	3.5	6.3	5.9
North / South Slope, High Uintas Liedy Peak	3.5	3.8	7.5	10.0	6.0	3.0	7.0	4.0	4.7
North / South Slope, High Uintas West	3.0	4.8	4.8	4.5	5.8	4.8	5.8	5.7	5.4
Ogden, Willard Peak	3.7	4.1	3.9	3.6	2.8	3.6	3.7	2.9	3.4
Wasatch Mountains, Box Elder Peak	9.0	—	6.0	7.7	5.0*	6.0*	2.0*	3.5*	3.8
Wasatch Mountains, Lone Peak	10.0	3.0	3.5	9.0	—	—	—	—	—
Wasatch Mountains, Provo Peak	5.8	4.0	4.0	5.3	5.5	10.0	3.0	6.7	6.6
Wasatch Mountains, Timpanogos	6.4	4.5	3.0	6.3	—	—	—	—	—
Central Mountains, Nebo	—	—	—	3.0	2.0	3.0	—	3.5	3.3
Mt Dutton	—	—	—	—	—	—	—	2.0	2.0
Statewide average	4.7	4.5	4.4	4.3	4.6	4.6	4.5	4.0	4.4

*Combined hunts: Box Elder Peak, Lone Peak, Timpanogos

Table 5. Resident and nonresident drawing odds of obtaining mountain goat hunting permits, Utah 1998–2017.

Year	Residents			Nonresidents		
	Applicants	Permits	Odds	Applicants	Permits	Odds
1998	568	18	1 in 31.6	44	1	1 in 44
1999	748	20	1 in 37.4	93	1	1 in 93
2000	904	24	1 in 37.7	142	2	1 in 71
2001	1103	27	1 in 40.9	194	2	1 in 97
2002	1505	33	1 in 45.6	244	2	1 in 122
2003	1793	37	1 in 48.5	275	3	1 in 92
2004	2072	40	1 in 51.8	333	3	1 in 111
2005	2384	59	1 in 40.4	464	5	1 in 93
2006	2747	83	1 in 33.1	660	6	1 in 110
2007	3351	84	1 in 39.9	683	5	1 in 137
2008	3405	83	1 in 41.0	732	7	1 in 105
2009	3577	91	1 in 39.3	2869	9	1 in 319
2010	3911	97	1 in 40.3	3194	10	1 in 319
2011	4005	118	1 in 33.9	3446	11	1 in 313
2012	4220	144	1 in 29.3	3779	17	1 in 222
2013	4620	144	1 in 32.1	4134	14	1 in 295
2014	5113	92	1 in 55.6	4599	10	1 in 459
2015	5492	93	1 in 59.1	5108	10	1 in 510
2016	5860	90	1 in 65.1	5497	8	1 in 687
2017	6441	94	1 in 68.5	6216	10	1 in 621

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Appendix A

MOUNTAIN GOATS IN UTAH: AN OVERVIEW

History

The mountain goat of western North America is one of two known members from the genus *Oreamnos*. The other member of the genus, *Oreamnos harringtoni*, is extinct. The closest extant relative is the chamois of Europe. Because of the harsh sites that mountain goats inhabit, the fossil record is not extensive. The genus likely derived from parent stock in Asia and entered North America sometime during the Pleistocene. It was likely completely isolated from that parent stock by the late Pleistocene (18,000 years ago).

During and since the Pleistocene, the distribution and status of goat populations likely varied widely since mountain goats specialized to occupy a narrow range of habitats. These habitats are tied closely to alpine cliffs, which means any glacial encroachment or retreat would have likely changed habitat suitability on all mountain ranges in western North America. This would have also caused an altitudinal shift in habitats within individual mountain ranges. During the full glacial period of the late Pleistocene, Harrington's mountain goats were present farther south than any mountain goats live today. This is documented by fossils recovered from the San Josecito Cave site, in Nuevo Leon, Mexico, at an altitude of 2300 meters. There were likely no goats present in much of Canada and Alaska because suitable cliff sites were buried by glaciers. With the end of the Pleistocene and the associated glacial retreat, suitable habitats for mountain goats would have become available northward and upward from the southern terminus in Mexico. As these habitat changes progressed, Utah would have provided a major pathway for goat redistribution from south to north. The central mountain ranges of Utah, along with the Rocky Mountains of Colorado, would have provided appropriate habitats for goat redistribution in response to changing climate. A strong case can be made that Utah would have been intermediate between both extremes. Given the variety and extent of mountain ranges through the length of the state, habitat at some elevation could have been provided during most if not all of the Pleistocene, and evidence from fossil sites in nearby areas support that premise. Pleistocene goat remains have been identified from the Smith Creek Cave site on the Utah-Nevada border near Baker, Nevada; at three sites in the Laramie Mountains in southeastern Wyoming; and at Rampart Cave and the Stanton site along the Colorado River corridor in northern Arizona. As conditions became warmer and drier in the Intermountain region after the Pleistocene, a dramatic restructuring of goat distributions could have occurred.

Recent Distribution

The distribution of mountain goats at the time of European contact with western mountain ranges is very poorly documented. This is likely a byproduct of the remote habitats used by mountain goats. Given the climatic conditions of the past 200 years, goat habitat would have been limited to the highest and most inaccessible alpine expanses in the Intermountain region. Only in Alaska and Northwest Canada would goats have been found near the valleys and basins that provided access for Europeans. Even early trappers would have been unlikely to encounter goats in their normal pursuit of beaver, since goats persist yearlong at high elevations in most ranges.

By the early part of the 20th century, European settlement and an interest in wildlife had set the stage for increasing recorded knowledge of the status and distribution of goats. By mid-century,

a well-documented analysis of goat distributions had emerged. A USFS report that was published in the Twelfth Biennial Report of the Fish and Game Commissioner of the State of Utah in 1917-1918, estimated 25 mountain goats on the Wasatch Forest. This figure was listed in addition to mountain sheep numbers. The Wasatch Forest at that time also included the Uinta Mountains; site locations, unfortunately, were not listed. A separate report from a District Ranger in Kamas stated that both mountain sheep and goats were present in the High Uintas. By the middle of the 20th century no native goat populations were known to persist in Utah, Colorado, Nevada, or Wyoming.

Currently, however, there are populations of mountain goats in all these states. All are the result of introductions of goats by state wildlife departments during the last 50+ years. Many, if not all, of these populations are healthy and viable, indicating that these populations all occupy habitat suitable for mountain goats. The status of these areas at the time of European settlement is not fully known.

The Intermountain Region Since the Pleistocene

The most recent glacial age ended about 14,000 years ago, and the interglacial period that we currently occupy had gained primacy. Conditions became significantly warmer and in many cases drier. Mountain goat habitat, which once existed as far south as Mexico was no longer suitable. The progression from full glacial advance to present day conditions was far from linear. Small scale returns to colder and snowier conditions occurred as recently as the 1800's. During the Middle Holocene, there was a period of several thousand years (from about 7,000 to 4,500 years ago) when climatic conditions were substantially warmer and probably drier than those today. Data indicate this period was pervasive enough that the Great Salt Lake may have been nearly dry.

Based on our knowledge of goat habitat requirements and climatic conditions in the early Holocene, goats could have found suitable habitat in many mountain ranges of Utah and the Intermountain area after the end of glaciation. These habitats were likely similar to those present today, though perhaps more extensive, given the cooler temperatures. During the Middle Holocene, however, the dramatic warming would have shifted goat habitat much higher on occupied mountain ranges. Data from the Snowbird Bog pollen sites indicate that timberline may have been 1000 feet or more higher in altitude than that found today. Given the observed altitudinal depth of current habitats, this compression would have eliminated suitable sites on most Intermountain ranges, and restricted those found in larger and more northerly ranges. Thus goat populations surviving after the Pleistocene in high elevation habitats may have been eliminated or restricted.

Since that period, however, conditions have reverted to a cooler and wetter pattern. Suitable goat habitat exists on many mountain ranges in Utah and surrounding states, as demonstrated by the survival of transplanted populations. If these ranges were devoid of goats at the time of European contact, why had goats not re-colonized there? Certainly goat populations had followed the ebb and flow of glacial periods for perhaps millions of years. However, one new factor was inserted at the end of the Pleistocene; humans. Humans became for the first time a member of the North American ecosystem. After that time, aboriginal people were widespread and important modifiers of both vegetative and animal communities. Although the extent and type of modifications are debated, the conclusion of nearly all recent research has been that impacts by aboriginal people were greater than previously thought. Some of the most obvious

and dramatic impacts would have been extensive and widespread burning, transportation of propagules of plant species beyond the range of "natural" movement, and manipulation or even elimination of populations and even species of large vertebrates.

It is known that goats were contemporaneous with aboriginal hunters at the end of the Pleistocene. The loss of goats during the Holocene may have been directly aided by opportunistic hunting of goats. It is well documented that native peoples hunted mountain sheep in alpine areas throughout the Intermountain area. Goats would have been an appropriate alternative prey item for these big game hunters.

Whatever the extent of this aboriginal pressure, it is obvious that recolonization of suitable habitats by goats had to be accomplished through the barrier of a thriving culture of big game hunters. These big game hunters likely only killed goats opportunistically, since their survival was dependent upon the vast array of other ungulates available to them. Given their highly selective habitat requirements, relatively low densities, and low fecundity, it would have been difficult for goats to recolonize these now suitable habitats. Currently, with a vast ocean of human habitation surrounding islands of goat habitat, the prospects for natural expansion of goat populations, except for unoccupied habitats immediately adjacent to existing populations, is unlikely.

An interesting footnote to this scenario can be added for the current status of moose. This species has since the turn of the century greatly extended its range southward into the Intermountain Area. The prospects for moose pioneering after the Pleistocene should have been as poor as for goats in the face of a thriving big game hunting culture. However, the encroachment of Europeans eliminated the two prime predators of moose - wolves and aboriginal big game hunters. After the turn of the century, wildlife laws and enforcement reduced the killing of moose by early settlers. As such, moose, with their higher mobility and broader habitat requirements than mountain goats, were able to colonize areas far to the south of what had been considered its historically occupied range.

***Oreamnos* speciation**

The relationship between the two known species of *Oreamnos* (Harrington's goat and mountain goat) warrants some discussion. Essentially, the largest difference between the two species is size. Harrington's goat is up to 30% smaller than the existing mountain goat species and has minor skull variances. This difference is derived from skulls from a few well-documented sites in Arizona, Mexico, California, and Nevada. Overall, though, the fossil record is poor because of the low probability of preservation in the harsh sites frequented by goats. The existing fossils all came from protected cave sites which are rare. Nearly all such sites are from isolated areas at the southern extreme of past mountain goat range and were likely in areas isolated from other goat populations after the end of the Pleistocene. Caution must be exercised in projecting the importance of a character such as relative size in assessing its evolutionary significance and the relationship between the two *Oreamnos* species. Body size may be one of the most labile of morphological traits, especially in extremes of climatic conditions. Purdue and Reity (1993) have demonstrated tremendous shifts in body size in white-tailed deer during the past 4,400 years in Georgia and South Carolina. They consider climate changes with resultant habitat quality to be the driving factor for this change. They indicate that body size tends to be quite responsive to changes in certain environmental factors that in turn serve as the ultimate source of

selection. This is dramatically demonstrated by ungulates on islands, which may frequently be dwarfed in response to reduced food resources.

A careful consideration of these factors will generate caution in inferring about the relationship between *O. harringtoni* and *O. americanus*. The fossil records are non-existent between isolated southerly sites and the range of "modern" goats. It is possible that the Harrington population documented by cave sites were "islands" by the late Pleistocene. Kurten (1980) postulates that Harrington's goat was in fact an extension of *O. americanus* that became isolated at the end of the Pleistocene, and body size would have been driven by limited resources. Since their habits were probably like those of modern goats, they would have been subjected to resource limitations in their peripheral occurrences.

Appendix B

Notwithstanding the following list, any existing mountain goat populations can be augmented. All suitable mountain goat habitat within the following units/subunits will be considered for augmentation/reintroduction.

Potential mountain goat transplant sites by region, Utah 2018.¹

Region	Unit	Transplant Site	Transplant Type
Central	Central Mountains	Loafer Mountain	Augmentation
	Central Mountains	Manti	Initial transplant
	Central Mountains	Mount Nebo	Augmentation
	Oquirrh-Stansbury	Stansbury Mountains	Initial transplant
	Wasatch Mountains	Box Elder Peak	Augmentation
	Wasatch Mountains	Lone Peak	Augmentation
	Wasatch Mountains	Provo Peak	Augmentation
	Wasatch Mountains	Timpanogos	Augmentation
	West Desert	Deep Creek Mountains	Initial transplant
Northeastern	North / South Slope	High Uintas Central	Augmentation
	North / South Slope	High Uintas East	Augmentation
	North / South Slope	High Uintas Liedy Peak	Augmentation
	North / South Slope	High Uintas West	Augmentation
Northern	Cache	Wellsville Mountains	Augmentation
	Cache	Logan Peak	Augmentation
	Cache	Mount Naomi	Augmentation
	Kamas	Uintas	Augmentation
	Ogden	Ogden Peak	Augmentation
	Ogden	Willard Peak	Augmentation
Southeastern	La Sal	La Sal Mountains	Augmentation
Southern	Beaver	Tushar Mountains	Augmentation
	Mt Dutton	Mt Dutton	Augmentation
	Monroe	Monroe	Initial transplant
	Panguitch Lake	Panguitch Lake	Initial transplant
	Plateau, Boulder	Boulder	Initial transplant
	Plateau, Thousand Lakes	Thousand Lakes	Initial transplant

¹ In accordance with Utah Code 23-14-21.



GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Wildlife Resources

MICHAEL D. FOWLKS
Division Director

MEMORANDUM

Date: October 18, 2018

To: Wildlife Board and Regional Advisory Council Members

From: Jace Taylor, Bighorn Sheep & Mountain Goat Biologist

Subject: Statewide Management Plan for Bighorn Sheep

The current statewide management plan for bighorn sheep was approved in 2013 and expires in 2018. The Utah Division of Wildlife Resources (UDWR) has drafted a new plan for management of bighorn sheep in collaboration with interested stakeholders.

Below is a summary of the major updates to the statewide management plan for bighorn sheep:

- 1) This plan is proposed as a 10-year plan that will be subject to review in 2028.
- 2) We have reaffirmed the DWR's position to increase bighorn sheep populations where appropriate without negatively impacting Utah's domestic sheep industry.
- 3) We have updated the disease information in the plan to reflect current scientific understanding. Important updates include recent findings concerning polymicrobial pneumonia, *Mycoplasma ovipneumoniae*, and evolving strategies concerning genetic interchange between populations of bighorns.
- 4) We recommend establishing protectable nursery herds for each subspecies of bighorn sheep to allow active management that will strengthen bighorn sheep populations struggling with disease.
- 5) We propose pursuing a protocol that would allow livestock producers to lethally remove wild bighorn sheep that are found in contact with domestic sheep or goats.
- 6) We recommend increasing hunting opportunity to help address point creep and to reduce instances of foraging rams that pose threats to herd health.

UTAH BIGHORN SHEEP STATEWIDE MANAGEMENT PLAN



**UTAH DIVISION OF WILDLIFE RESOURCES
DEPARTMENT OF NATURAL RESOURCES**

**UTAH DIVISION OF WILDLIFE RESOURCES
STATEWIDE MANAGEMENT PLAN FOR BIGHORN SHEEP**

I. PURPOSE OF THE PLAN

A. General

This document is the Statewide Management Plan for bighorn sheep in Utah (hereafter referred to as the “Plan”). This Plan provides overall guidance and direction to Utah’s bighorn sheep management program. This Plan assesses current information on bighorn sheep, identifies issues and concerns relating to bighorn sheep management in Utah, and establishes goals and objectives for future bighorn management programs. Strategies are also outlined to achieve goals and objectives. This Plan helps determine priorities for bighorn management and provide the overall direction for management plans on individual bighorn units throughout the state.

This Plan, among other things, outlines a variety of measures designed to abate or mitigate the risk of comingling and pathogen transmission between domestic and wild bighorn sheep. This Plan is not intended to be utilized to involuntarily alter domestic sheep grazing operations in Utah. The only mechanism acceptable to the Utah Division of Wildlife Resources (UDWR) for altering domestic sheep grazing practices to avoid risk of comingling is through voluntary actions undertaken by the individual grazers. UDWR does not support any form of involuntary restriction, reduction, limitation, termination, or conversion of permitted domestic sheep grazing for purposes of protecting bighorn sheep on public or private property.

The ability to successfully manage current populations of bighorn sheep and to restore bighorns to historical habitat is highly dependent on public tolerance for those existing and new populations. There are very few areas in Utah with suitable bighorn habitat that are not impacted by human development or are not in proximity to domestic sheep or domestic sheep grazing. Remaining areas of unoccupied suitable habitat have domestic sheep in the vicinity that create a moderate risk of comingling. Broad-based public support for new bighorn populations cannot be achieved if it comes at the expense of local domestic sheep operations. That public support, particularly with the agriculture industry, is critical to UDWR’s ability to successfully maintain and expand bighorn sheep and other wildlife populations throughout the state. That public support is more vital to the successful conservation of bighorn sheep than abating the moderate risk of comingling and disease presented by domestic sheep. If UDWR adopts a zero sum game approach in abating comingling through involuntary grazing restrictions, conversions, and terminations, it will create a divide between agriculture and wildlife management detrimental not only to bighorn sheep conservation, but wildlife in general.

Statute charges the UDWR in Utah Code Section 23-14-3 to establish policies that “recognize the impact of wildlife on man, his economic activities, private property rights, and local economies” and to “balance the habitat requirements of wildlife with the social and economic activities of man.” Considering this, the UDWR will not manage bighorn sheep to the involuntary exclusion of domestic sheep. The two must both exist in Utah with a proper balance between the two entities.

B. Dates Covered

The Plan was approved by the Utah Wildlife Board on (expected November 29, 2018) and will be subject to review within 10 years.

II. SPECIES ASSESSMENT

A. Natural History

Bighorn sheep are found in western North America from central British Columbia to Mexico and from California to the Dakotas and are beautiful and impressive large mammals native to North America. They are named for the massive horns grown by the males of the species. Horns grow throughout life and typically reach maximum size at 8 to 10 years of age. Females also have horns that are similar in size to yearling males. Males, females, and young of the year are called rams, ewes, and lambs respectively. Rams normally separate themselves from groups of ewes and lambs, except during the breeding season, which can occur from August to November for desert bighorns and from October to early December for Rocky Mountain bighorns. During that time, rams engage in impressive head butting clashes to establish dominance. Gestation is about 180 days. Lambs, which are nearly always singles, are born in February to May for desert bighorns and April to early June for Rocky Mountain bighorns.

Bighorn sheep are native to Utah with suitable habitat throughout the state (Figure 1). Archeological evidence indicates they were well known to the prehistoric inhabitants of Utah, since bighorns are depicted in pictographs and petroglyphs more than any other form of wildlife. Historical records of the first European explorers and settlers in the state also confirm the abundance of bighorns. Father Escalante noted in his journal as he crossed the Colorado River in Utah - "through here wild sheep live in such abundance that their tracks are like those of great herds of domestic sheep" (Rawley 1985). Explorers, trappers, pioneers and settlers also recorded numerous observations of bighorn sheep throughout the state. Evidence of bighorn sheep is so plentiful and suitable habitat so abundant, that it is believed bighorns inhabited almost every mountain range in Utah prior to European settlement (Dalton and Spillett 1971). Rocky Mountain bighorns (*Ovis canadensis canadensis*) are generally recognized to have inhabited northern and central Utah, whereas desert bighorns (*Ovis canadensis nelsoni*) were found in southern Utah. California bighorns (*Ovis canadensis californiana*) historically inhabited portions of the Great Basin in Nevada and Idaho. Although it is not known conclusively whether or not California bighorns inhabited Utah, recent studies indicate there is no genetic or taxonomic distinction between Rocky Mountain and California bighorns (Ramey 1993). Thus, they should be considered the same subspecies (Rocky Mountain bighorn sheep). Some mixing and interbreeding of Rocky Mountain and desert bighorns likely occurred where their ranges converged in Utah, making a clear distinction of historical ranges difficult.

Native populations of Rocky Mountain bighorn sheep were nearly extirpated following pioneer settlement. A few scattered sightings of bighorns persisted in northern Utah as late as the 1960's. Factors contributing to their decline included competition with domestic livestock for forage and space, vulnerability to domestic livestock-borne diseases, habitat conversions away from native

grasslands towards shrub lands due to excessive grazing and fire suppression, and unregulated hunting (Shields 1999).

Utah's desert bighorn sheep populations also struggled to survive civilization. Whereas some herds suffered early extirpation, others remained relatively undisturbed until the 1940's and 1950's, when uranium was discovered on the Colorado Plateau. By the 1960's, only a small population of desert bighorns remained in Utah along the remote portions of the Colorado River. Desert bighorn populations were thought to have declined for the same reasons previously described for Rocky Mountain bighorns.

B. Management

1. UDWR Regulatory Authority

The UDWR presently operates under authority granted by the Utah Legislature in Title 23 of the Utah Code. UDWR was created and established as the wildlife authority for the state under Section 23-14-1. Title 23 of the Utah Code also vests UDWR with its functions, powers, duties, rights, and responsibilities. UDWR's duties are to protect, propagate, manage, conserve, and distribute protected wildlife throughout the state.

The UDWR is charged to manage the state's wildlife resources and to assure the future of protected wildlife for its intrinsic, scientific, educational, and recreational values. UDWR is further charged in Section 23-14-3(2) (b) to develop wildlife management policies that: 1) "recognizes the impact of wildlife on man, his economic activities, private property rights, and local economies;" and 2) "seek to balance the habitat requirements of wildlife with the social and economic activities of man." Protected wildlife species are defined in code by the Utah Legislature.

2. Population Status

Rocky Mountain Bighorn

Rocky Mountain bighorn sheep currently exist in the northern half of the state (Figure 2). The current statewide population estimate for Rocky Mountain bighorns managed by UDWR is approximately 1,500 animals (Figure 3). Utah currently has 14 individually managed populations of Rocky Mountain bighorn sheep, all of which are the result of transplant efforts. Three of these populations are showing increasing trends, 2 are stable, and 8 are showing declining trends or have low numbers of sheep (Table 1). The 14th population, the Stansbury Mountains, recently underwent a disease event and the area was subsequently depopulated. In January 2018, UDWR reintroduced 59 bighorn sheep to the Stansbury Mountain from other source herds within Utah.

In addition to UDWR managed herds, populations of Rocky Mountain bighorn sheep populations are also found in Dinosaur National Monument and on Ute tribal lands in northeastern Utah.

Desert Bighorn

Desert bighorns inhabit the slickrock canyons, rocky slopes, and canyonlands areas of southern Utah (Figure 2). Significant populations occur across the Colorado Plateau including the San Rafael Swell and throughout the Colorado River and its many tributaries. The current population estimate for desert bighorns in Utah managed by UDWR is nearly 2,900 animals (Figure 3). Utah currently has 13 individually managed populations of desert bighorn sheep. Five of these populations are showing an increasing trend while 7 are maintaining stable numbers (Table 2). The 13th population, San Juan North, was tested in 2017 and those animals found actively at risk of spreading disease were culled. Healthy bighorns were then translocated into this herd to augment the loss of sick bighorns. In addition to UDWR managed herds, desert sheep populations also occur in Arches, Canyonlands, Capital Reef, and Zion National Parks, and on Navajo tribal lands.

3. Population Surveys

In Utah, bighorn sheep populations are surveyed via helicopter every 2–3 years (Table 1 & Table 2). During these flights, biologists survey all potential bighorn sheep habitat during the peak of the rut in late October to December depending on the management unit. All observed animals are counted and classified as ewes, lambs, and rams, with rams being further classified as Class I (2.5 years old), II (2.5–5.5 years old), III (6.5–7.5 years old), or IV (8.5+ years old) (Geist 1971). Previous studies have shown that sightability on bighorn sheep populations varies between 60–70%, depending on the unit and conditions. In addition to the helicopter surveys, many bighorn sheep populations in Utah have radio and GPS collared bighorns. These collars allow biologist to monitor annual survival and movements. The collars also allow biologists to locate animals and collect ground classification data in years without helicopter surveys. In conjunction with Brigham Young University, Utah State University, Utah Wild Sheep Foundation (UWSF), and Sportsmen for Fish and Wildlife (SFW), UDWR has conducted and participated in many valuable bighorn sheep research project. Findings from those research projects have greatly improved the current knowledge of bighorn sheep and have improved management practices.

4. Hunting

Bighorn sheep are managed as an once-in-a-lifetime hunting species in Utah. The first hunt for bighorn sheep in Utah was held in 1967 for the desert subspecies on the San Juan Unit (Table 3). A total of 10 permits were issued, 9 hunters went afield, and all 9 harvested rams. The first hunt for Rocky Mountain bighorns in Utah was in 1991 on the Book Cliffs Rattlesnake Unit. Two permits plus 1 high-bid permit were issued and all 3 hunters harvested rams. Since the initial hunts, the total number of bighorn sheep permits has generally been increasing. The highest number of desert bighorn sheep permits issued in a given year in Utah was in 2017 when 59 permits were issued. For Rockies, the highest number of permits issued in a given year was in 2013 with 46 permits being issued. From 1967 to 2017, a total of 1,831 people hunted bighorn sheep (534 Rocky Mountain, 1,297 desert) resulting in the harvest of 1,622 bighorn sheep (529 Rocky Mountain, 1093 desert). Success rates for bighorn sheep in Utah are high and average 99% for Rockies and 84% for deserts. Demand for bighorn sheep permits is extremely high, and demand is increasing faster than natural reproduction can sustain (Table 4 & Table 5). In 2017, a

total of 30,128 hunters applied for the 81 public draw permits available, resulting in drawing odds of 1 in 372.

5. Transplants

In partnership with local conservation groups including SFW and UWSF, and in coordination with federal land management agencies, UDWR has been involved in an aggressive program to restore bighorn sheep to their native habitat over the last 40 years. Extensive efforts have been made to reintroduce and augment populations of both Rocky Mountain and desert bighorn sheep (Table 6, Table 7). Rocky Mountain bighorns were first translocated into the state near Brigham City in 1966, whereas desert bighorns were first translocated into Utah in 1973 in Zion National Park. Since restoration efforts began, over 1,200 Rocky Mountain bighorn sheep and over 1,000 desert bighorns have been released in areas of historical habitat. Most desert bighorn transplants have been successful, whereas there have been some failures of Rocky Mountain bighorn transplants. Although the exact reasons behind the transplant failures are unknown, disease issues, predation, and not moving enough animals have all been hypothesized as potential reasons. UDWR will continue to pursue opportunities to transplant bighorn sheep when beneficial while coordinating efforts with federal land management agencies, private land owners, and local governments. As all current populations of bighorn sheep in Utah have been influenced by translocations in some form with variable degrees of success, UDWR recognizes, understands, and accepts the risk of failure associated with all future translocation efforts.

C. Habitat

Bighorn sheep are uniquely adapted to inhabit some of the most remote and rugged areas in Utah. They exist in some of the most hostile climatic conditions ranging from the hot, dry canyonlands of southern Utah to the cold, snowy alpine regions of Utah's northern mountains. Bighorns are sometimes referred to as a wilderness species because of the naturally remote and inaccessible areas they inhabit. Bighorns prefer open habitat types with adjacent steep rocky areas for escape and safety. Habitat is characterized by rugged terrain including canyons, gulches, talus cliffs, steep slopes, mountaintops, and river benches (Shackleton et al. 1999). The diet of mountain sheep is comprised primarily of grasses and forbs, although sheep may also utilize shrubs depending on season and availability. Most Rocky Mountain bighorns typically have seasonal migrations with established winter and summer ranges, whereas most desert bighorns generally do not have distinct summer and winter migrations. Extensive historical bighorn habitat occurs throughout Utah (Figure 1). However, not all habitat is currently suitable for reestablishment of bighorn populations. Vegetative changes, human encroachment, and domestic sheep grazing make some areas unsuitable for bighorn restoration. Habitat management practices include voluntary grazing allotment conversions from domestic sheep to cattle, vegetative treatments, and water developments. UDWR considers grazing conversions and restrictions "involuntary" when the party negotiating for the conversion/restriction threatens to seek more burdensome grazing restrictions, reductions, or conversions in court or through other regulatory means unless the livestock grazer consents to the requested conversion/restriction. UDWR, in partnership with conservation groups and land managers has been extremely helpful in negotiating, funding, and participating in habitat projects.

III. ISSUES AND CONCERNS

A. Disease

Disease is a significant concern for bighorn sheep management. Respiratory diseases have resulted in large-scale population declines in bighorn sheep populations across the western U.S., including in Utah (Cassirer et al. 2017). Other diseases such as contagious ecthyma, bluetongue, and psoroptic mange have been detected in Utah's bighorn sheep populations with limited impacts.

The etiology of respiratory disease of bighorn sheep is thought to be polymicrobial, however, multiple members of the Pasteurellaceae family of bacteria as well as *Mycoplasma ovipneumoniae* have particularly been associated with respiratory disease, death, and reduced lamb recruitment in bighorn sheep (Miller et al. 2012, Besser et al. 2012b).

Within the Pasteurellaceae family, the bacteria *Pasteurella multocida*, *Mannheimia haemolytica* and *Bibersteinia trehalosi* are commonly detected during respiratory disease outbreaks of bighorn sheep (Besser et al. 2012b). Within each species of these bacteria, there are several biovariants and subtypes that may be further classified by virulence or ability to produce leukotoxin, which can cause extensive lung tissue damage when associated with pneumonia (Miller et al. 2012). *Mannheimia haemolytica* and *B. trehalosi* are also frequently detected in the upper respiratory tract of healthy wild and domestic ruminants and likely act as opportunistic pathogens in animals during times of stress, or secondary to primary infections with *Mycoplasma ovipneumoniae* (Besser et al. 2012b, Cassirer et al. 2017). *Pasteurella multocida* is less commonly cultured from the upper respiratory tract of bighorn sheep, but was detected in association with large die-offs of Rocky Mountain bighorn sheep in the Goslin Mountain, Mount Nebo, Rock Canyon, and Stansbury Mountains; as well as in respiratory disease outbreaks in bighorn sheep populations of Idaho, Washington, Oregon, Colorado, Montana, South Dakota (Spraker et al. 1984, Weiser et al. 2003, Besser et al. 2012b).

Over the last decade, much attention has focused on *M. ovipneumoniae* as an important component of pneumonia outbreaks in bighorn sheep (Besser et al. 2012b, Cassirer et al. 2017). *Mycoplasma ovipneumoniae* is primarily carried in the respiratory tract of asymptomatic domestic sheep and goats (Besser et al. 2012a, Besser et al. 2012b, Cassirer et al. 2017). While not a virulent pathogen all on its own, *M. ovipneumoniae* colonizes the respiratory tract, inhibiting the normal mucociliary clearance used to expel bacteria that enter the lungs under normal conditions. When this clearance is impaired, bacteria that enter the lungs, particularly virulent opportunistic bacteria such as the described Pasteurellaceae, start to replicate, overcoming the body's natural defenses and thus causing pneumonia. Bighorn sheep appear to be very susceptible to such infections. For example, *Mycoplasma ovipneumoniae* was detected in >95% of 44 affected bighorn sheep lungs sampled in eight pneumonia outbreaks that occurred between 2009–2010 in the western U.S., but was absent in lung tissues of 5 animals obtained from two populations unaffected by pneumonia (Besser et al. 2012b). A wide variety of strains of *M. ovipneumoniae* have been detected (Cassirer et al. 2017), and infection with one strain does not appear to induce cross-immunity with other strains (Cassirer et al. 2017). Respiratory disease outbreaks can therefore occur repeatedly in the same population with introduction of new

M. ovipneumoniae strains (Cassirer et al. 2017). While some bighorn sheep that survive an initial outbreak may be able to clear *M. ovipneumoniae* and other pathogens from their respiratory tract, others may become persistently infected and continue to shed the bacterium intermittently, resulting in reinfection of lambs that subsequently may succumb to pneumonia (Cassirer et al. 2017). The presence of persistently infected bighorn sheep in a bighorn population may therefore lead to long periods of recurrent disease and low lamb recruitment as immunity is not transferred from ewe to lambs (Cassirer et al. 2017). The presence of sinus tumors, which has been detected in multiple bighorn sheep populations across the western U.S., may also negatively affect the clearance of pathogens from the respiratory tract of surviving bighorn sheep and result in a higher number of persistently infected animals (Fox et al. 2015).

There are several examples of epizootic outbreaks of pneumonia in bighorn sheep due to contact with domestic sheep in the literature (Jessup 1985, Foreyt 1990, Martin et al. 1996). Furthermore, controlled experimental studies commingling domestic sheep infected with *M. ovipneumoniae* with healthy bighorn sheep resulted in fatal pneumonia of the bighorn sheep; whereas commingling of domestic sheep free of *M. ovipneumoniae* with healthy bighorn sheep did not result in development of respiratory disease or fatalities in 3 of 4 bighorn sheep for over 100 days (Besser et al. 2012a). Similarly, there are documented instances of contact between uninfected bighorn sheep and domestic sheep in Utah that have resulted in varying degrees of disease to the population of wild bighorns; in some cases the result being no perceived disease in the bighorns (Shannon et al. 2014). This makes it clear that pathogens like *M. ovipneumoniae* are the concern and not the domestic animals themselves. Commingling with domestic goats carrying *M. ovipneumoniae* resulted in sublethal pneumonia in bighorn sheep, suggesting that goat strains possibly are less virulent than domestic sheep strains (Besser et al. 2017). After introduction of disease into a bighorn sheep population, the disease may continue to be transmitted among bighorn sheep (Cassirer et al. 2017). Other factors that may contribute to the severity of a disease outbreak in bighorn sheep could include various forms of stress including overcrowding, poor nutrition, human disturbance, loss of habitat, weather conditions, infection with parasites such as lungworm (*Protostrongylus spp*) or mites (*Psoroptes ovis*) (Lange et al. 1980, DeForge 1981, Foreyt and Jessup 1982, Spraker et al. 1984, Clark and Jessup 1992, Bunch et al. 1999, Monello et al. 2001).

After introduction of respiratory disease into a bighorn sheep population, options for clearing the disease from the population through active management are limited. Augmenting actively diseased populations with healthy bighorn sheep, without efforts to stop the pathogen transmission prior to augmentation, is unlikely to be successful as the healthy bighorn sheep will likely become infected from the resident population. Because of the lack of cross-reactivity between *M. ovipneumoniae* strains and the role of other bacteria in inducing respiratory disease, augmentation with other infected bighorn sheep may cause renewed disease outbreaks in both the augmented population and augmenting animals. Targeted removal of chronic shedders may be an option in easily accessible populations with low *M. ovipneumoniae* prevalence that can be tested repeatedly (Cassirer et al. 2017). In populations that are not easily accessible for repeated testing, targeted removal of shedding bighorns after a single test may also be an option, but those animals that may potentially clear the pathogen would also be removed from the population. Complete depopulation of infected herds followed by subsequent reintroduction with healthy bighorns may be effective in isolated populations with low numbers. UDWR will continue to

seek options for management and improvement of bighorn sheep populations already affected by respiratory disease.

Although population connectivity is generally desirable for genetic flow, increased connectivity elevates the risk of transmission of respiratory disease between bighorn sheep herds. Therefore, maintaining more isolated bighorn sheep populations may outweigh the benefits derived from connected populations in some instances. Connectivity between herds of bighorn sheep is not always the goal of the UDWR. Genetic exchange, one of the core functions of population connectivity, can be achieved through managed translocations and other efforts. For those reasons, it is critical for future management that we understand herd connectivity and the distribution of pathogens in Utah bighorn sheep.

Because of the aforementioned disease concerns, the Western Association of Fish and Wildlife Agencies (WAFWA) Wild Sheep Working Group published the “Recommendations for Domestic Sheep and Goat Management in Wild Sheep Habitat” in 2007, and updated that document in 2012 (Appendix A). That document provides general guidelines to state wildlife agencies, federal land management agencies, wild sheep conservation organizations, domestic sheep and goat producers/permittees, and private landowners for reducing conflicts between wild sheep and domestic sheep and goats. While the WAFWA guidelines are generally helpful, the unique social, political, and biological environment in Utah requires a tailored approach in managing bighorn sheep on a sustainable basis. For the purposes of this Plan, “sustainable” means preserving and maintaining bighorn sheep within the state at the species level using the management practices outlined in this Plan. Because bighorn sheep are heavily impacted by human activities, they often require intensive management. Therefore, management is essential to maintaining bighorn sheep within the state on a sustainable basis. The objective of UDWR and this Plan is to expand bighorn sheep populations, where feasible, and to maintain bighorn sheep on a sustainable statewide basis without requiring or causing involuntary relinquishment of livestock grazing opportunity on public and private lands. UDWR supports an active livestock industry exercising responsible grazing practices that: 1) maintain private lands as open space; 2) benefit rangeland health; 3) reduce frequency and intensity of rangeland fires; and 4) maintain water distribution facilities effectively expanding wildlife distribution to areas where water is the limiting factor for wildlife. All of these responsible grazing practices provide habitat that benefit wildlife. UDWR is charged in Section 23-14-3(2) (b) to develop wildlife management policies that: 1) “recognizes the impact of wildlife on man, his economic activities, private property rights, and local economics;” and 2) “seek to balance the habitat requirements of wildlife with the social and economic activities of man.” UDWR recognizes the economic importance of the domestic sheep industry, and it is not the intent of this Plan or UDWR to force domestic sheep operators off public lands or out of business. Rather, the intent is to look for opportunities that will protect bighorn sheep populations while working with the domestic sheep industry. Because of the unique mosaic of bighorn sheep habitat in Utah and its pervasive proximity to domestic sheep and goats on private and public lands, and the susceptibility of bighorn sheep to diseases harbored by domestic sheep and goats, it is impossible to completely remove all risk of pathogen transmission. UDWR fully understands and accepts the risks of disease in bighorn sheep populations, and will employ a variety of strategies to manage around this risk to ensure sustainable populations of bighorns can exist in balance with domestic sheep grazing.

UDWR recognizes that voluntary conversions, as defined in Section II. C. of this Plan, from sheep and goat to cattle or horse on public grazing allotments may be beneficial to promote healthy populations of bighorn sheep. UDWR also recognizes that voluntary conversions from cattle or horse to sheep or goat on public grazing allotments can be beneficial to promote healthy populations of bighorn sheep when such conversions allow a livestock operator to move domestic sheep or goats that present a risk of transmitting pathogens to allotments where that risk is diminished. UDWR does not support involuntary conversions or relinquishment of public land grazing AUMs or allotments for the benefit of wildlife. UDWR supports increases in public land grazing AUMs where the forage conditions that precipitated reductions have adequately improved. UDWR does not support the conversion of public land grazing allotments to domestic sheep or goats in established bighorn sheep management units. UWSF has been instrumental in resolving bighorn/domestic sheep issues, and their efforts have resulted in protection of many bighorn sheep populations by reducing the potential for the transmission of disease.

Section 23-14-3(2) charges UDWR to manage and maintain bighorn sheep on a sustainable basis, in general. It does not require individual population sustainability. As such, population objectives established by UDWR for individual bighorn sheep herds are flexible targets used to evaluate the effectiveness of past management strategies and to assist in identifying appropriate management strategies for the future. These population objectives are a balance between habitat carrying capacity, social tolerance, and managing the risk of pathogen transmission; they are not a metric for evaluating population sustainability or viability. They instead inform UDWR on possible management strategies at the individual population level that will help in managing for a sustainable statewide population of bighorn sheep.

Response and control of a disease outbreak will be conducted using standardized current protocols for sampling and testing (Foster 2004, WAFWA Wildlife Health Committee (WHC), UC-Davis 2007). Accurate cause of death should be determined for bighorn sheep through a full necropsy when possible. Bighorn sheep that are suspected of harboring infectious pathogens or that have been in contact with domestic sheep or goats, may pose a risk for pathogen transmission, and removal of such high risk animals should be decided on a case by case basis. The isolation of an affected bighorn sheep herd from other unaffected bighorn sheep herds should also be ensured to the largest extent possible. Many of Utah's isolated bighorn sheep populations present minimal risk of transmission to other bighorn.

B. Predation

Predators have played an important role in the evolution and development of adaptive strategies in bighorn sheep (Geist 1999). However, predation can be a serious limiting factor to bighorn herd establishment or expansion. In some states, excessive predation has resulted in substantial herd reductions (Wehausen 1996, Creeden and Graham 1997, Rominger et al. 2004). Mountain lions are the most significant predators of bighorns in Utah. Coyotes, bobcats, and golden eagles may occasionally take bighorn sheep but should not be considered a serious threat to bighorn sheep herds.

Mountain lion populations should be managed at levels that will allow for the establishment of healthy and sustainable populations of bighorn sheep. This may require removal of mountain

lions that are negatively impacting bighorn populations until herds are well established. In established small herds where mountain lion harvest is typically low or non-existent because of topography and access, a consistent effort to improve mountain lion harvest opportunity may need to be considered. These efforts could include not closing sheep units to harvest (i.e., no quotas) and maintaining a liberal policy of removing lions on sheep units when there is opportunity. In some cases, the use of USDA Wildlife Services or other contracted personnel may also be needed to help control cougar populations. Bighorn sheep unit management plans and predator management should specify conditions for predator management in bighorn areas.

C. Habitat Degradation or Loss

Bighorn habitat can be degraded, fragmented, or lost to a variety of causes including human disturbance, energy development, and natural succession. Reductions in the quality or quantity of habitat can result in corresponding losses to bighorn populations (DeForge 1972, Hamilton et al. 1982). Human disturbance may cause bighorn sheep to change use areas and abandon certain habitats because of those disturbances. Loss of preferred habitat can compel bighorns into habitats that reduce productivity, decrease survival rates, and increase risk of pathogen transmission. Human disturbance is also thought to be a possible stress inducer, which may lead to disease problems in some populations (DeForge 1981, Bunch et al. 1999). Working with federal land management agencies to protect the habitat needed for healthy herds may improve herd health.

Energy development is an important facet of Utah's economy. DWR recognizes the value of balancing this industry with the needs of bighorn sheep and other wildlife. However, energy development in bighorn habitat, if not properly managed and mitigated, can result in direct loss of habitat. Infrastructure and disturbance associated with energy development has the potential to displace bighorns from habitat that would otherwise be suitable. Best management practices should be employed in coordination with federal land management agencies when planning energy development in bighorn sheep habitat. Mineral exploration for oil, gas, uranium, and other minerals has been extensive in bighorn areas. Habitat managers for the Bureau of Land Management and U.S. Forest Service should carefully coordinate with the State of Utah and energy development companies to monitor those activities to minimize and mitigate impacts to bighorn sheep.

Plant succession can also dramatically affect habitat quality. Encroachment by pinyon-juniper and other shrubs has resulted in the fragmentation and loss of large expanses of bighorn habitat. Vegetative treatments, including fire management and mechanical treatments, can restore and improve bighorn habitat to its condition prior to settlement times.

D. Wilderness and Park Management

Administration of wilderness areas and national parks has presented problems for bighorn sheep managers in some states (Arizona Game and Fish 1989 and Bleich 1999). Utah currently has a good working relationship with federal land management agencies, which has allowed and promoted good bighorn sheep management programs. Future wilderness designation and park expansions should specifically allow for activities required for proper management of bighorn

populations such as the use of aircraft for surveys, transplants, research projects, and the ability to access and maintain water developments constructed specifically for bighorn sheep. It is critical to the future of bighorn sheep in those areas to maintain the use of those valuable management tools. Certain activities proposed in wilderness areas may necessitate coordination with appropriate land management agencies.

E. Poaching

Although poaching is not a problem for overall bighorn populations, it can have a detrimental effect on hunter harvest opportunities. Bighorn sheep are highly prized by hunters and legal hunting permits are difficult to obtain. Bighorns often inhabit very remote areas that are difficult to monitor and patrol. Thus, the incentives and opportunities for poaching exist.

F. Competition

Competition for forage and space by domestic livestock, feral animals, and other wild ungulates can affect bighorn populations (Bailey 1980). Competition is most likely to occur in crucial habitats such as winter ranges and lambing areas and during periods of extreme weather such as droughts or heavy snow. Competition with livestock for forage is minimal for most bighorn populations in Utah since bighorns utilize steep, rugged terrain generally not used by livestock. However, some feral animals, such as burros and goats, and some wild ungulates may use the same ranges as bighorn sheep making competition possible. Bighorn habitat should be monitored to assure proper range management and minimize competition.

G. Transplants

Transplanting bighorn sheep is a primary tool for restoration and management of bighorn populations. All bighorn sheep transplants in Utah will be done in accordance with Utah Code 23-14-21 and in coordination with federal land management agencies. Several issues need to be considered prior to releasing bighorns in new areas or into existing herds, and those issues are detailed in the 2012 WAFWA guidelines (Appendix A). Bighorns should only be released in areas where there is a high probability of success as determined by GIS modeling and habitat evaluations. Furthermore, pre-transplant health screening of both the source stock and receiving population is critical in order to evaluate the risk of disease introduction. Additional screening should be conducted on all individual bighorn sheep destined for translocation and any animal that appear unfit for translocation should not be moved. Sufficient numbers should be released to assure genetic diversity and to help new herds reach self-sustaining levels.

UDWR has established a current list of units/subunits that serve as potential augmentation or reintroduction sites for bighorn sheep (Appendix B). All suitable bighorn sheep habitat found within those units/subunits will be available for augmentation/reintroduction. The exact release site for transplanted sheep depends on accessibility and weather conditions and will be determined closer to the time of release.

Currently, UDWR obtains bighorn sheep for transplants from source herds within Utah as well as surrounding western states and Canadian provinces. As Utah's bighorn sheep populations

continue to grow, UDWR will work towards transplanting more sheep from Utah populations and reduce the reliance on sheep coming from out of state, with the ultimate goal of only using Utah bighorn sheep populations that are known to be healthy as transplant source herds. This practice will also be important to appropriately manage the number of bighorn sheep in thriving populations. Monello et al. (2001) found that 88% of pneumonia induced die-offs occurred at or within 3 years of peak population estimates. By monitoring growing bighorn herds and by using healthy bighorn populations as source herds, UDWR will minimize the risk of introducing a new disease to uninfected populations and decrease the chances of having population die offs in both source and release herds.

In addition to conducting pre-transplant health screening of source or receiving herds, all bighorn sheep brought into Utah from other states will be tested for diseases and must meet health requirements established by UDWR and the state veterinarian for the Utah Department of Agriculture and Food (UDAF). All bighorn sheep relocated from source herds within the state will also be pre-screened for those same diseases and tested during the translocation in order to prevent inadvertently moving disease between bighorn sheep populations. Current protocols for sampling, testing, and responding to disease outbreaks will be used as a standard for Utah transplants and disease monitoring (Foster 2004, WAFWA Wildlife Health Committee (WHC), UC-Davis 2007).

IV. USE AND DEMAND

Bighorn sheep are considered one of the most sought after and highly prized big game animals in North America. Demand for bighorn sheep hunting opportunities far exceeds the current availability of hunting permits (Table 4 & Table 5). Currently in Utah, applications exceed available permits by 161:1 for residents and 2,599:1 for nonresidents. Additionally, applications for both resident and nonresidents have increased every year since the initiation of Utah's draw system.

Great demand also exists for information concerning bighorn sheep and bighorn viewing opportunities. Many people who have no interest in hunting bighorns are very interested in learning more about bighorn sheep and observing them in the wild. Informational programs and viewing opportunities currently offered for bighorn sheep include UDWR sheep viewing days and guided hikes at Antelope Island State Park.

Finally, public interest and legal mandates require management of bighorn sheep for their intrinsic value. Bighorn sheep are an important part of fragile ecosystems throughout Utah and should be properly managed regardless of recreational uses.

V. CONCLUSION

A fitting conclusion to this section of the Plan is found in the book *Mountain Sheep of North American* by Raul Valdez and Paul Krausman (1999). It states:

“Mountain sheep, like all other native fauna and flora, are part of the structure and heritage of North America. Despite all of the efforts exerted toward their

conservation, wild sheep face a precarious future. They are an ecologically fragile species, adapted to limited habitats that are increasingly fragmented. Future conservation efforts will only be successful if land managers are able to minimize fragmentation. According mountain sheep their rightful share of North America and allowing them to inhabit the wilderness regions they require is a responsibility all Americans must shoulder. It is our moral and ethical obligation never to relent in the struggle to ensure their survival.”

VI. STATEWIDE MANAGEMENT GOALS AND OBJECTIVES

A. Population Management Goal: Establish and maintain a sustainable statewide population of bighorn sheep by utilizing suitable habitat within the state to create and foster individual populations.

Population Objective 1: Increase bighorn sheep populations within the state as conditions allow (as outlined in this Plan).

Strategies:

- a. Develop or revise management plans for individual units with population goals and objectives. During unit plan development, all affected cooperative agencies, private land owners, local governments, and grazing permittees shall be invited to take part in the decision making process.
- b. Survey all herd units every 2–3 years to monitor population size and composition as conditions and budget allow. Dependent on the terrain and canopy cover, helicopter surveys or ground-based surveys will be employed to maximize accuracy and efficiency. When feasible, invite livestock producers and sportsmen to participate in surveys.
- c. Refine population or sightability models to determine the relationship between population surveys and population size.
- d. When possible, use radio collars, remote cameras, and GPS collars to better understand survival, distribution, and movements of each herd. Use this information to refine estimates of population size. Explore using similar technology with domestic animals in coordination with livestock operators to better understand resource partitioning and interactions with bighorn sheep.
- e. In coordination with the appropriate land management agencies, augment existing populations where needed to improve herd distribution, link small populations when deemed beneficial, and improve genetic diversity (Appendix B).
- f. In coordination with appropriate federal land management agencies, transplant bighorn sheep to establish new populations in accordance with Utah Code 23-14-21 (Appendix B).
- g. Develop an annual transplant plan based on availability of bighorn sheep, release sites, and consistent with Appendix B.
- h. Initiate predator management as specified in predator and bighorn sheep unit management plans. On remote or hard to access units, USDA Wildlife Services or other contracted personnel may be needed to help reduce cougar numbers.
- i. Support law enforcement efforts to reduce illegal taking of bighorn sheep.

Population Objective 2: Actively manage individual populations of bighorn sheep to reduce risk of pathogen transmission, mitigate damages during disease events, and sustain or reestablish herds after contraction of disease.

Strategies: Reduce Risk of Pathogen Transmission

- a. Strive for spatial separation between bighorn sheep and domestic sheep and goats that does not negatively impact livestock grazing by utilizing natural barriers (e.g. rivers or expanses of unsuitable habitat) and man-made barriers (e.g. fences or roads).
- b. Strive for temporal separation between bighorn sheep and domestic sheep and goats by coordinating with livestock operators and federal land management agencies on active grazing allotments and private lands. If domestic sheep or goats are only present on an

allotment during defined dates, then the risk of pathogen transmission is reduced in that area outside of those dates.

- c. Utilize current and emerging technologies to monitor movements of bighorn sheep and discourage temporal or spatial interaction. These technologies include but are not limited to satellite and camera collars, satellite geofencing, and remote cameras.
- d. Continue to document instances of interaction between wild sheep and domestic sheep and goats so that it allows conflicts to be evaluated and dealt with in a timely manner.
- e. Refine protocols that allow UDWR personnel to lethally remove bighorn sheep when high risk of pathogen transmission from domestic sheep, domestic goats, or other bighorns is suspected. This will be done to prevent bighorns that are likely infected from transmitting pathogens to healthy bighorns.
- f. Pursue in good faith a protocol that would allow livestock operators to lethally remove bighorn sheep found comingling and in direct contact with domestic sheep or goats. If this protocol can be developed in ways that reduce the risk of pathogen transmission for bighorn sheep without impacting UDWR's ability to manage wildlife, then it will be proposed in the big game Rule (R657-5), presented to the Wildlife Board for approval, then implemented and enforced by UDWR. This management strategy would be unique to bighorn sheep because of the substantive peer-reviewed published research indicating the high risk of virulent pathogen transmission from domestic animals to wild sheep. Currently, this phenomenon is not proven in other species.
- g. Pursuant to Section 4-25-202, UDWR personnel may immediately kill or remove estray domestic sheep and goats when their presence poses a risk of pathogen transmission to bighorn sheep. This event is a rare occurrence and should not apply to private property or permitted public allotments.
- h. Utilize depredation hunts under R657-44-7, when appropriate, to remove bighorns that are outside management unit boundaries and their location presents an increased risk of pathogen transmission.
- i. Reduce bighorn numbers in specific areas of concentration through trapping and transplanting programs to help reduce risk of pathogen transmission.
- j. In areas where the density of bighorns is difficult to manage through capturing and translocating ewes, use ewe hunts to establish lower densities that will reduce the risk of pathogen transmission.
- k. Establish lower ram to ewe ratios in areas with higher risk of contact with domestic sheep or goats. The goal being to minimize dispersal of rams when competing for breeding opportunities.
- l. Utilize medicines or vaccines that have been proven to decrease the risk of pathogen transmission or decrease the negative effects of disease when determined to be acceptable by the DWR.

Strategies: Mitigate Damages during Disease Events

- a. Use lethal removal of symptomatic infected bighorns that pose a risk of transmitting pathogens to other healthy bighorns.
- b. Decrease hunting permit allocation, including suspending hunts, to maximize potential for rapid population growth.
- c. Increase permit allocation, including creating new hunts, to cull infected bighorn sheep herds and reduce spread of the disease.
- d. In cases of extreme morbidity and mortality, explore lethal depopulation of infected herds in preparation for potential repopulation with healthy bighorns.

Strategies: Sustain Herds after Contraction of Disease

- a. Establish and maintain secure nursery herds of Rocky Mountain, California, and desert bighorn sheep. Locations for nursery herds will be selected with the goal of minimizing potential contact with domestic sheep or goats (measures including double fencing may be used to accomplish this goal). Nursery herds will be tested regularly to monitor for disease concerns.
- b. Use healthy bighorns from nursery herds to reestablish depopulated herds or to augment infected herds when deemed appropriate.
- c. Establish a monitoring rotation for all bighorn sheep herds to establish background disease profiles for each herd. This information will be used to determine overall herd health and the suitability of each herd for transplants.
- d. Participate in research efforts to find solutions to disease problems and low lamb survival.
- e. When mortality from a disease event does not merit depopulation, UDWR may capture and test bighorns from infected populations followed by selective culling of those individuals found to be harboring infectious pathogens. When multiple capturing events are feasible, this method has been proven to decrease morbidity and increase productivity.
- f. Improve and increase suitable habitat for bighorn sheep to reduce stress and increase productivity of the area.
- g. Inform and educate the public of the potential risks to bighorn sheep from domestic-borne pathogens.
- h. Work with UDAF, local governments, livestock operators, and animal industry programs to implement programs that reduce pathogen prevalence in noncommercial domestic sheep and goat herds, thereby improving health and productivity in domestic herds and reducing risk of pathogen transmission to bighorns.

B. Habitat Management Goal: Provide good quality habitat for healthy populations of bighorn sheep.

Objective: Maintain or improve bighorn sheep habitat to enhance individual herd success and thereby promote the overall sustainability of bighorn sheep statewide.

Strategies:

- a. Identify crucial bighorn sheep habitats and work with land managers and private landowners to protect and enhance these areas.
- b. Assist land management agencies in monitoring bighorn sheep habitat. Habitat monitoring by the land management agencies will be contingent on available funding and personnel.
- c. Work with land managers to minimize and mitigate loss of bighorn habitat due to human disturbance and development.
- d. Initiate vegetative treatment projects to improve bighorn habitat lost to natural succession or human impacts.
- e. Under the correct circumstances, encourage land management agencies to allow fires to burn when such action improves bighorn sheep habitat.
- f. Improve or maintain existing water sources and develop new water sources as needed to improve distribution and abundance of bighorn sheep.

- g. Support research and monitoring efforts to evaluate bighorn sheep use of water sources to ensure the water sources are having the desired effect.
- h. Work with land management agencies and private landowners to voluntarily implement agency guidelines for management of domestic sheep and goats in bighorn areas similar to those proposed by the WAWFA Wild Sheep Working Group.
- i. Support conservation groups' efforts to pursue willing conversions of domestic sheep grazing allotments by working with willing permittees in bighorn areas to minimize the risk of pathogen transmission.
- j. Inform and educate the public concerning the needs of bighorn sheep including the effects of human disturbance and the need for habitat improvements.
- k. Create preferred habitat for bighorn sheep in areas not proximate to domestic sheep and goats to attract bighorns away from risks of pathogen transmission.

C. Recreation Goal: Provide quality opportunities for hunting and viewing bighorn sheep.

Objective 1: Increase hunting opportunities as populations allow while maintaining quality hunting experiences.

Strategies:

- a. Recommend permit numbers based on 12-25% of the counted ram population (yearling and older) or 30-60% of the counted rams 6 years of age or older.
- b. When feasible, use subunits and multiple seasons to maximize hunting opportunities, distribute hunters, and minimize hunter conflicts.
- c. Recommend hunting seasons to provide maximum recreational opportunity while not imposing on UDWR management needs.
- d. Use hunting as a tool to regulate density of bighorn sheep to reduce risk of pathogen transmission.
- e. Monitor size and age class of all harvested rams.
- f. Work with federal land management agencies' local access coordinators to maintain and improve access for hunting and viewing of bighorn sheep. Explore seasonal openings, modified motorized boat rules, and administrative access for surveys or maintenance.
- g. Explore providing a greater variety of hunting opportunities by utilizing more primitive weapons, variation in season length, and more variable season dates.
- h. Use ewe hunts to establish lower densities that will reduce the risk of pathogen transmission as well as provide recreational opportunity.

Objective 2: Increase public awareness, education, and expand opportunities to view bighorn sheep.

Strategies:

- a. Look for ways to expand bighorn sheep viewing opportunities for the public.
- b. Ensure that information about bighorn sheep published on the UDWR website, social media channels, and print products is current and accurate.
- c. Work with partner entities (state and federal agencies, conservation groups, agricultural stakeholders) to help educate the public about the intrinsic and economic value of bighorn sheep on the landscape, as well as the threats the species face related to habitat degradation, predation, and disease.

Figure 1. Modeled suitable bighorn sheep habitat in Utah.

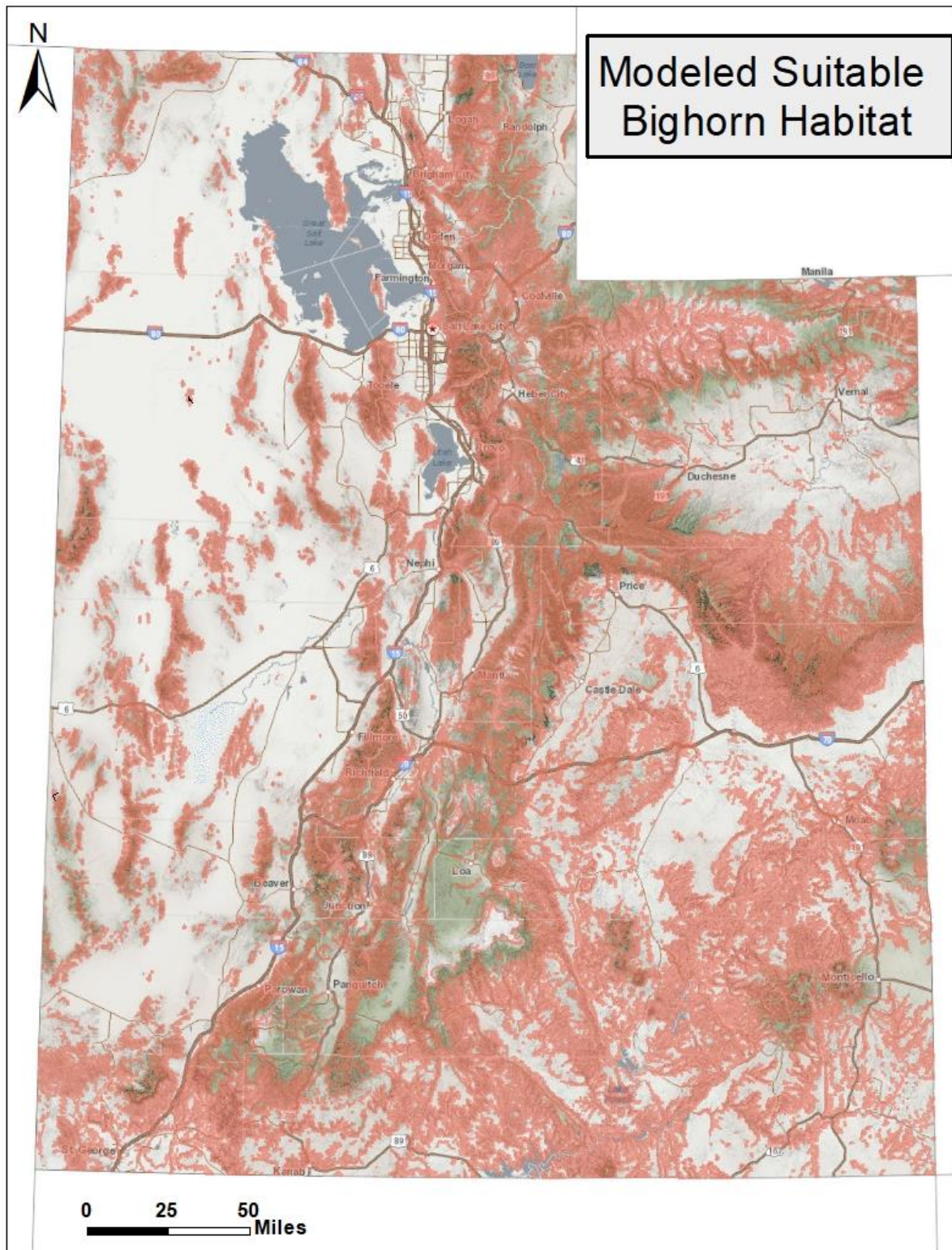


Figure 2. Bighorn sheep distribution in Utah, 2017.

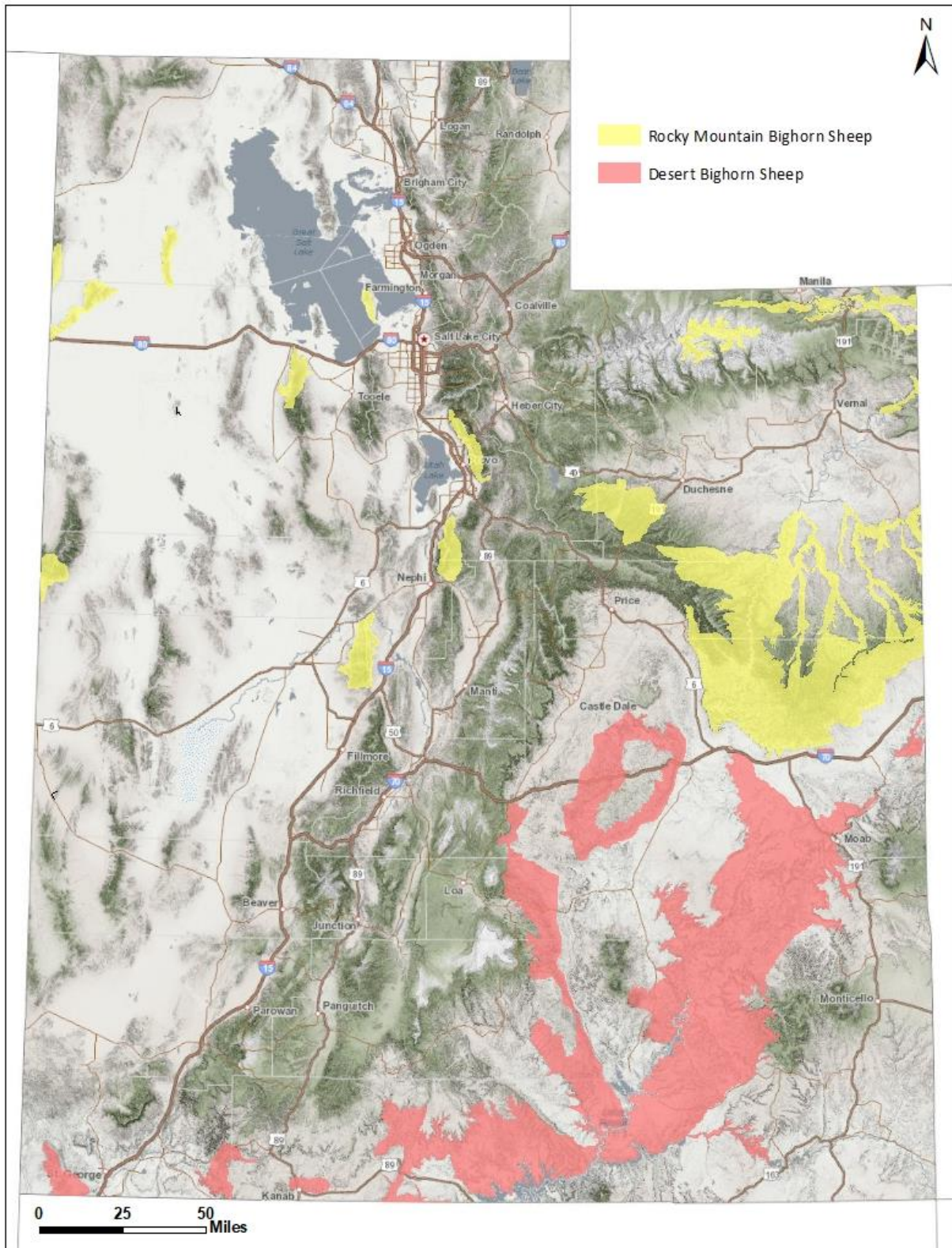


Figure 3. Bighorn sheep population trends in herds managed by the Utah Division of Wildlife Resources 1998-2017.

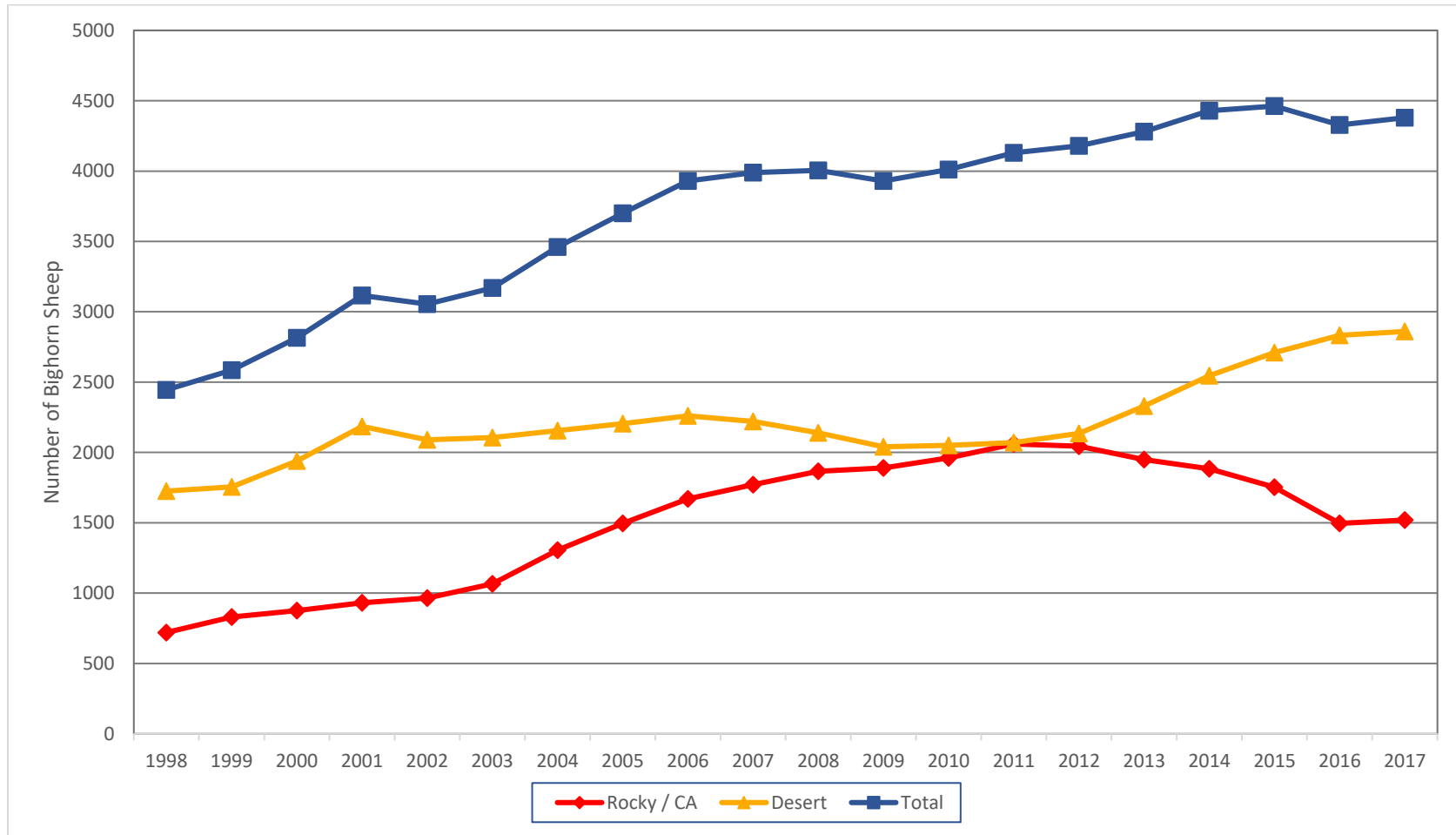


Table 1. Trend counts for Rocky Mountain bighorn sheep populations managed by UDWR, Utah 2012-2017.

Unit #	Unit name	2012	2013	2014	2015	2016	2017
1	Box Elder, Antelope Island	121	141	117	132	53+	112
1	Box Elder, Newfoundland Mountains	198	—	139	—	158	—
1	Box Elder, Pilot Mountain	42	39	28	—	24	—
8	North Slope, Bare Top Mountain	52	47	39	44	28	27
8	North Slope, Goslin Mountain	—	—	13	15	5	9
8	North Slope, Sheep Creek	63	24	33	38	27	23
8	North Slope, Carter Creek/Red Canyon	29	42	42	14	24	10
10	Book Cliffs, Rattlesnake	—	153	—	—	138	—
11	Nine Mile, Bighorn Mountain	—	333	—	—	264	—
16	Central Mountains, Nebo	—	16	—	14	—	—
17	Wasatch Mountains, Timpanogos & Provo Peak	—	33	—	32	—	—
17	Wasatch Mountains, Avintaquin	—	55	51	—	—	21
18	Oquirrh-Stansbury, Stansbury Mountains	163	—	—	140	0*	0
21	Fillmore, Oak Creek	—	—	—	—	—	67

*Population depopulated due to disease issues

†Incomplete count due to weather conditions

Table 2. Trend counts for desert bighorn sheep populations managed by UDWR, Utah 2012-2017.

Unit #	Unit name	2012	2013	2014	2015	2016	2017
12	San Rafael, Dirty Devil	66	—	60	—	86	—
12	San Rafael, North	101	94	—	124	—	—
12	San Rafael, South	—	188	—	216	—	—
13	La Sal, Potash	69	—	81	—	—	134
14	San Juan, Lockhart	40	—	84	—	—	55
14	San Juan, North	13	—	14	—	—	34*
14	San Juan, South	39	—	45	—	—	62
14	San Juan, River	—	—	38	—	—	42
15	Henry Mountains, Little Rockies	63	—	73	—	92	—
26	Kaiparowits, Escalante	71	—	92	—	—	88
26	Kaiparowits, East / West	—	339	—	355	—	—
29	Zion	—	504	—	498	—	—
30	Pine Valley, Beaver Dam	72	—	52	—	131	—

*Selective cull and augmentation took place after this survey

Table 3. Summary of bighorn sheep hunting opportunities, Utah 1967–2017.

Year	Rocky Mountain Bighorns		Desert Bighorns	
	Hunters afield	Rams harvested	Hunters afield	Rams harvested
1967	No hunt	—	9	9
1968	No hunt	—	10	3
1969	No hunt	—	10	6
1970	No hunt	—	10	4
1971	No hunt	—	10	1
1972	No hunt	—	8	1
1973	No hunt	—	No hunt	—
1974	No hunt	—	No hunt	—
1975	No hunt	—	5	2
1976	No hunt	—	10	4
1977	No hunt	—	25	10
1978	No hunt	—	23	7
1979	No hunt	—	18	3
1980	No hunt	—	19	10
1981	No hunt	—	18	5
1982	No hunt	—	11	6
1983	No hunt	—	10	9
1984	No hunt	—	14	5
1985	No hunt	—	15	12
1986	No hunt	—	14	10
1987	No hunt	—	12	7
1988	No hunt	—	15	12
1989	No hunt	—	12	10
1990	No hunt	—	15	12
1991	3	3	13	10
1992	3	3	11	10
1993	6	6	17	17
1994	6	6	19	18
1995	6	6	30	30
1996	6	5	29	28
1997	3	3	29	28
1998	5	5	31	31
1999	4	4	32	31
2000	9	9	33	33
2001	12	12	30	30
2002	13	12	40	39
2003	13	13	44	43
2004	12	12	42	40
2005	13	13	40	39
2006	20	19	41	37
2007	22	22	45	40
2008	27	27	41	39
2009	28	28	41	37
2010	34	34	50	46
2011	37	37	54	46
2012	42	42	49	41
2013	46	46	44	42

Year	Rocky Mountain Bighorns		Desert Bighorns	
	Hunters afield	Rams harvested	Hunters afield	Rams harvested
2014	44	44	46	45
2015	41	40	49	45
2016	40	39	46	41
2017	39	39	59	58

Table 4. Drawing odds of obtaining a Rocky Mountain bighorn sheep permit, Utah 2003–2017.

Year	Residents			Nonresidents		
	Applicants	Permits	Odds	Applicants	Permits	Odds
2003	1063	10	1 in 106.3	932	1	1 in 932.0
2004	1166	9	1 in 129.6	0	0	—
2005	1354	11	1 in 123.1	0	0	—
2006	1793	15	1 in 119.5	0	0	—
2007	2192	16	1 in 137.0	1131	1	1 in 1131.0
2008	2381	21	1 in 113.4	1015	1	1 in 1015.0
2009	2547	21	1 in 121.3	4323	1	1 in 4323.0
2010	2828	25	1 in 113.1	4776	2	1 in 2388.0
2011	3205	26	1 in 123.3	5001	2	1 in 2500.5
2012	3603	30	1 in 120.1	5400	2	1 in 2700.0
2013	3933	36	1 in 109.3	5759	3	1 in 1919.7
2014	4436	33	1 in 134.4	6365	4	1 in 1591.3
2015	4901	32	1 in 153.2	7187	3	1 in 2395.7
2016	5195	34	1 in 152.8	7783	3	1 in 2594.3
2017	5532	27	1 in 204.9	8712	3	1 in 2904.0

Table 5. Drawing odds of obtaining a desert bighorn sheep permit, Utah 2003–2017.

Year	Residents			Nonresidents		
	Applicants	Permits	Odds	Applicants	Permits	Odds
2003	2253	35	1 in 64.4	2266	3	1 in 755.3
2004	2653	32	1 in 82.9	3139	3	1 in 1046.3
2005	3051	32	1 in 95.3	3731	3	1 in 1243.7
2006	3467	33	1 in 105.1	3897	3	1 in 1299.0
2007	3814	35	1 in 109.0	4201	3	1 in 1400.3
2008	3827	33	1 in 116.0	3599	2	1 in 1799.5
2009	4042	33	1 in 122.5	5592	2	1 in 2796.0
2010	4386	40	1 in 109.7	6004	3	1 in 2001.3
2011	4367	39	1 in 112.0	6124	3	1 in 2041.3
2012	4607	36	1 in 128.0	6480	3	1 in 2160.0
2013	4846	30	1 in 161.5	6617	5	1 in 1323.4
2014	5147	35	1 in 147.8	7184	3	1 in 2394.7
2015	5420	37	1 in 146.5	7893	3	1 in 2631.0
2016	5777	47	1 in 122.9	8453	3	1 in 2817.7
2017	6404	47	1 in 136.3	9480	4	1 in 2370.0

Table 6. History of Rocky Mountain bighorn sheep transplants, Utah 1966–2018.

Unit #	Release Unit / Area	Year	# Released	Source
1	Box Elder, Antelope Island	1997	23	Kamloops, BC
1	Box Elder, Antelope Island	2000	6	Winnemucca NV
1	Box Elder, Newfoundland Mountains	2001	15	Antelope Island, UT
1	Box Elder, Newfoundland Mountains	2001	16	Hart Mt, NV
1	Box Elder, Newfoundland Mountains	2003	16	Antelope Island, UT
1	Box Elder, Newfoundland Mountains	2008	18	Antelope Island, UT
1	Box Elder, Pilot Mountain	1987	24	Basalt, CO
1	Box Elder, Pilot Mountain	1993	2	Bare Top Mountain, UT
1	Box Elder, Pilot Mountain	1998	13	Wells, NV
1	Box Elder, Pilot Mountain	1998	19	Contact, NV
3	Ogden, Box Elder Canyon	1966	14	Whiskey Basin, WY
3	Ogden, Box Elder Canyon	1966	20	Waterton, AB
3	Ogden, Box Elder Canyon	1969	12	Banff, AB
3	Ogden, Box Elder Canyon	1970	14	Banff, AB
8	North Slope, Bare Top Mountain	1983	19	Whiskey Basin, WY
8	North Slope, Bare Top Mountain	1984	17	Whiskey Basin, WY
8	North Slope, Sheep Creek	1989	21	Whiskey Basin, WY
8	North Slope, Sheep Creek	2000	6	Almont Triangle, CO
8	North Slope, Hoop Lake	1989	23	Whiskey Basin, WY
8	North Slope, Carter Creek / S Red Canyon	2000	10	Almont Triangle, CO
8	North Slope, Carter Creek / S Red Canyon	2001	18	Basalt, CO
8	North Slope, Carter Creek / S Red Canyon	2003	6	Desolation Canyon, UT
8	North Slope, Goslin Mountain	2005	34	Thompson Falls, MT
8	North Slope, Goslin Mountain	2007	42	Bonner, MT
8	North Slope, Goslin Mountain	2014	25	Green River, UT
10	Book Cliffs, Hill Creek	1970	9	Whiskey Basin, WY
10	Book Cliffs, Hill Creek	1973	12	Alberta, Canada
10	Book Cliffs, Hill Creek	1998	44	Kaleden, BC
10	Book Cliffs, Hill Creek	1998	20	Fowler, CO
11	Nine Mile, Bighorn Mountain	1993	26	Estes Park, CO
11	Nine Mile, Bighorn Mountain	1995	28	Georgetown, CO
11	Nine Mile, Jack Creek	2000	15	Bare Top Mountain., UT
11	Nine Mile, Jack Creek	2002	15	Sula, MT
11	Nine Mile, Trail Canyon	2009	40	Green River, UT
16	Central Mountains, Nebo	1981	27	Whiskey Basin, WY
16	Central Mountains, Nebo	1982	21	Whiskey Basin, WY
16	Central Mountains, Nebo	2004	18	Augusta, MT
16	Central Mountains, Nebo	2007	25	Augusta, MT
17a	Wasatch Mountains, Timpanogos	2000	25	Rattlesnake, UT
17a	Wasatch Mountains, Timpanogos	2001	10	Hinton, AB
17a	Wasatch Mountains, Timpanogos	2002	9	Sula, MT
17a	Wasatch Mountains, Timpanogos	2007	20	Sula, MT
17a	Wasatch Mountains, Timpanogos	2007	18	Forbes, CO
17a	Wasatch Mountains, Provo Peak	2001	22	Hinton, AB
17a	Wasatch Mountains, Provo Peak	2007	10	Sula, MT / Augusta, MT
17c	Wasatch Mountains, Lake Canyon	2009	30	Augusta, MT
17c	Wasatch Mountains, Indian Canyon	2009	30	Augusta, MT
18	Oquirrh-Stansbury, Stansbury Mountains	2005	12	Antelope Island, UT
18	Oquirrh-Stansbury, Stansbury Mountains	2006	44	Antelope Island, UT
18	Oquirrh-Stansbury, Stansbury Mountains	2008	36	Antelope Island, UT
18	Oquirrh-Stansbury, Stansbury Mountains	2018	18	Antelope Island, UT
18	Oquirrh-Stansbury, Stansbury Mountains	2018	41	Newfoundland Mountains, UT
19	West Desert, Deep Creek Mountains	1984	16	Whiskey Basin, WY
19	West Desert, Deep Creek Mountains	1989	14	Whiskey Basin, WY

Unit #	Release Unit / Area	Year	# Released	Source
21	Oak Creek Mountains	2014	24	Antelope Island, UT
21	Oak Creek Mountains	2014	9	Newfoundland Mountains, UT
21	Oak Creek Mountains	2015	16	Newfoundland Mountains, UT
21	Oak Creek Mountains	2016	49	Antelope Island, UT
21	Oak Creek Mountains	2018	15	Antelope Island, UT

Table 7. History of desert bighorn sheep transplants, Utah 1966–2018.

Unit #	Release Unit / Area	Year	# Released	Source
12	San Rafael, Dirty Devil	1991	22	North San Rafael, UT
12	San Rafael, Dirty Devil	1994	15	Potash, UT
12	San Rafael, Dirty Devil	1996	17	Potash, UT
12	San Rafael, Dirty Devil	2003	25	San Rafael, South, Chimney Cyn, UT
12	San Rafael, Dirty Devil	2007	15	San Rafael, South, UT
12	San Rafael, Dirty Devil	2007	15	Escalante, Steven's Canyon, UT
12	San Rafael, Maze (CNP)	1983	23	Island in the Sky, CNP, UT
12	San Rafael, Maze (CNP)	1985	2	Canyonlands NP, UT
12	San Rafael, North	1979	12	San Juan Unit, UT
12	San Rafael, North	1982	11	Island in the Sky, CNP, UT
12	San Rafael, North	1986	6	Canyonlands NP, UT
12	San Rafael, North	1986	18	Canyonlands NP, UT
12	San Rafael, North	1988	10	Coal Wash, UT
12	San Rafael, North Wash	1996	21	South San Rafael, UT
12	San Rafael, North Wash	1997	13	Escalante, UT
12	San Rafael, South	1983	12	Island in the Sky, CNP, UT
12	San Rafael, South	1984	16	Potash, UT
12	San Rafael, South	1985	12	Island in the Sky, CNP, UT
12	San Rafael, South	1997	4	Escalante, UT
12	San Rafael, South	1998	6	Escalante, UT
13	La Sal Potash	1991	10	Potash, UT
13	La Sal, Arches National Park	1985	6	Canyonlands NP, UT
13	La Sal, Arches National Park	1986	19	Canyonlands NP, UT
13	La Sal, Dolores Triangle	1979	7	San Juan Unit, UT
13	La Sal, Dolores Triangle	1990	20	River Mountains, NV
14	San Juan, Johns Canyon	2008	19	San Juan, South, Hite, UT
14	San Juan, Johns Canyon	2008	11	La Sal, Potash, Crystal Geysers, UT
14	San Juan, Johns Canyon	2013	16	Big Bend, Moab, UT
14	San Juan, Johns Canyon	2014	6	Big Bend, Moab, UT
14	San Juan, North	1998	6	Escalante, UT
14	San Juan, North	1999	12	Lake Mead, NV
14	San Juan, North	1999	13	Lake Mead, NV
14	San Juan, North	2017	50	Zion National Park, UT
14	San Juan, Nokai Dome	2014	26	Zion, UT
14	San Juan, Nokai Dome	2014	23	Zion, UT
15	Henry Mountains, Little Rockies	1985	18	Canyonlands NP, UT
15	Henry Mountains, Little Rockies	1985	12	Red Canyon / White Canyon, UT
25/26	Capitol Reef National Park	1984	21	Island in the Sky, CNP, UT
25/26	Capitol Reef National Park	1985	10	Canyonlands NP, UT
25/26	Capitol Reef National Park	1996	20	Island in the Sky, CNP, UT
25/26	Capitol Reef National Park	1997	20	Island in the Sky, CNP, UT
26	Kaiparowits, East	1980	20	Cataract/White Canyons, UT
26	Kaiparowits, East	1982	12	Canyonlands NP, UT
26	Kaiparowits, East	1993	13	Escalante, UT
26	Kaiparowits, East	1995	17	Escalante, UT
26	Kaiparowits, East	2009	20	Lake Mead, NV
26	Kaiparowits, East	2012	25	River Mountains, NV
26	Kaiparowits, East	2012	25	Muddy Mountains, NV

Unit #	Release Unit / Area	Year	# Released	Source
26	Kaiparowits, Escalante	1975	4	Gypsum Canyon, UT
26	Kaiparowits, Escalante	1976	12	Gypsum Canyon, UT
26	Kaiparowits, Escalante	1978	7	Cataract Canyon, UT
26	Kaiparowits, Escalante	1986	4	Canyonlands NP, UT
26	Kaiparowits, Escalante	1995	6	Escalante, UT
26	Kaiparowits, Escalante	1998	7	Escalante, UT
26	Kaiparowits, Escalante	1995	18	Escalante, UT
26	Kaiparowits, West	1995	21	Black Mountains, AZ
26	Kaiparowits, West	1995	2	Escalante, UT
26	Kaiparowits, West	1999	21	Lake Mead, AZ
26	Kaiparowits, West	2000	20	Lake Mead, NV
26	Kaiparowits, West	2006	20	Fallon, NV
26	Kaiparowits, West	1995	2	Escalante, UT
26	Kaiparowits, West	1996	20	Lake Mead, NV
29	Zion	2013	19	Zion, UT
29	Zion National Park	1973	12	Lake Mead, NV
30	Pine Valley, Beaver Dam	1994	25	Lake Mead, AZ
30	Pine Valley, Beaver Dam	2014	26	Zion, UT
30	Pine Valley, Beaver Dam	2015	12	Zion, UT

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APPENDIX A. WAFWA Wild Sheep Working Group “Recommendations for Domestic Sheep and Goat Management in Wild Sheep Habitat”

Recommendations to WAFWA Agencies

- Historic and suitable but currently unoccupied wild sheep range should be identified, evaluated, and compared against currently-occupied wild sheep distribution and existing or potential areas where domestic sheep or goats may occur.
- Risk assessments should be completed at least once per decade (more often if warranted) for existing and potential wild sheep habitat. These assessments should specifically identify where and to what extent wild sheep could interface with domestic sheep or goats, and the level of risk within those areas.
- Following completion of site or herd-specific risk assessments, any translocations, population augmentations, or other restoration and management strategies for wild sheep should minimize the likelihood of association between wild sheep and domestic sheep or goats. Agencies should:
 - Avoid translocations of wild sheep into areas with no reasonable likelihood of effective separation from domestic sheep or goats.
 - Re-evaluate planned translocations of wild sheep to historical ranges as potential conflicts, landscape conditions, and habitat suitability change.
 - Recognize that augmentation of a wild sheep herd from discrete source populations poses a risk of pathogen transfer (CAST 2008) and thus, only use source stock verified as healthy through a proper health assessment (WAFWA 2009) for translocations. Source herds should have extensive health histories and be regularly monitored to evaluate herd health. Wild sheep managers should evaluate tradeoffs between anticipated benefits such as demographic, behavioral and genetic interchange, and the potential consequences of mixing wild sheep from various source herds.
 - Develop and employ mapping or modeling technology as well as ground based land use reviews prior to translocations to compare wild sheep distribution and movements with distribution of domestic sheep or goats. If a translocation is implemented and association with domestic sheep or goats occurs, or is likely to occur beyond an identified timeframe or pre-determined geographic area, domestic sheep or goat producers should be held harmless.
- The higher the risk of association between wild sheep and domestic sheep or goats, the more intensively wild sheep herds should be monitored and managed. This is particularly important when considering “new” vs. “augmented” wild sheep populations.
 - Site-specific protocols should be developed when association with domestic sheep or goats is probable. For example, decisions concerning percentage of translocated wild

sheep that must be radio-collared for achieving desired monitoring intensities should in part, be based upon the subsequent level of risk of association with domestic sheep or goats.

- Intensive monitoring provides a mechanism for determining proximity of wild sheep to domestic sheep or goats and for evaluating post-release habitat use and movements.
- Budgets for wild sheep translocation projects should include adequate funding for long-term monitoring.
- Wild sheep managers should identify, analyze, and evaluate the implications of connectivity and movement corridors between largely insular herds comprising a meta-population against opportunities for increased association with domestic sheep or goats. Analyses should include distribution and continuity (Mack 2008) among populations of wild sheep and the anticipated frequency of movement among or within wild sheep range. In doing so, the benefits of genetic interchange and its resultant implications for population viability, must be weighed against the risks of disease transmission (Bleich et al. 1990), especially if dispersing or wandering wild sheep could travel across domestic sheep or goat grazing allotments or trailing routes, private land holdings or other areas where the potential transfer of endemic pathogens from an infected wild herd to a naïve herd could occur.
- Removal of wild sheep known, or suspected to have closely associated with domestic sheep or goats is considered to be an effective management tool. Atypical movements by wild sheep can heighten risk of association with domestic sheep or goats. Additional measures to achieve effective separation should be implemented if such association occurs. However, removal of wild sheep from occupied, normally-anticipated wild sheep range is not always the best management option. Continuous risk of association exists during active grazing seasons when domestic sheep or goats are grazed within normally-anticipated wild sheep range. Thus, removal of individual wild sheep is an ineffective method for maintaining separation, and has potentially negative consequences for population viability. Removal of wild sheep should occur only after critical evaluation and further implementation of measures designed to minimize association and enhance effective separation.
- Wild sheep populations should have pre-determined population objectives, and should be managed at agreed-upon densities to minimize the potential for dispersal. Because some dispersal occurs regardless of population density, some risk of association is always present if domestic sheep or goats are within range of dispersing wild sheep.
- Agencies should develop a written protocol to be implemented when association between wild sheep and domestic sheep or goats is confirmed. Notification requirements, appropriate response and post-contact monitoring options for both domestic sheep and goats and dispersing or wandering wild sheep should be included. Moreover, wildlife agencies should collaborate with agricultural agencies, land management agencies, producers and permittees, grazing industry representatives, and wild sheep advocates to develop an effective, efficient, and legal protocol to be implemented when feral or abandoned domestic sheep or goats threaten to associate with wild sheep but for which no owner can be identified. Written

protocol examples are provided in Appendix B (British Columbia Fish, Wildlife and Habitat Management Branch) and Appendix C (Wyoming Game and Fish Department).

- Wildlife agencies should develop databases as a system to report, record, and summarize association between wild sheep and domestic sheep or goats and its outcome; the WAFWA WSWG website (<http://www.wafwa.org/html/wswg.shtml>) would be a logical host. Further, wildlife managers and federal/crown land managers should encourage prompt reporting by the public of observed proximity between wild sheep and domestic sheep or goats.
- Wild sheep managers should coordinate with local weed or pest management districts, or other applicable agencies or organizations involved with weed or vegetation management, to preclude the use of domestic sheep or goats for noxious weed or vegetation control in areas where association with wild sheep is likely to occur. Agencies should provide educational information and offer assistance to such districts regarding disease risks associated with domestic sheep or goats. Specific guidelines (Pybus et al. 1994) have already been developed and implemented in British Columbia, and are available at: <http://www.for.gov.bc.ca/hfp/publications/00006/>.
- Specific protocols for sampling, testing prior to translocation, and responding to disease outbreaks should be developed and standardized to the extent practical across state and federal jurisdictions. Several capture and disease-testing protocols have been developed and are available to wild sheep managers (Foster 2004, UC-Davis 2007, WAFWA 2009). Protocols should be reviewed and updated as necessary by the WAFWA Wildlife Health Committee (WHC) and presented to WAFWA Directors for endorsement. Once endorsed, agencies should implement the protocols, and the WHC should lead an effort to further refine and ensure implementation of said protocols.
- Agencies should coordinate and pool resources to support the ongoing laboratory detection and interpretation of important diseases of wild sheep. Furthermore, wild sheep managers should support data sharing and development and use of standardized protocols (WAFWA 2009). Interagency communication between wildlife disease experts such as the WAFWA Wildlife Health Committee (WHC) should be encouraged to enhance strategies for monitoring, managing and improving health of wild sheep populations through cooperative efforts.
- Wild sheep management agencies should develop educational materials and outreach programs to identify and interpret the risk of association between wild sheep and domestic sheep or goats for producer groups, owners of small and large farm flocks, animals used for packing and 4-H animals. In some cases, regulation may be necessary to maintain separation.

APPENDIX B. Potential Bighorn Sheep Translocation Sites Utah 2018

Notwithstanding the following list, any existing bighorn sheep populations can be augmented. All suitable bighorn sheep habitat within the following units/subunits will be considered for augmentation/reintroduction.

Rocky Mountain Bighorn Sheep

Augment existing populations/management units to meet population management objectives, including:

- Antelope Island
- Book Cliffs
- Box Elder – Pilot Mountain, Silver Island Mtns, Newfoundland Mtns
- Central Mountains – Nebo
- Fillmore – Oak Creek
- Nine Mile
- North Slope – Summit, Three Corners, West Daggett
- Oquirrh-Stansbury – Stansbury Mountains
- Wasatch Mountains – Avintaquin, Rock Canyon, Timpanogos
- West Desert – Deep Creek Mountains

Reintroduction areas to establish new populations:

- Box Elder – Bovine Mountain, Goose Creek, Raft River Mountains, Stansbury Island
- Ogden – Wellsville Mountains
- South Slope Uintas
- Wasatch Mountains – Wasatch Front
- West Desert – Cedar Mountains

Desert Bighorn Sheep

Augment existing populations/management units to meet population management objectives, including:

- Henry Mountains
- Kaiparowits – East, Escalante, West
- La Sal – Potash, Dolores Triangle
- Paunsaugunt – Paria River
- Pine Valley
- San Juan – Lockhart, North, South, River
- San Rafael – Dirty Devil, North, South
- Zion

Reintroduction areas to establish new populations:

- Beaver – Mineral Mountains
- Paunsaugunt
- West Desert – Fish Springs, Confusion Range, House Range



GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Wildlife Resources

MICHAEL D. FOWLKS
Division Director

MEMORANDUM

Date: October 17, 2018

To: Wildlife Board and Regional Advisory Council Members

From: Covy Jones, Big Game Coordinator

SUBJECT: 2019 BBOIAL Proposed Season Dates, Boundary Changes, and Rule Changes (R657-5)

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

BBOIAL season dates:

See attached tables for details.

Big Game Guidebook Recommendations:

Southern Region Changes

1. We recommend discontinuing the late-season limited-entry muzzleloader deer hunts on the Monroe and Plateau, Fishlake units.
2. We recommend adding an early general-season any weapon deer hunt on the Panguitch Lake unit
3. We recommend adding archery and muzzleloader management buck deer hunts on the Paunsaugunt unit.

Southeast Region Changes

1. We recommend adding a cow-only archery bison hunt on the Henry Mtns unit.
2. We recommend adding a hunter's choice bison hunt on the Henry Mtns unit.
3. We recommend a boundary change on the Henry Mtns bison unit.
4. We recommend adding an archery hunt to the San Juan, Hatch Point pronghorn unit.
5. We recommend a boundary change on the San Rafael, North unit.

Northern Region Changes

1. We recommend a boundary change on the Cache, North limited-entry elk unit to remove the Wellsville Mtns.
2. We recommend a boundary change to add the Wellsville Mtns to the elk any bull unit.
3. We recommend a boundary change to add the Box Elder, Hansel Mtns unit to the any bull unit.
4. We recommend a boundary change to Cache Extended Archery area.
5. We recommend discontinuing the Box Elder, Pilot Mtn bighorn sheep hunt.



Central Region Changes

1. We recommend adding the South Wasatch Extended Archery unit for deer.
2. We recommend adding the Herriman South Valley Extended Archery unit for deer.
3. We recommend adding the Utah Lake Extended Archery unit for deer.
4. We recommend adding the Sanpete Valley Extended Archery unit for deer.
5. We recommend a boundary change to the Wasatch Front Extended Archery unit for elk and deer.
6. We recommend adding a bighorn sheep hunt to the Oquirrh-Stansbury, West unit.
7. We recommend a boundary change to the Wasatch Mtns, Timpanogos mountain goat unit.
8. We recommend adding an archery-only mountain goat hunt on the Central Mtns, Nebo unit.

Northeast Region Changes

1. We recommend adding 2 hunter's choice bison hunts to the Book Cliffs unit.
2. We recommend adding a hunter's choice bison hunt to the Book Cliffs, Little Creek Roadless unit.
3. We recommend adding a cow-only bison hunt to the Book Cliffs unit.
4. We recommend a boundary change to the Uintah Basin Extended Archery deer and elk unit.
5. We recommend a boundary change to the Nine Mile, Anthro limited-entry elk and spike bull units.
6. We recommend a boundary change to the South Slope, Bonanza/Vernal/Yellowstone any bull unit.
7. We recommend adding a pronghorn muzzleloader hunt to the Nine Mile, Anthro-Myton Bench unit.
8. We recommend adding a pronghorn muzzleloader hunt to the South Slope, Bonanza/Diamond Mtn unit.

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

Proposed Rule Changes to R657-5 – Taking Big Game:

Allow hunters to be transported into remote areas via airplane or helicopter:

1. Scouting during the flight is prohibited.
2. Must land on an improved airstrip.
3. Cannot hunt until the following day.
4. May transport hunters, their gear, and legally harvested wildlife.

Allow the use of airguns:

1. An airgun must be pneumatically powered.
2. Pressurized solely through a separate charging device.
3. May only fire a bolt or arrow, no less than 16 inches long.
4. Using fixed or expandable broadheads at least 7/8 inch wide at its widest position.
5. Traveling no less than 400 feet per second at the muzzle.

See attached rule redline for detailed changes.

The 2019 DWR General Season Deer Dates Recommendation				
Extended Archery Deer				
	Cache, Laketown; Ogden; Uintah Basin; Wasatch Front; West Cache; Utah Lake; Herriman South Valley;			Sept. 14–Nov. 30
	South Wasatch; Sanpete Valley			Sept. 14–Oct. 15
General Season Buck Deer				
General Season Archery Hunts				
			2019	2019
Hunt #	Hunt Name	Unit #	Season Dates	Nonres Permits
DB1500	Beaver	22	Aug. 17–Sept. 13	y
DB1501	Box Elder	1	Aug. 17–Sept. 13	y
DB1502	Cache	2	Aug. 17–Sept. 13	y
DB1503	Central Mtns, Manti/San Rafael	12/16B	Aug. 17–Sept. 13	y
DB1504	Central Mtns, Nebo	16A	Aug. 17–Sept. 13	y
DB1505	Chalk Creek/East Canyon/Morgan-South Rich	4/5/6	Aug. 17–Sept. 13	y
DB1506	Fillmore	21A/21B	Aug. 17–Sept. 13	y
DB1508	Kamas	7	Aug. 17–Sept. 13	y
DB1509	La Sal, La Sal Mtns	13A	Aug. 17–Sept. 13	y
DB1510	Monroe	23	Aug. 17–Sept. 13	y
DB1511	Mt Dutton	24	Aug. 17–Sept. 13	y
DB1512	Nine Mile	11	Aug. 17–Sept. 13	y
DB1513	North Slope	8	Aug. 17–Sept. 13	y
DB1514	Ogden	3	Aug. 17–Sept. 13	y
DB1515	Oquirrh-Stansbury	18	Aug. 17–Sept. 13	y
DB1516	Panguitch Lake	28	Aug. 17–Sept. 13	y
DB1517	Pine Valley	30	Aug. 17–Sept. 13	y
DB1518	Plateau, Boulder/Kaiparowits	25C/26	Aug. 17–Sept. 13	y

DB1519	Plateau, Fishlake	25A	Aug. 17–Sept. 13	y
DB1520	Plateau, Thousand Lakes	25B	Aug. 17–Sept. 13	y
DB1521	San Juan, Abajo Mtns	14A	Aug. 17–Sept. 13	y
DB1522	South Slope, Bonanza/Vernal	9B/9D	Aug. 17–Sept. 13	y
DB1523	South Slope, Yellowstone	9A	Aug. 17–Sept. 13	y
DB1524	Southwest Desert	20	Aug. 17–Sept. 13	y
DB1525	Wasatch Mtns, East	17B/17C	Aug. 17–Sept. 13	y
DB1526	Wasatch Mtns, West	17A	Aug. 17–Sept. 13	y
DB1527	West Desert, Tintic	19C	Aug. 17–Sept. 13	y
DB1528	West Desert, West	19A	Aug. 17–Sept. 13	y
DB1529	Zion	29	Aug. 17–Sept. 13	y

General Season Any Legal Weapon Hunts (early)

			2019	2019
Hunt #	Hunt Name	Unit #	Season Dates	Nonres Permits
DB1590	Chalk Creek/East Canyon/Morgan-South Rich	4/5/6	Oct. 9–Oct. 13	y
DB1591	Fillmore	21A/21B	Oct. 9–Oct. 13	y
DB1592	Kamas	7	Oct. 9–Oct. 13	y
DB1593	Nine Mile	11	Oct. 9–Oct. 13	y
DB1595	Pine Valley	30	Oct. 9–Oct. 13	y
DB1596	Plateau, Fishlake	25A	Oct. 9–Oct. 13	y
DB1597	Zion	29	Oct. 9–Oct. 13	y
DB1594	Panguitch Lake	28	Oct. 9–Oct. 13	y

General Season Any Legal Weapon Hunts

			2019	2019
Hunt #	Hunt Name	Unit #	Season Dates	Nonres Permits
DB1530	Beaver	22	Oct. 19–Oct. 27	y
DB1531	Box Elder	1	Oct. 19–Oct. 27	y
DB1532	Cache	2	Oct. 19–Oct. 27	y
DB1533	Central Mtns, Manti/San Rafael	12/16B	Oct. 19–Oct. 27	y

DB1534	Central Mtns, Nebo	16A	Oct. 19–Oct. 27	y
DB1535	Chalk Creek/East Canyon/Morgan-South Rich	4/5/6	Oct. 19–Oct. 27	y
DB1536	Fillmore	21A/21B	Oct. 19–Oct. 27	y
DB1538	Kamas	7	Oct. 19–Oct. 27	y
DB1539	La Sal, La Sal Mtns	13A	Oct. 19–Oct. 27	y
DB1540	Monroe	23	Oct. 19–Oct. 27	y
DB1541	Mt Dutton	24	Oct. 19–Oct. 27	y
DB1542	Nine Mile	11	Oct. 19–Oct. 27	y
DB1543	North Slope	8	Oct. 19–Oct. 27	y
DB1544	Ogden	3	Oct. 19–Oct. 27	y
DB1545	Oquirrh-Stansbury	18	Oct. 19–Oct. 27	y
DB1546	Panguitch Lake	28	Oct. 19–Oct. 27	y
DB1547	Pine Valley	30	Oct. 19–Oct. 27	y
DB1548	Plateau, Boulder/Kaiparowits	25C/26	Oct. 19–Oct. 27	y
DB1549	Plateau, Fishlake	25A	Oct. 19–Oct. 27	y
DB1550	Plateau, Thousand Lakes	25B	Oct. 19–Oct. 27	y
DB1551	San Juan, Abajo Mtns	14A	Oct. 19–Oct. 27	y
DB1552	South Slope, Bonanza/Vernal	9B/9D	Oct. 19–Oct. 27	y
DB1553	South Slope, Yellowstone	9A	Oct. 19–Oct. 27	y
DB1554	Southwest Desert	20	Oct. 19–Oct. 27	y
DB1555	Wasatch Mtns, East	17B/17C	Oct. 19–Oct. 27	y
DB1556	Wasatch Mtns, West	17A	Oct. 19–Oct. 27	y
DB1557	West Desert, Tintic	19C	Oct. 19–Oct. 27	y
DB1558	West Desert, West	19A	Oct. 19–Oct. 27	y
DB1559	Zion	29	Oct. 19–Oct. 27	y

General Season Muzzleloader Hunts

			2019	2019
Hunt #	Hunt Name	Unit #	Season Dates	Nonres Permits
DB1560	Beaver	22	Sept. 25–Oct. 3	y
DB1561	Box Elder	1	Sept. 25–Oct. 3	y

DB1562	Cache	2	Sept. 25–Oct. 3	y
DB1563	Central Mtns, Manti/San Rafael	12/16B	Sept. 25–Oct. 3	y
DB1564	Central Mtns, Nebo	16A	Sept. 25–Oct. 3	y
DB1565	Chalk Creek/East Canyon/Morgan-South Rich	4/5/6	Sept. 25–Oct. 3	y
DB1566	Fillmore	21A/21B	Sept. 25–Oct. 3	y
DB1568	Kamas	7	Sept. 25–Oct. 3	y
DB1569	La Sal, La Sal Mtns	13A	Sept. 25–Oct. 3	y
DB1570	Monroe	23	Sept. 25–Oct. 3	y
DB1571	Mt Dutton	24	Sept. 25–Oct. 3	y
DB1572	Nine Mile	11	Sept. 25–Oct. 3	y
DB1573	North Slope	8	Sept. 25–Oct. 3	y
DB1574	Ogden	3	Sept. 25–Oct. 3	y
DB1575	Oquirrh-Stansbury	18	Sept. 25–Oct. 3	y
DB1576	Panguitch Lake	28	Sept. 25–Oct. 3	y
DB1577	Pine Valley	30	Sept. 25–Oct. 3	y
DB1578	Plateau, Boulder/Kaiparowits	25C/26	Sept. 25–Oct. 3	y
DB1579	Plateau, Fishlake	25A	Sept. 25–Oct. 3	y
DB1580	Plateau, Thousand Lakes	25B	Sept. 25–Oct. 3	y
DB1581	San Juan, Abajo Mtns	14A	Sept. 25–Oct. 3	y
DB1582	South Slope, Bonanza/Vernal	9B/9D	Sept. 25–Oct. 3	y
DB1583	South Slope, Yellowstone	9A	Sept. 25–Oct. 3	y
DB1584	Southwest Desert	20	Sept. 25–Oct. 3	y
DB1585	Wasatch Mtns, East	17B/17C	Sept. 25–Oct. 3	y
DB1586	Wasatch Mtns, West	17A	Sept. 25–Oct. 3	y
DB1587	West Desert, Tintic	19C	Sept. 25–Oct. 3	y
DB1588	West Desert, West	19A	Sept. 25–Oct. 3	y
DB1589	Zion	29	Sept. 25–Oct. 3	y

Premium Limited Entry Buck Deer				
Premium Archery Hunts				
			2019	2019
Hunt #	Hunt Name	Unit #	Season Dates	Nonres Permits
DB1000	Henry Mtns	15	Aug. 17–Sept. 13	y
DB1001	Paunsaugunt	27	Aug. 17–Sept. 13	y
Premium Any Legal Weapon Hunts				
			2019	2019
Hunt #	Hunt Name	Unit #	Season Dates	Nonres Permits
DB1002	Antelope Island	1	Nov. 13–Nov. 20	n
DB1003	Henry Mtns	15	Oct. 19–Oct. 27	y
DB1004	Paunsaugunt	27	Oct. 19–Oct. 31	y
Premium Muzzleloader Hunts				
			2019	2019
Hunt #	Hunt Name	Unit #	Season Dates	Nonres Permits
DB1005	Henry Mtns	15	Sept. 25–Oct. 3	y
DB1006	Paunsaugunt	27	Sept. 25–Oct. 3	y
Management Buck Hunt				
			2019	2019
Hunt #	Hunt Name	Unit #	Season Dates	Nonres Permits
DB1009	Henry Mtns (any legal weapon)	15	Oct. 28–Nov. 1	y
DB1051	Henry Mtns (archery)	15	Aug. 24–Sept. 13	y
DB1052	Henry Mtns (muzzleloader)	15	Sept. 28–Oct. 3	y
DB1010	Paunsaugunt (any legal weapon)	27	Nov.1 –Nov. 5	y
DB1058	Paunsaugunt (cactus buck)	27	Nov. 6–Nov. 18	y
DB1073	Paunsaugunt (archery)	27	Aug. 26–Sept. 13	y
DB1074	Paunsaugunt (muzzleloader)	27	Sept. 30–Oct. 4	y

Multi-Season				
			2019	2019
Hunt #	Hunt Name	Unit #	Season Dates	Nonres Permits
DB1007	Henry Mtns	15	All Limited Entry Seasons	n
DB1008	Paunsaugunt	27	All Limited Entry Seasons	n
Limited Entry Buck Deer				
Limited Entry Archery Hunts				
			2019	2019
Hunt #	Hunt Name	Unit #	Season Dates	Nonres Permits
DB1011	Book Cliffs	10A/10B/10C	Aug. 17–Sept. 13	y
DB1012	Fillmore, Oak Creek LE	21C	Aug. 17–Sept. 13	y
DB1013	La Sal, Dolores Triangle	13B	Nov. 2–Nov. 15	n
DB1014	San Juan, Elk Ridge	14B	Aug. 17–Sept. 13	y
DB1015	South Slope, Diamond Mtn	9C	Aug. 17–Sept. 13	y
DB1016	West Desert, Vernon	19B	Aug. 17–Sept. 13	y
Limited Entry Any Legal Weapon Hunts				
			2019	2019
Hunt #	Hunt Name	Unit #	Season Dates	Nonres Permits
DB1017	Book Cliffs, North	10A/10C	Oct. 19–Oct. 27	y
DB1018	Book Cliffs, South	10B	Oct. 19–Oct. 27	y
DB1019	Fillmore, Oak Creek LE	21C	Oct. 19–Oct. 27	y
DB1020	La Sal, Dolores Triangle	13B	Nov. 16–Nov. 24	y
DB1021	North Slope, Summit	8A	Oct. 5–Oct. 17	y
DB1022	San Juan, Elk Ridge	14B	Oct. 19–Oct. 27	y
DB1023	South Slope, Diamond Mtn	9C	Oct. 19–Oct. 27	y
DB1024	West Desert, Vernon	19B	Oct. 19–Oct. 27	y

Limited Entry Muzzleloader Hunts				
			2019	2019
Hunt #	Hunt Name	Unit #	Season Dates	Nonres Permits
DB1025	Book Cliffs	10A/10B/10C	Sept. 25–Oct. 3	y
DB1026	Cache, Crawford Mtn	2D	Nov. 16–Dec. 1	y
DB1029	Fillmore, Oak Creek LE	21C	Sept. 25–Oct. 3	y
DB1031	La Sal, Dolores Triangle	13B	Nov 27.–Dec. 5	n
DB1037	San Juan, Elk Ridge	14B	Sept. 25–Oct. 3	y
DB1038	South Slope, Diamond Mtn	9C	Sept. 25–Oct. 3	y
DB1042	West Desert, Vernon	19B	Sept. 25–Oct. 3	y
Multi-Season				
			2019	2019
Hunt #	Hunt Name	Unit #	Season Dates	Nonres Permits
DB1044	Book Cliffs	10A/10B/10C	All Limited Entry Seasons	y
DB1045	Fillmore, Oak Creek LE	21C	All Limited Entry Seasons	n
DB1046	San Juan, Elk Ridge	14B	All Limited Entry Seasons	n
DB1047	South Slope, Diamond Mtn	9C	All Limited Entry Seasons	n
DB1048	West Desert, Vernon	19B	All Limited Entry Seasons	y
Limited Entry Late Season Muzzleloader				
			2019	2019
Hunt #	Hunt Name	Unit #	Season Dates	Nonres Permits
DB1059	Beaver	22	Oct. 30–Nov. 7	y
DB1027	Chalk Creek/East Canyon/Morgan-South Rich	4/5/6	Oct. 30–Nov. 7	y
DB1028	Fillmore	21A/21B	Oct. 30–Nov. 7	y
DB1030	Kamas	7	Oct. 30–Nov. 7	y
DB1032	Monroe	23	Oct. 30–Nov. 7	y
DB1053	Mt Dutton	24	Oct. 30–Nov. 7	y
DB1033	Nine Mile	11	Oct. 30–Nov. 7	y

DB1065	North Slope	8	Oct. 30–Nov. 7	y
DB1054	Ogden	3	Oct. 30–Nov. 7	y
DB1034	Pine Valley	30	Oct. 30–Nov. 7	y
DB1055	Plateau, Fishlake	25A	Oct. 30–Nov. 7	y
DB1036	Plateau, Thousand Lakes	25B	Oct. 30–Nov. 7	y
DB1039	South Slope, Yellowstone	9A	Oct. 30–Nov. 7	y
DB1040	Southwest Desert	20	Oct. 30–Nov. 7	y
DB1041	Wasatch Mtns, East	17B/17C	Oct. 30–Nov. 7	y
DB1043	Zion	29	Oct. 30–Nov. 7	y
	(y) At least one nonresident permit in 2019			
	(n) No nonresident permit in 2019			
	<u>NOTE: Permit numbers will be determined in May 2019</u>			

	The 2019 DWR General Season Elk Dates Recommendation		
	Archery Spike Bull	Aug. 17–Sept. 6	
	Archery Any Bull	Aug. 17–Sept. 13	
	Muzzleloader	Oct. 30–Nov. 7	
	Any Legal Weapon	Oct. 5–Oct. 17	
	Extended Archery Elk		
	Uintah Basin	Aug. 17–Dec. 15	
	Wasatch Front	Aug. 17–Dec. 15	
	Limited Entry Bull Elk		
	Archery Hunts		
		2019	2019
Hunt #	Hunt Name	Season Dates	Nonres Permits
EB3000	Beaver, East	Aug. 17–Sept. 13	y
EB3001	Book Cliffs, Bitter Creek/South	Aug. 17–Sept. 13	y
EB3002	Book Cliffs, Little Creek Roadless	Aug. 17–Sept. 13	y
EB3003	Cache, Meadowville †	Aug. 17–Sept. 13	y
EB3004	Cache, North	Aug. 17–Sept. 13	y
EB3005	Cache, South	Aug. 17–Sept. 13	y
EB3006	Central Mtns, Manti	Aug. 17–Sept. 13	y
EB3007	Central Mtns, Nebo	Aug. 17–Sept. 13	y
EB3008	Fillmore, Pahvant	Aug. 17–Sept. 13	y
EB3009	La Sal, La Sal Mtns	Aug. 17–Sept. 13	y
EB3010	Monroe	Aug. 17–Sept. 13	y
EB3011	Mt Dutton	Aug. 17–Sept. 13	y
EB3012	Nine Mile, Anthro	Aug. 17–Sept. 13	y
EB3013	North Slope, Three Corners	Aug. 17–Sept. 13	y
EB3014	Oquirrh-Stansbury	Aug. 17–Sept. 13	y
EB3015	Panguitch Lake	Aug. 17–Sept. 13	y

EB3016	Paunsaugunt	Aug. 17–Sept. 13	y
EB3017	Plateau, Boulder/Kaiparowits	Aug. 17–Sept. 13	y
EB3018	Plateau, Fishlake/Thousand Lakes	Aug. 17–Sept. 13	y
EB3019	San Juan Bull Elk	Aug. 17–Sept. 13	y
EB3020	South Slope, Diamond Mtn	Aug. 17–Sept. 13	y
EB3021	Southwest Desert	Aug. 17–Sept. 13	y
EB3022	Wasatch Mtns	Aug. 17–Sept. 13	y
EB3023	West Desert, Deep Creek	Aug. 17–Sept. 13	y
Any legal weapon hunts (early rifle)			
		2019	2019
Hunt #	Hunt Name	Season Dates	Nonres Permits
EB3024	Beaver, East	Sept. 14–Sept. 22	y
EB3026	Book Cliffs, Bitter Creek/South	Sept. 14–Sept. 22	y
EB3028	Book Cliffs, Little Creek Roadless	Sept. 14–Sept. 22	y
EB3029	Box Elder, Grouse Creek	Sept. 14–Sept. 22	y
EB3031	Box Elder, Pilot Mtn	Sept. 7–Sept. 27	y
EB3032	Cache, Meadowville †	Sept. 14–Sept. 22	y
EB3034	Cache, North	Sept. 14–Sept. 22	y
EB3036	Cache, South	Sept. 14–Sept. 22	y
EB3038	Central Mtns, Manti	Sept. 14–Sept. 22	y
EB3040	Central Mtns, Nebo	Sept. 14–Sept. 22	y
EB3042	Fillmore, Pahvant	Sept. 14–Sept. 22	y
EB3045	La Sal, La Sal Mtns	Sept. 14–Sept. 22	y
EB3047	Monroe	Sept. 14–Sept. 22	y
EB3049	Mt Dutton	Sept. 14–Sept. 22	y
EB3051	Nine Mile, Anthro	Sept. 14–Sept. 22	y
EB3054	Oquirrh-Stansbury	Sept. 14–Sept. 22	y
EB3056	Panguitch Lake	Sept. 14–Sept. 22	y
EB3058	Paunsaugunt	Sept. 14–Sept. 22	y
EB3061	Plateau, Boulder/Kaiparowits	Sept. 14–Sept. 22	y

EB3063	Plateau, Fishlake/Thousand Lakes	Sept. 14–Sept. 22	y
EB3066	San Juan Bull Elk	Sept. 14–Sept. 22	y
EB3068	South Slope, Diamond Mtn	Sept. 14–Sept. 22	y
EB3070	Southwest Desert	Sept. 14–Sept. 22	y
EB3072	Wasatch Mtns	Sept. 14–Sept. 22	y
EB3074	West Desert, Deep Creek	Sept. 14–Sept. 22	y

Any legal weapon hunts (mid rifle)

		2019	2019
Hunt #	Hunt Name	Season Dates	Nonres Permits
EB3030	Box Elder, Grouse Creek	Oct. 5–Oct. 27	y
EB3126	Central Mtns, Manti	Oct. 5–Oct. 17	y
EB3053	North Slope, Three Corners	Oct. 5–Oct. 17	y
EB3059	Paunsaugunt	Oct. 5–Oct. 17	y
EB3064	Plateau, Fishlake/Thousand Lakes	Oct. 5–Oct. 17	y
EB3069	South Slope, Diamond Mtn	Oct. 5–Oct. 17	y
EB3127	Wasatch Mtns	Oct. 5–Oct. 17	y
EB3075	West Desert, Deep Creek	Oct. 5–Oct. 17	n

Any legal weapon hunts (late rifle)

		2019	2019
Hunt #	Hunt Name	Season Dates	Nonres Permits
EB3025	Beaver, East	Nov. 9–Nov. 17	y
EB3027	Book Cliffs, Bitter Creek/South	Nov. 9–Nov. 17	y
EB3033	Cache, Meadowville †	Nov. 9–Nov. 17	y
EB3035	Cache, North	Nov. 9–Nov. 17	y
EB3037	Cache, South	Nov. 9–Nov. 17	y
EB3039	Central Mtns, Manti	Nov. 9–Nov. 17	y
EB3041	Central Mtns, Nebo	Nov. 9–Nov. 17	y
EB3043	Fillmore, Pahvant	Nov. 9–Nov. 17	y
EB3044	La Sal, Dolores Triangle	Dec. 7, 2019–Jan. 31, 2020	n

EB3046	La Sal, La Sal Mtns	Nov. 9–Nov. 17	y
EB3048	Monroe	Nov. 9–Nov. 17	y
EB3050	Mt Dutton	Nov. 9–Nov. 17	y
EB3052	Nine Mile, Anthro	Nov. 9–Nov. 17	y
EB3055	Oquirrh-Stansbury	Nov. 9–Nov. 17	y
EB3057	Panguitch Lake	Nov. 9–Nov. 17	y
EB3060	Paunsaugunt	Nov. 9–Nov. 17	y
EB3062	Plateau, Boulder/Kaiparowits	Nov. 9–Nov. 17	y
EB3065	Plateau, Fishlake/Thousand Lakes	Nov. 9–Nov. 17	y
EB3067	San Juan Bull Elk	Nov. 9–Nov. 17	y
EB3071	Southwest Desert	Nov. 9–Nov. 17	y
EB3073	Wasatch Mtns	Nov. 9–Nov. 17	y
EB3076	West Desert, Deep Creek	Nov. 9–Nov. 17	n

Muzzleloader Hunts

		2019	2019
Hunt #	Hunt Name	Season Dates	Nonres Permits
EB3077	Beaver, East	Sept. 23–Oct. 4	n
EB3078	Book Cliffs, Bitter Creek/South	Sept. 23–Oct. 4	y
EB3079	Book Cliffs, Little Creek Roadless	Sept. 23–Oct. 4	y
EB3080	Box Elder, Grouse Creek	Sept. 23–Oct. 4	y
EB3081	Cache, Meadowville †	Sept. 23–Oct. 4	y
EB3082	Cache, North	Sept. 23–Oct. 4	n
EB3083	Cache, South	Sept. 23–Oct. 4	y
EB3084	Central Mtns, Manti	Sept. 23–Oct. 4	y
EB3085	Central Mtns, Nebo	Sept. 23–Oct. 4	y
EB3086	Fillmore, Pahvant	Sept. 23–Oct. 4	y
EB3087	La Sal, La Sal Mtns	Sept. 23–Oct. 4	y
EB3088	Monroe	Sept. 23–Oct. 4	y
EB3089	Mt Dutton	Sept. 23–Oct. 4	y
EB3090	Nine Mile, Anthro	Sept. 23–Oct. 4	n

EB3091	North Slope, Three Corners	Oct. 30–Nov. 7	y
EB3092	Oquirrh-Stansbury	Sept. 23–Oct. 4	n
EB3093	Panguitch Lake	Sept. 23–Oct. 4	y
EB3094	Paunsaugunt	Sept. 23–Oct. 4	y
EB3095	Plateau, Boulder/Kaiparowits	Sept. 23–Oct. 4	y
EB3096	Plateau, Fishlake/Thousand Lakes	Sept. 23–Oct. 4	y
EB3097	San Juan Bull Elk	Sept. 23–Oct. 4	y
EB3098	South Slope, Diamond Mtn	Sept. 23–Oct. 4	y
EB3099	Southwest Desert	Sept. 23–Oct. 4	y
EB3100	Wasatch Mtns	Sept. 23–Oct. 4	y
EB3101	West Desert, Deep Creek	Sept. 23–Oct. 4	n
Multi-Season			
		2019	2019
Hunt #	Hunt Name	Season Dates	Nonres Permits
EB3102	Beaver, East	All Limited Entry Seasons	n
EB3103	Book Cliffs, Bitter Creek/South	All Limited Entry Seasons	y
EB3104	Book Cliffs, Little Creek Roadless	All Limited Entry Seasons	n
EB3105	Cache, Meadowville †	All Limited Entry Seasons	n
EB3106	Cache, North	All Limited Entry Seasons	n
EB3107	Cache, South	All Limited Entry Seasons	n
EB3108	Central Mtns, Manti	All Limited Entry Seasons	y
EB3109	Central Mtns, Nebo	All Limited Entry Seasons	n
EB3110	Fillmore, Pahvant	All Limited Entry Seasons	n
EB3111	La Sal, La Sal Mtns	All Limited Entry Seasons	n
EB3112	Monroe	All Limited Entry Seasons	n
EB3113	Mt Dutton	All Limited Entry Seasons	n
EB3114	Nine Mile, Anthro	All Limited Entry Seasons	n
EB3115	North Slope, Three Corners	All Limited Entry Seasons	n
EB3116	Oquirrh-Stansbury	All Limited Entry Seasons	n
EB3117	Panguitch Lake	All Limited Entry Seasons	n

EB3118	Paunsaugunt	All Limited Entry Seasons	n
EB3119	Plateau, Boulder/Kaiparowits	All Limited Entry Seasons	n
EB3120	Plateau, Fishlake/Thousand Lakes	All Limited Entry Seasons	y
EB3121	San Juan Bull Elk	All Limited Entry Seasons	n
EB3122	South Slope, Diamond Mtn	All Limited Entry Seasons	n
EB3123	Southwest Desert	All Limited Entry Seasons	n
EB3124	Wasatch Mtns	All Limited Entry Seasons	y
EB3125	West Desert, Deep Creek	All Limited Entry Seasons	n

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

Youth Any Bull Hunts

		2019	2019
Hunt #	Hunt Name	Season Dates	Nonres Permits
EB1004	Youth General Any Bull Elk	Sept. 14–Sept. 22	y

(y) At least one nonresident permit in 2019

(n) No nonresident permit in 2019

NOTE: Permit numbers will be determined in May 2019

Limited Entry Pronghorn			
Archery Hunts			
		2019	2019
Hunt #	Hunt Name	Season Dates	Nonres Permits
PB5000	Beaver	Aug. 17–Sept. 13	n
PB5001	Book Cliffs, Bitter Creek	Aug. 17–Sept. 13	n
PB5002	Book Cliffs, South	Aug. 17–Sept. 13	y
PB5003	Box Elder, Promontory	Aug. 17–Sept. 13	n
PB5004	Box Elder, Puddle Valley	Aug. 17–Sept. 13	n
PB5005	Box Elder, Snowville	Aug. 17–Sept. 13	n
PB5006	Box Elder, West	Aug. 17–Sept. 13	n
PB5007	Cache/Morgan-South Rich/Ogden	Aug. 17–Sept. 13	y
PB5008	Fillmore, Oak Creek South	Aug. 17–Sept. 13	y
PB5009	La Sal, Potash/South Cisco	Aug. 17–Sept. 13	y
PB5010	Mt Dutton/Paunsaugunt	Aug. 17–Sept. 13	y
PB5011	Nine Mile, Anthro-Myton Bench	Aug. 17–Sept. 13	y
PB5053	Nine Mile, Range Creek	Aug. 17–Sept. 13	n
PB5012	North Slope, Three Corners/West Daggett	Aug. 17–Sept. 13	y
PB5054	Panguitch Lake/Zion, North	Aug. 17–Sept. 13	n
PB5013	Pine Valley	Aug. 17–Sept. 13	y
PB5014	Plateau, Parker Mtn	Aug. 17–Sept. 13	y
PB5055	San Rafael, Desert	Aug. 17–Sept. 13	n
PB5015	San Rafael, North	Aug. 17–Sept. 13	y
PB5016	South Slope, Bonanza/Diamond Mtn	Aug. 17–Sept. 13	y
PB5017	South Slope, Vernal	Aug. 17–Sept. 13	y
PB5018	Southwest Desert	Aug. 17–Sept. 13	y
PB5019	West Desert, Riverbed	Aug. 17–Sept. 13	y
PB5020	West Desert, Rush Valley	Aug. 17–Sept. 13	n
PB5021	West Desert, Snake Valley	Aug. 17–Sept. 13	y
PB5058	San Juan, Hatch Point	Aug. 17–Sept. 13	n

Muzzleloader hunts			
		2019	2019
Hunt #	Hunt Name	Season Dates	Nonres Permits
PB5022	Cache/Morgan-South Rich/Ogden	Sept. 25–Oct. 3	y
PB5023	Plateau, Parker Mtn	Sept. 25–Oct. 3	y
PB5056	San Rafael, North	Sept. 25–Oct. 3	y
PB5024	Southwest Desert	Sept. 25–Oct. 3	y
PB5059	Nine Mile, Anthro-Myton Bench	Sept. 25–Oct. 3	y
PB5060	South Slope, Bonanza/Diamond Mtn	Sept. 25–Oct. 3	y
Any Legal Weapon Hunts			
		2019	2019
Hunt #	Hunt Name	Season Dates	Nonres Permits
PB5025	Beaver	Sept. 14–Sept. 22	y
PB5026	Book Cliffs, Bitter Creek	Sept. 14–Sept. 22	y
PB5027	Book Cliffs, South	Sept. 14–Sept. 22	y
PB5028	Box Elder, Promontory	Sept. 14–Sept. 22	y
PB5029	Box Elder, Puddle Valley	Sept. 14–Sept. 22	y
PB5030	Box Elder, Snowville	Sept. 14–Sept. 22	y
PB5031	Box Elder, West	Sept. 14–Sept. 22	y
PB5032	Cache/Morgan-South Rich/Ogden	Sept. 14–Sept. 22	y
PB5033	Fillmore, Oak Creek South	Sept. 14–Sept. 22	y
PB5034	Kaiparowits	Sept. 14–Sept. 22	n
PB5035	La Sal, Potash/South Cisco	Sept. 14–Sept. 22	y
PB5036	Mt Dutton/Paunsaugunt	Sept. 14–Sept. 22	y
PB5037	Nine Mile, Anthro-Myton Bench	Sept. 14–Sept. 22	y
PB5038	Nine Mile, Range Creek	Sept. 14–Sept. 22	y
PB5039	North Slope, Summit	Sept. 14–Sept. 22	y
PB5040	North Slope, Three Corners/West Daggett	Sept. 14–Sept. 22	y
PB5041	Panguitch Lake/Zion, North	Sept. 14–Sept. 22	y

PB5042	Pine Valley	Sept. 14–Sept. 22	y
PB5043	Plateau, Parker Mtn	Sept. 14–Sept. 22	y
PB5044	San Juan, Hatch Point	Sept. 14–Sept. 22	y
PB5045	San Rafael, Desert	Sept. 14–Sept. 22	y
PB5046	San Rafael, North	Sept. 14–Sept. 22	y
PB5047	South Slope, Bonanza/Diamond Mtn	Sept. 14–Sept. 22	y
PB5048	South Slope, Vernal	Sept. 14–Sept. 22	y
PB5049	Southwest Desert	Sept. 14–Sept. 22	y
PB5050	West Desert, Riverbed	Sept. 14–Sept. 22	y
PB5051	West Desert, Rush Valley	Sept. 14–Sept. 22	y
PB5052	West Desert, Snake Valley	Sept. 14–Sept. 22	y
	(y) At least one nonresident permit in 2019		
	(n) No nonresident permit in 2019		
	NOTE: Permit numbers will be determined in May 2019		

ONCE IN A LIFETIME SPECIES			
Bull Moose		2019	2019
Hunt #	Hunt Name	Season Dates	Nonres Permits
MB6000	Cache	Sept. 14–Oct. 17	y
MB6001	Chalk Creek †	Sept. 14–Oct. 17	n
MB6002	East Canyon †	Sept. 14–Oct. 17	n
MB6003	East Canyon, Morgan-Summit †	Sept. 14–Oct. 17	n
MB6004	Kamas	Sept. 14–Oct. 17	n
MB6005	Morgan-South Rich †	Sept. 14–Oct. 17	n
MB6006	North Slope, Summit	Sept. 14–Oct. 17	y
MB6007	North Slope, Three Corners/West Daggett	Sept. 14–Oct. 17	n
MB6008	Ogden †	Sept. 14–Oct. 17	y
MB6009	South Slope, Diamond Mtn/Vernal	Sept. 14–Oct. 17	n
MB6010	South Slope, Yellowstone	Sept. 14–Oct. 17	n
MB6011	Wasatch Mtns/Central Mtns	Sept. 14–Oct. 17	y
†This unit is composed of all or largely private property. Hunters should acquire written permission from the landowner before applying for this hunt.			
Bison		2019	2019
Any Legal Weapon Hunts			
Hunt #	Hunt Name	Season Dates	Nonres Permits
BI6500	Antelope Island	Dec. 2–Dec. 13	n
BI6501	Book Cliffs (hunter's choice)	Aug. 24 - Sept. 4	y
BI6517	Book Cliffs (hunter's choice)	Sept. 7-Sept. 18	y
BI6518	Book Cliffs (hunter's choice)	Oct. 23-Nov. 3	y
BI6519	Book Cliffs, Little Creek Roadless (hunter's choice)	Oct. 5-Oct. 22	y
BI6507	Book Cliffs, Wild Horse Bench/Nine Mile, Anthro (hunter's choice)	Nov. 18, 2019–Jan. 31, 2020	y
BI6508	Book Cliffs (cow only)	Sept. 21-Oct. 2	y
BI6520	Book Cliffs (cow only)	Nov. 6-Nov. 17	y
BI6503	Henry Mtns (hunter's choice)	Nov. 2–Nov. 13	y

BI6504	Henry Mtns (hunter's choice)	Nov. 16–Nov. 27	y
BI6516	Henry Mtns (hunter's choice)	Nov. 30–Dec. 11	y
BI6505	Henry Mtns (cow only)	Dec. 14–Dec. 27	y
BI6506	Henry Mtns (cow only)	Dec. 28–Jan. 12, 2020	y
Archery Hunts		2019	2019
Hunt #	Hunt Name	Season Dates	Nonres Permits
BI6509	Henry Mtns (hunters choice)	Sept. 14–Sept. 24	y
BI6515	Henry Mtns (cow only)	Oct. 4–Oct. 18	y
Desert Bighorn Sheep		2019	2019
Hunt #	Hunt Name	Season Dates	Nonres Permits
DS6600	Henry Mtns	Sept. 14–Nov. 10	n
DS6601	Kaiparowits, East*	Sept. 14–Nov. 10	y
DS6602	Kaiparowits, Escalante	Sept. 14–Nov. 10	n
DS6603	Kaiparowits, West	Sept. 14–Nov. 10	y
DS6604	La Sal, Potash/South Cisco	Sept. 14–Nov. 10	n
DS6605	Pine Valley	Oct. 26–Dec. 29	n
DS6606	San Juan, Lockhart	Sept. 14–Nov. 10	n
DS6607	San Juan, South	Sept. 14–Nov. 10	n
DS6608	San Rafael, Dirty Devil	Sept. 14–Nov. 10	n
DS6609	San Rafael, North	Sept. 14–Nov. 10	n
DS6610	San Rafael, South †	Sept. 14–Nov. 10	y
DS6611	Zion^	Sept. 14–Oct. 11	y
DS6612	Zion	Oct. 12–Nov. 10	n
* Nonresidents may only hunt the Kaiparowits East and Escalante 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		2019	2019
Hunt #	Hunt Name	Season Dates	Nonres Permits

RS6700	Antelope Island	Nov. 13–Nov. 20	n
RS6701	Book Cliffs, South	Nov. 1–Nov. 30	y
RS6703	Box Elder, Newfoundland Mtn	Oct. 26–Nov. 15	n
RS6704	Box Elder, Newfoundland Mtn	Nov. 16–Dec. 8	y
RS6702	Box Elder, Pilot Mtn	Sept. 1 - Oct. 30	n
RS6719	Central Mtns, Nebo/Wasatch Mtns	Nov. 1–Nov. 30	n
RS6720	Fillmore, Oak Creek	Nov. 1–Nov. 30	n
RS6712	Nine Mile, Gray Canyon	Nov. 1–Nov. 30	y
RS6713	Nine Mile, Jack Creek	Nov. 1–Nov. 30	n
RS6714	North Slope, Bare Top/West Daggett	Nov. 1–Nov. 30	n
RS6721	Oquirrh-Stansbury, West	Nov. 1–Nov. 30	n

Mountain Goat

Any Legal Weapon Hunts		2019	2019
Hunt #	Hunt Name	Season Dates	Nonres Permits
GO6800	Beaver	Sept. 7–Sept. 22	y
GO6801	Beaver	Sept. 23–Nov. 13	n
GO6803	Central Mtns, Nebo	Sept. 9–Nov. 30	y
GO6804	Chalk Creek/Kamas, Uintas	Sept. 14–Oct. 31	y
GO6817	La Sal, La Sal Mtns	Sept 9–Nov. 30	n
GO6814	Mt Dutton	Sept 9–Nov. 30	n
GO6805	North Slope/South Slope, High Uintas Central	Sept. 9–Oct. 31	y
GO6806	North Slope/South Slope, High Uintas East	Sept. 9–Oct. 31	n
GO6807	North Slope/South Slope, High Uintas Leidy Peak	Sept. 9–Oct. 31	n
GO6808	North Slope/South Slope, High Uintas West	Sept. 9–Oct. 31	y
GO6809	Ogden, Willard Peak	Sept. 9–Sept. 22	y
GO6810	Ogden, Willard Peak	Sept. 23–Nov. 13	y
GO6811	Ogden, Willard Peak (female goat only)	Oct. 7–Nov. 15	y
GO6818	Wasatch Mtns, Box Elder Peak	Sept. 9–Nov. 30	n
GO6819	Wasatch Mtns, Lone Peak	Sept. 9–Nov. 30	n
GO6813	Wasatch Mtns, Provo Peak	Sept. 9–Nov. 30	n

GO6820	Wasatch Mtns, Timpanogos	Sept. 9–Nov. 30	n
Archery Hunts		2019	2019
Hunt #	Hunt Name	Season Dates	Nonres Permits
GO6815	North Slope/South Slope, High Uintas Central	Aug. 17–Sept. 8	n
GO6821	Central Mtns, Nebo	Aug. 17–Sept. 8	y
	(y) At least one nonresident permit in 2019		
	(n) No nonresident permit in 2019		
	<u>NOTE: Permit numbers will be determined in May 2019</u>		

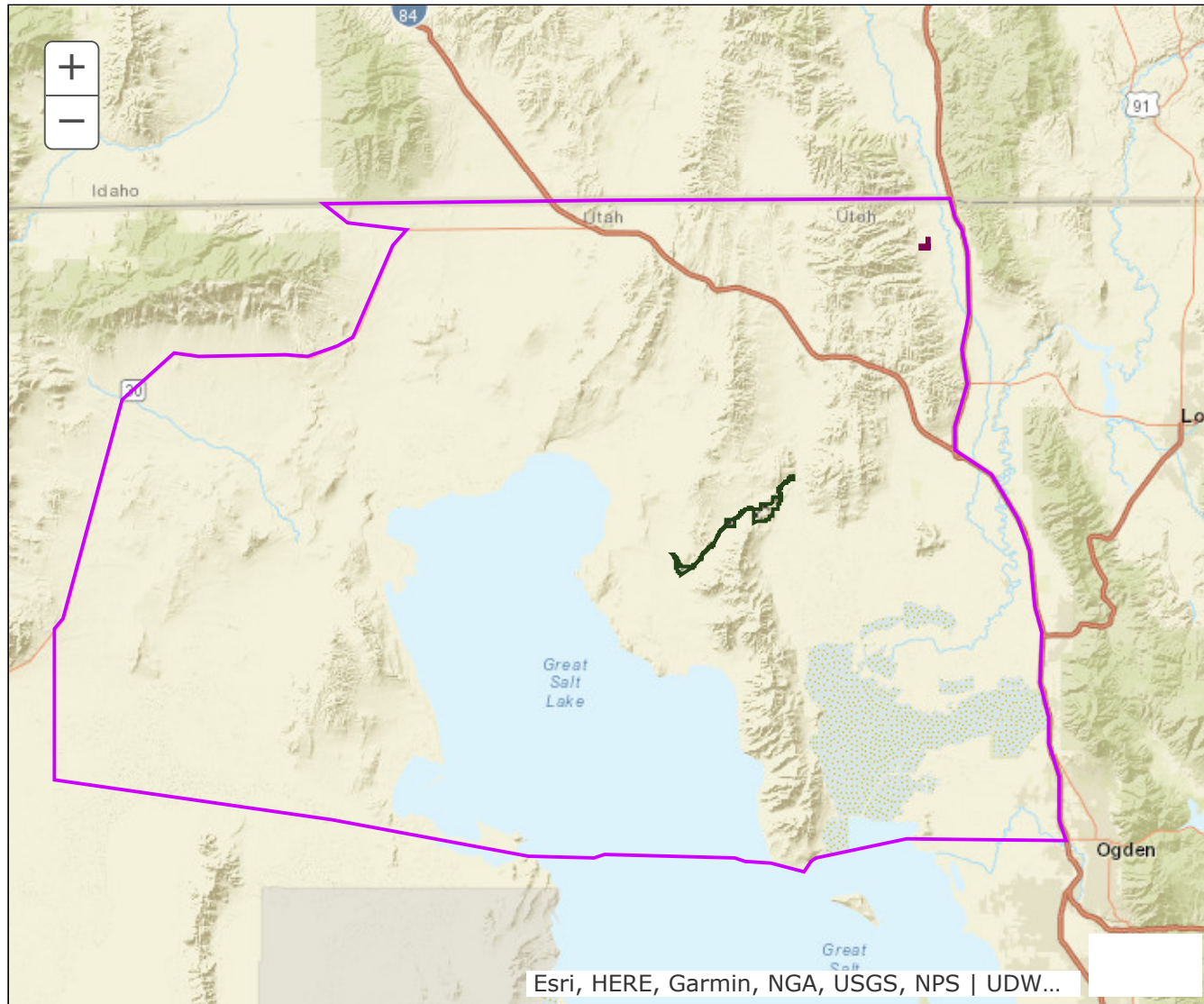
Summary of Changes			
Hunt Number	Discontinued Hunts	Species	Season
	NRO		
RS6702	Box Elder, Pilot Mtn	Rocky Mountain bighorn	
DB1032	Monroe	Deer	Oct. 30–Nov. 7
DB1055	Plateau, Fishlake	Deer	Oct. 30–Nov. 7
	New Hunts	Species	
	CRO		
RS6721	Oquirrh-Stansbury, West	Rocky Mountain Bighorn	Nov. 1–Nov. 30
GO6821	Central Mtns, Nebo (Archery Only)	Mountain Goat	Aug. 17–Sept. 8
	South Wasatch Extended Archery	Deer	Sept. 14–Oct. 18
	Herriman South Valley Extended Archery	Deer	Sept. 14–Nov. 30
	Utah Lake Extended Archery	Deer	Sept. 14–Nov. 30
	Sanpete Valley Extended Archery	Deer	Sept. 14–Oct. 18
	SERO		
PB5058	San Juan, Hatch Point	Pronghorn	Aug. 17–Sept. 13
BI6515	Henry Mtns	Bison, cow only	Oct. 4–Oct. 18
BI6516	Henry Mtns	Bison, hunters choice	Nov. 30–Dec. 11
	NERO		
PB5059	Nine Mile, Anthro-Myton Bench	Pronghorn	Sept. 25–Oct. 3
PB5060	South Slope, Bonanza/Diamond Mtn	Pronghorn	Sept. 25–Oct. 3
BI6517	Book Cliffs	Bison, hunters choice	Sept. 7–Sept. 18
BI6518	Book Cliffs	Bison, hunters choice	Oct. 23–Nov. 3
BI6519	Book Cliffs, Little Creek Roadless	Bison, hunters choice	Oct. 5–Oct. 22
BI6520	Book Cliffs	Bison cow only	Nov. 6–Nov. 17
	SRO		
DB1594	Panguitch Lake	Deer	Oct. 9–Oct. 13
DB1073	Paunsaugunt (archery)	Deer	Aug. 26–Sept. 13
DB1074	Paunsaugunt (muzzleloader)	Deer	Sept. 30–Oct. 4

	Boundary Changes	Species	
	CRO		
	Wasatch Mtns, Timpanogos	Goat	
	Wasatch Front Extended Archery	Deer/Elk	
	SERO		
	San Rafael, North	Pronghorn	
	Henry Mtns (bison)	Bison	
	NERO		
	Uinta Basin Extended Archery	deer and elk	
	Nine Mile, Anthro	Elk	
	South Slope, Bonanza/Vernal/Yellowstone	elk	
	NRO		
	West Cache Extended Archery	deer	
	Cache, North	elk	
	Box Elder, Hansel Mtns	any bull elk	Any Bull Dates
	Cache, Wellsville Mtns	any bull elk	Any Bull Dates
	Date Changes	Species	
	NERO		
BI6501	Book Cliffs (hunter's choice)	Bison	Aug. 24 - Sept. 4
BI6507	Book Cliffs, Wild Horse Bench/Nine Mile, Anthro (hunter's choice)	Bison	Nov. 18, 2019–Jan. 31, 2020
BI6508	Book Cliffs (cow only)	Bison	Sept. 21–Oct. 2
	SERO		
BI6509	Henry Mtns (hunters choice)	Bison	Sept.14–Sept.24
BI6503	Henry Mtns (hunter's choice)	Bison	Nov. 2–Nov. 13
BI6504	Henry Mtns (hunter's choice)	Bison	Nov. 16–Nov. 27
BI6505	Henry Mtns (cow only)	Bison	Dec. 14–Dec. 27
BI6506	Henry Mtns (cow only)	Bison	Dec. 28–Jan. 12, 2020

BOUNDARY RECOMMENDATION

UNIT Box Elder, Hansel Mtn

SPECIES elk

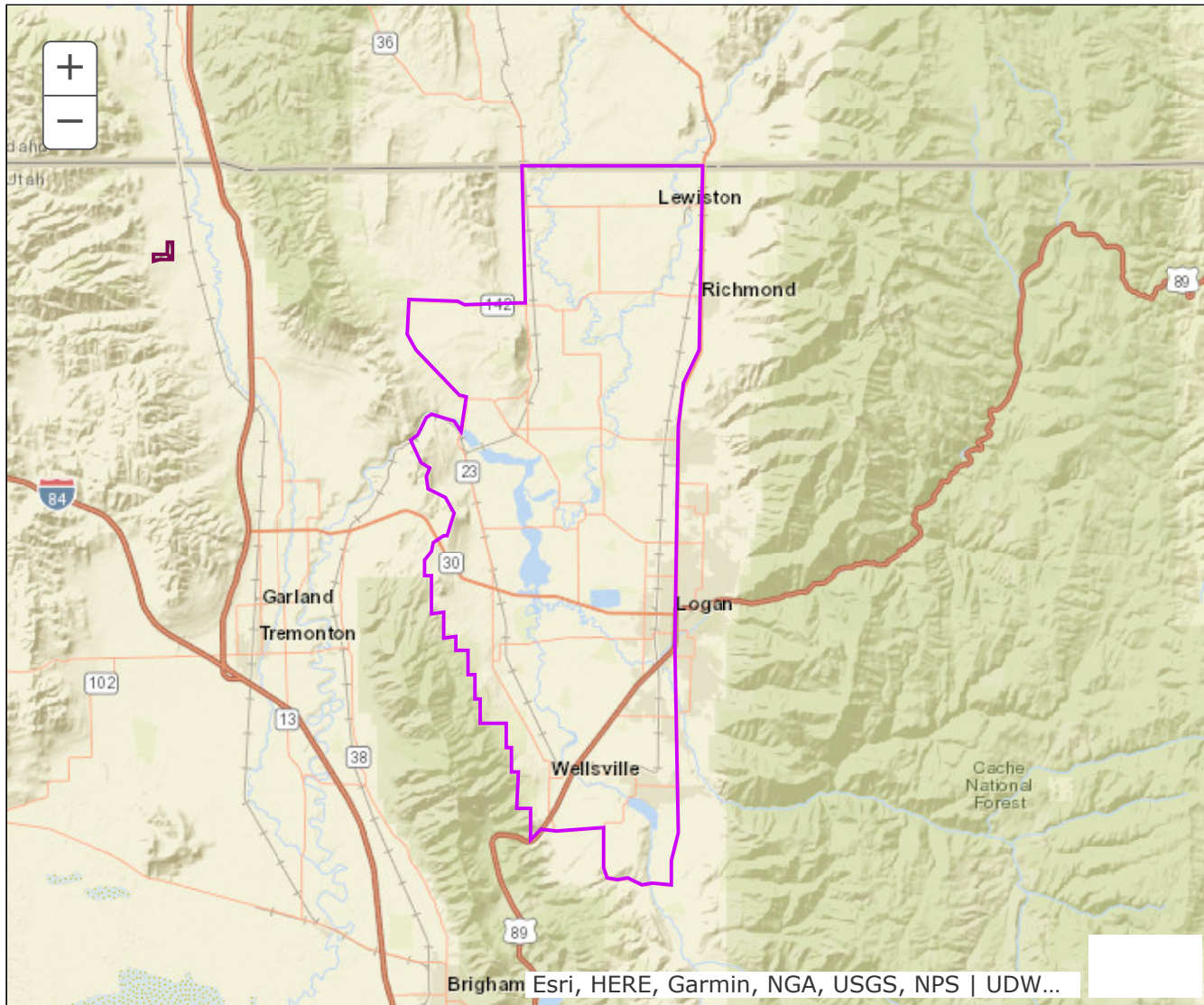


Updated Boundary: Box Elder and Weber counties—Boundary begins at 12th Street and I-15 in Ogden; north on I-15 to the Utah/Idaho state line; west on this state line to SR-42; southeast on SR-42 to SR-30; southwest on SR-30 to township line of R15W and R16W; due south on this line to Union Pacific railroad tracks; east on these tracks(causeway) to 12th Street; east on this street to I-15 in Ogden. This hunt is comprised of all or largely private property. Hunters should acquire written permission from the landowner before applying for this hunt. Excludes all CWMUs. USGS 1:100,000 Maps: Grouse Creek, Promontory Point, Tremonton. Boundary questions: Call Ogden office, 801-476-2740.

BOUNDARY RECOMMENDATION

UNIT West Cache Extended Archery Area

SPECIES deer

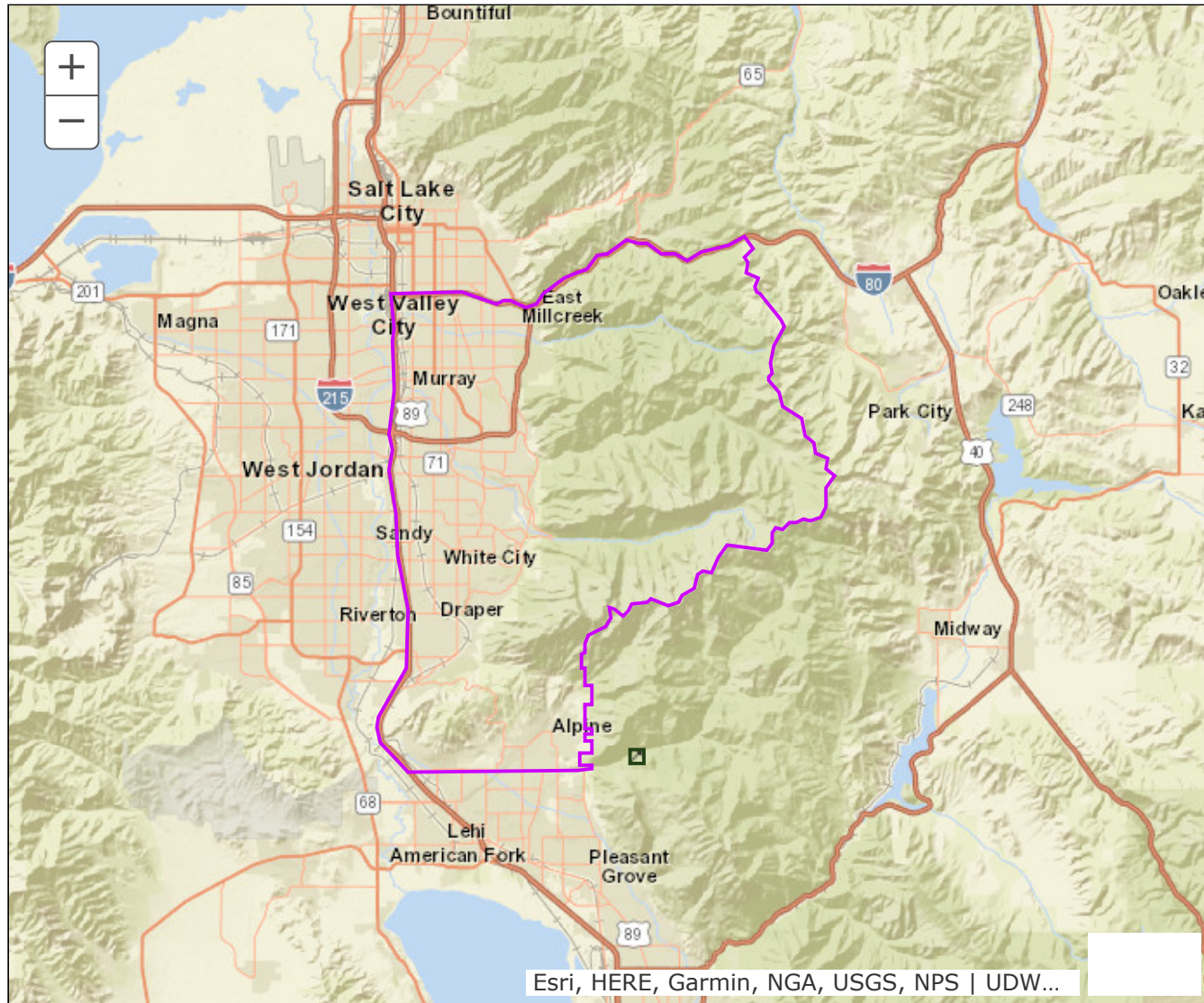


Updated Boundary: Cache County--Boundary begins at SR-142 and SR-23 in Newton; northwest then east on SR-142 to SR-23; north along SR-23 to the Utah/Idaho line; east on the Utah/Idaho line to US-91; south on US-91 to US-89/91; south on US-89/91 to SR-165; south on SR-165 to Mt Pisgah Road (8700 South) in Paradise; west on Mt Pisgah Road to 2400 west; north on 2400 west to SR-1170; west on SR-1170 to US-89/91; southwest on US89/91 to the USFS Administrative Boundary; north on this boundary to the Box Elder/Cache County line; north on this county line to the southwest shoreline of Cutler Reservoir; east along this shoreline to SR-23; north on SR-23 to SR-142 in Newton.

BOUNDARY RECOMMENDATION

UNIT Wasatch Front Extended Archery Area

SPECIES deer-elk

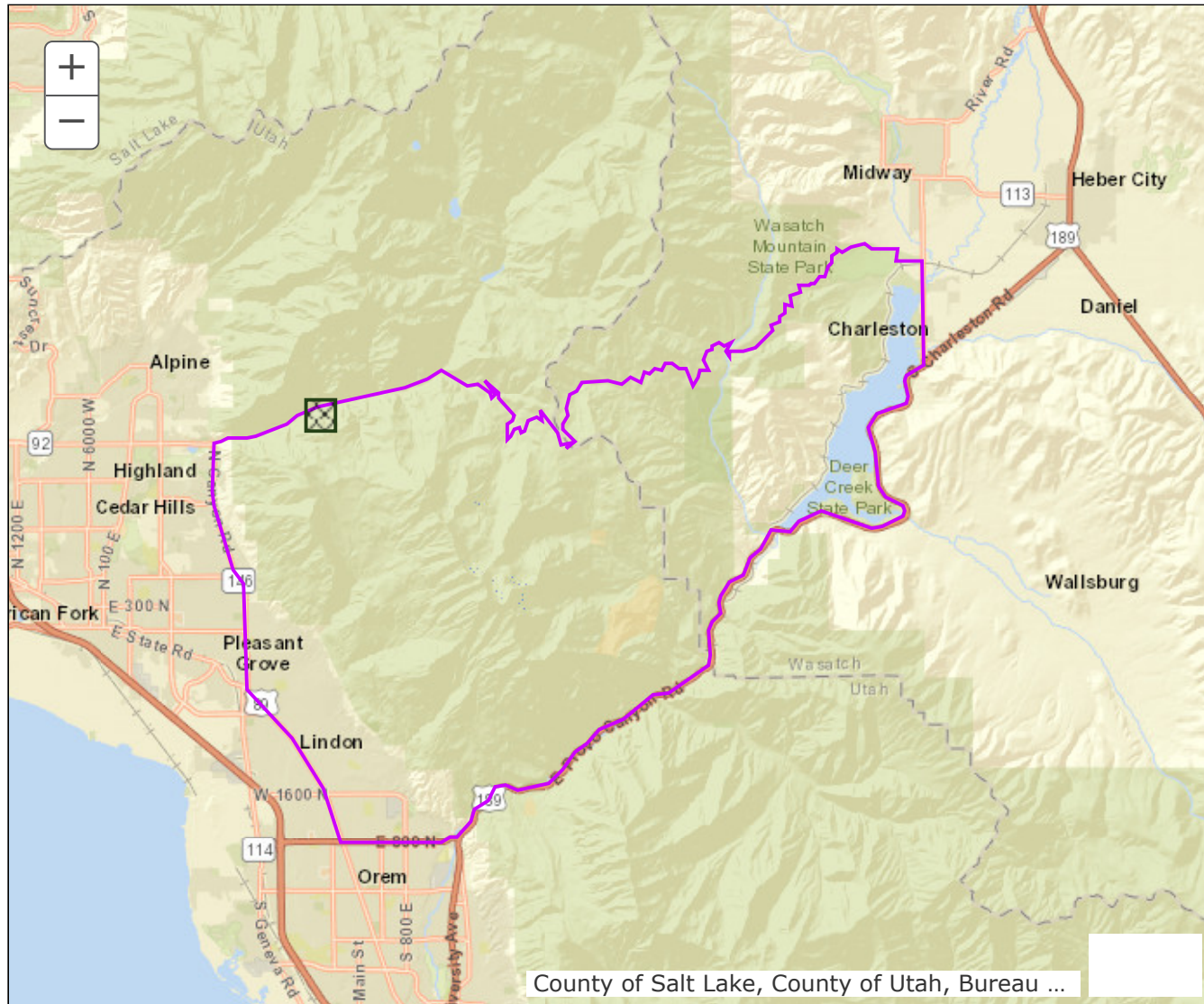


Updated Boundary: Salt Lake and Utah counties--Boundary begins at I-15 and I-80; south on I-15 to SR-92; east on SR-92 to the USFS Wilderness Boundary (mouth of American Fork Cyn); north on this boundary Lake Hardy Trail; north on this trail to the Salt Lake/Utah county line; east on this county to the Salt Lake/Wasatch county line; east on this county line to the Salt Lake/Summit county line; north on this county line to I-80; west on I-80 to I-15.

BOUNDARY RECOMMENDATION

UNIT Wasatch Mtns, Timpanogos

SPECIES Mountain Goat

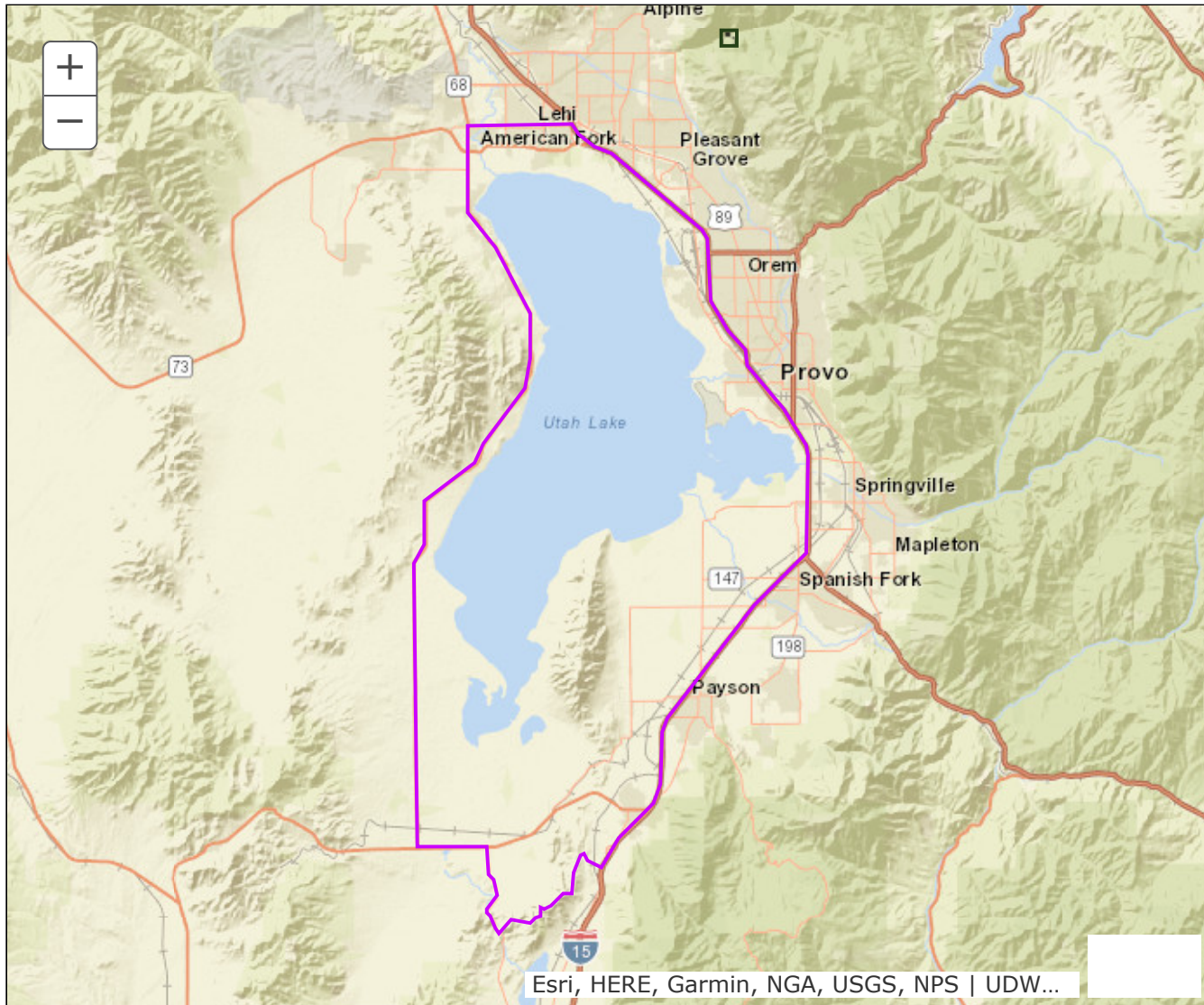


Updated Boundary: Utah and Wasatch Counties—Boundary begins at US-189 and 800 North in Orem; west on 800 North to US-89 (State Street); northwest on US-89 to SR-146; north on SR-146 to SR-92; east on SR-92 to USFS Road 114 (Cascade Scenic Drive); east on this road to SR-113 in Midway; south on SR-113 to SR-189; west on SR-189 to 800 North in Orem. Excludes all CWMUs. USGS 1:100,000 Maps: Provo. Boundary questions? Call Springville office, 801-491-5678.

BOUNDARY RECOMMENDATION

UNIT Utah Lake Extended Archery Area

SPECIES deer

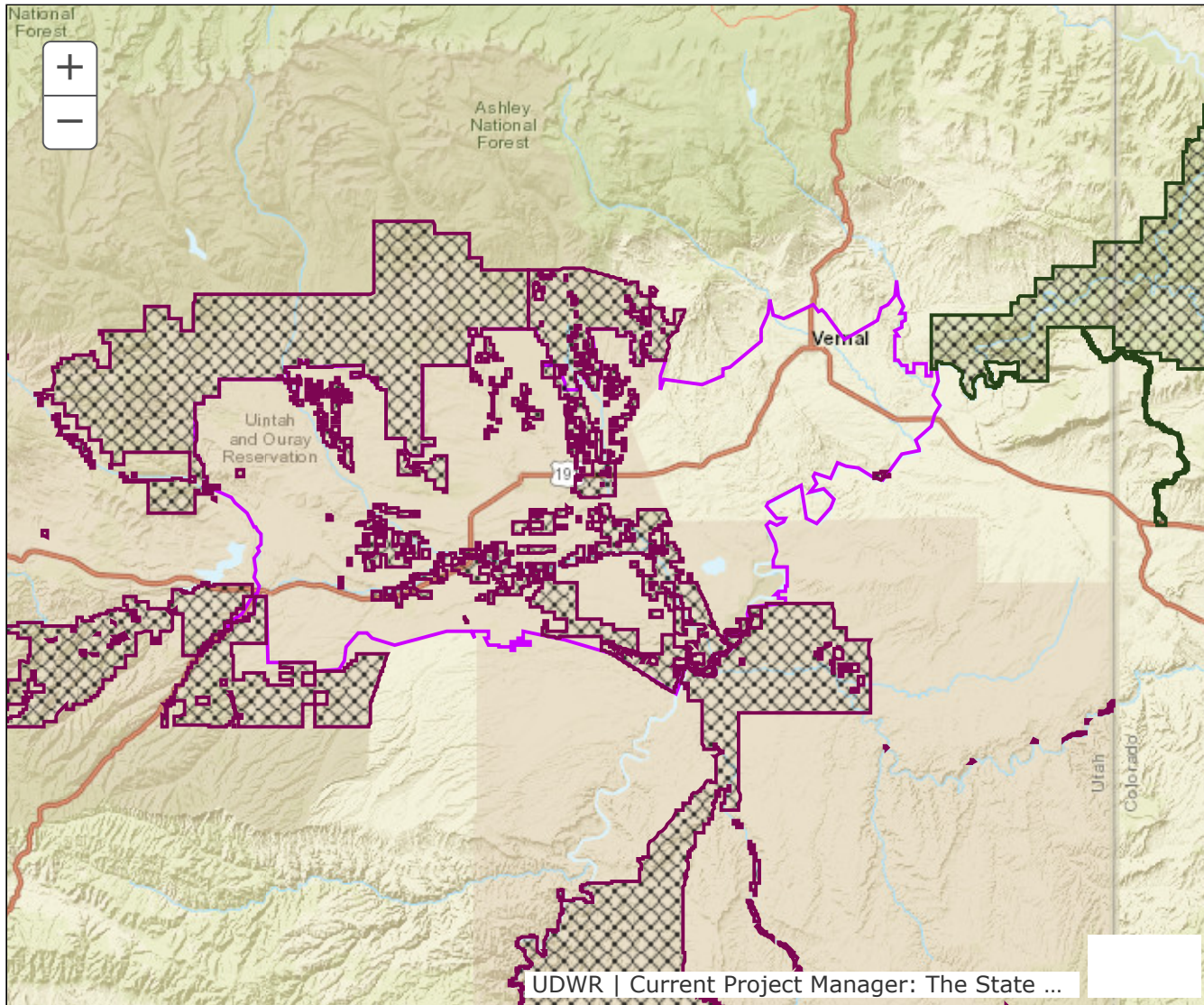


Updated Boundary: Utah County--Boundary begins at I-15 and SR-73 in Lehi; west on SR-73 to SR-68; south on SR-68 to US-6: east on US-6 to Center Street in Goshen; south on Center Street(Goshen Cyn Road) to the Juab/Utah county line; east on this county line to I-15; north on I-15 to SR-73. USGS 1:100,000 Maps: Provo. Boundary questions? Call the Springville office, 801-491-5678.

BOUNDARY RECOMMENDATION

UNIT Uintah Basin Extended Archery Area

SPECIES Extended Archery



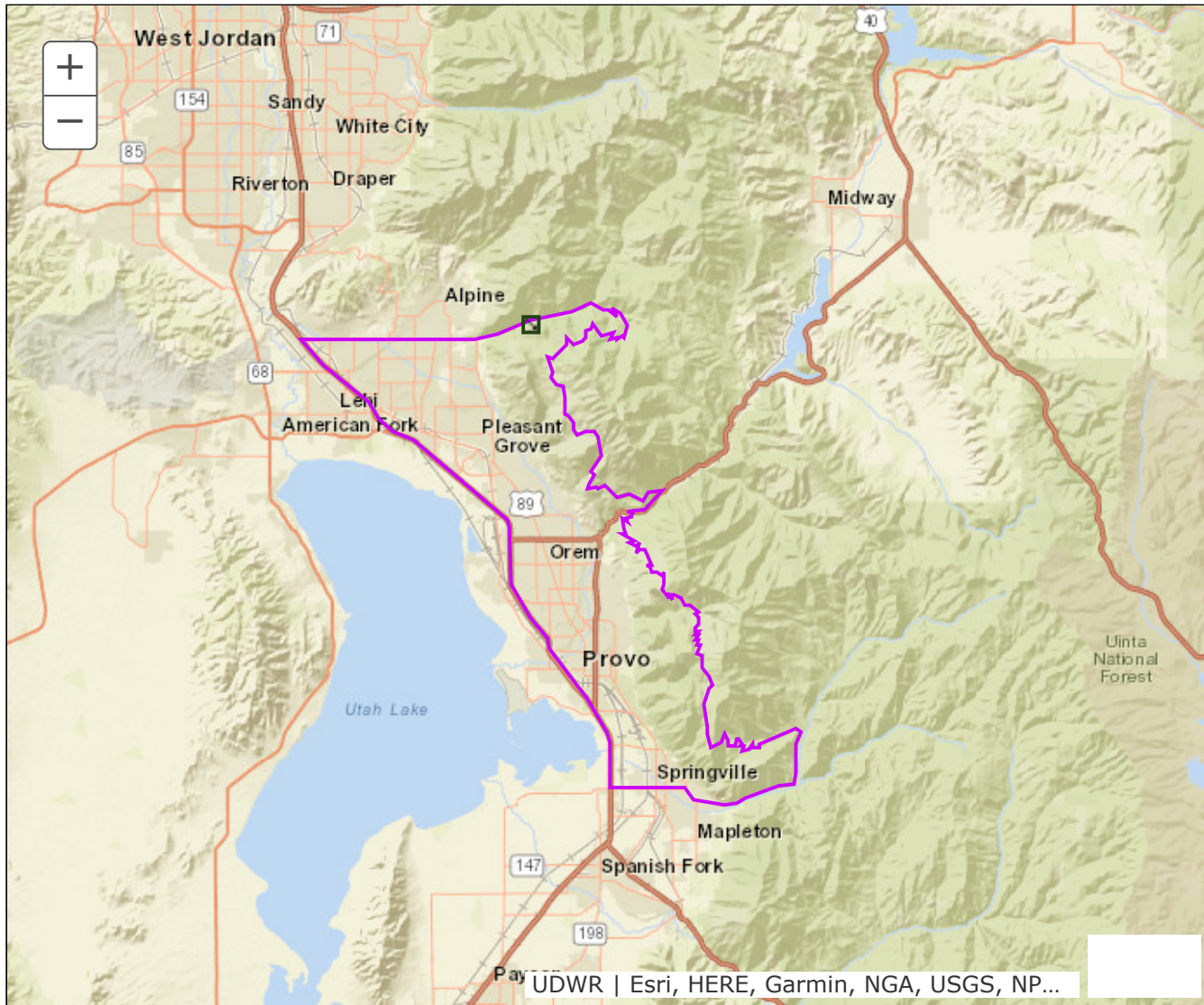
Updated Boundary: Duchesne and Uintah counties—Boundary begins at SR-87 and the Duchesne River in Duchesne; north along this river to the Ute Tribal boundary near the mouth of Rock Creek west of Utahn; north then east on this boundary to SR-121 (1 mile east of Hayden); east and south on this road to the Ute Tribal boundary (0.9 miles west of the East Channel of the Whiterocks River); north then east along this boundary around the East Channel of the Whiterocks River, Tridel and Deep Creek to the BLM boundary northeast of Lapoint; south along this boundary to the SITLA boundary; south along this boundary to SR-121; north and east along this road to the Highline Canal in Maeser; north along this canal to Ashley Creek; south along this creek to the Rockpoint Canal; southeast along this canal to the Diamond Mountain Road; northeast on this road to Brush Creek; south along this creek to the Island Park road; east along this road to the BLM boundary; south and east along this boundary to the Dinosaur National Monument boundary; east along this boundary to the Green River; southwest along this river to the Ouray National Wildlife Refuge eastern boundary; south along this boundary to the Green River; west along this river to the BLM

boundary near Pariette Draw west along the BLM boundary to the Pleasant Valley/Antelope Canyon road (CR-31) west along this road to the Antelope Canyon road (CR-27) south along this road to the Ute Tribal boundary; west along this boundary to the Cottonwood Ridge WMA boundary; west and north along this boundary to the Ute Tribal boundary; north and west along this boundary to Indian Canyon (US-191) north along US-191 to US-40; east on US-40 to SR-87 in Duchesne; north on SR-87 to the Duchesne River. EXCLUDES ALL NATIVE AMERICAN TRUST LAND. Contact Ouray National Wildlife Refuge for special hunting regulations on the refuge. USGS 1:100,000 Maps: Duchesne, Dutch John, Vernal. Boundary Questions? Call the Vernal office, 435-781-9453.

BOUNDARY RECOMMENDATION

UNIT South Wasatch Front Extended Archery Area

SPECIES Extended Archery

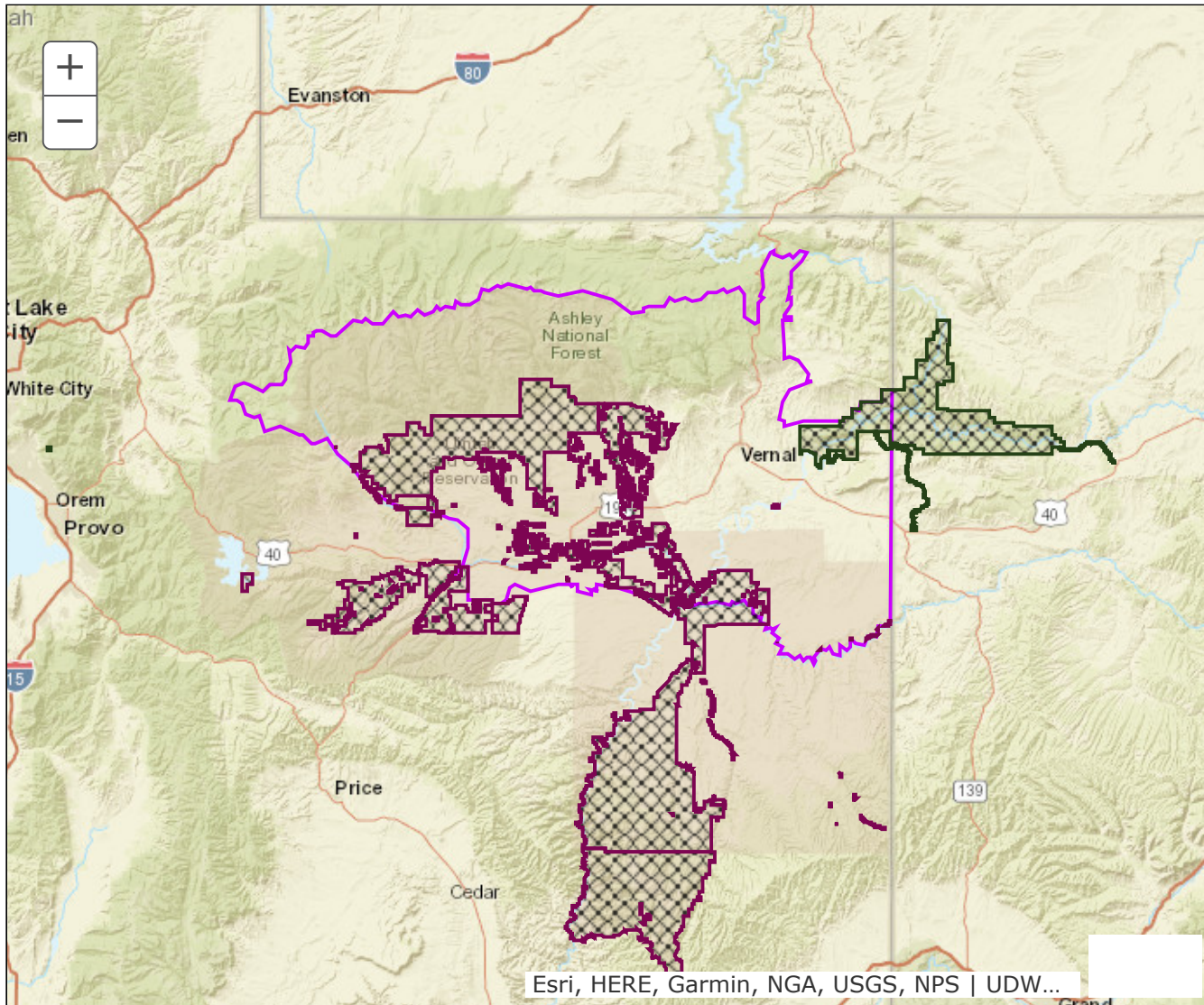


Updated Boundary: Utah County—Boundary begins at I-15 and SR-92; east on SR-92 to Timpooneke campground and USFS Road 056; west on USFS Road 056 to USFS Trail 049; south on USFS Trail 049 to USFS Trail 033; south on USFS Trail 033 to SR-189 in Provo Canyon; west on SR-189 to USFS Road 027 (Squaw Peak Trail road); south on USFS road 027 to Left Fork Hobbie Creek Road; south on this road to Hobbie Creek Road: west on this road to 400 South in Springville; west on 400 South to I-15; north on I-15 to SR-92: USGS 1:100,000 Maps: Provo. Boundary questions? Call the Springville office, 801-491-5678.

BOUNDARY RECOMMENDATION

UNIT South Slope, Bonanza/Vernal/Yellowstone

SPECIES Elk



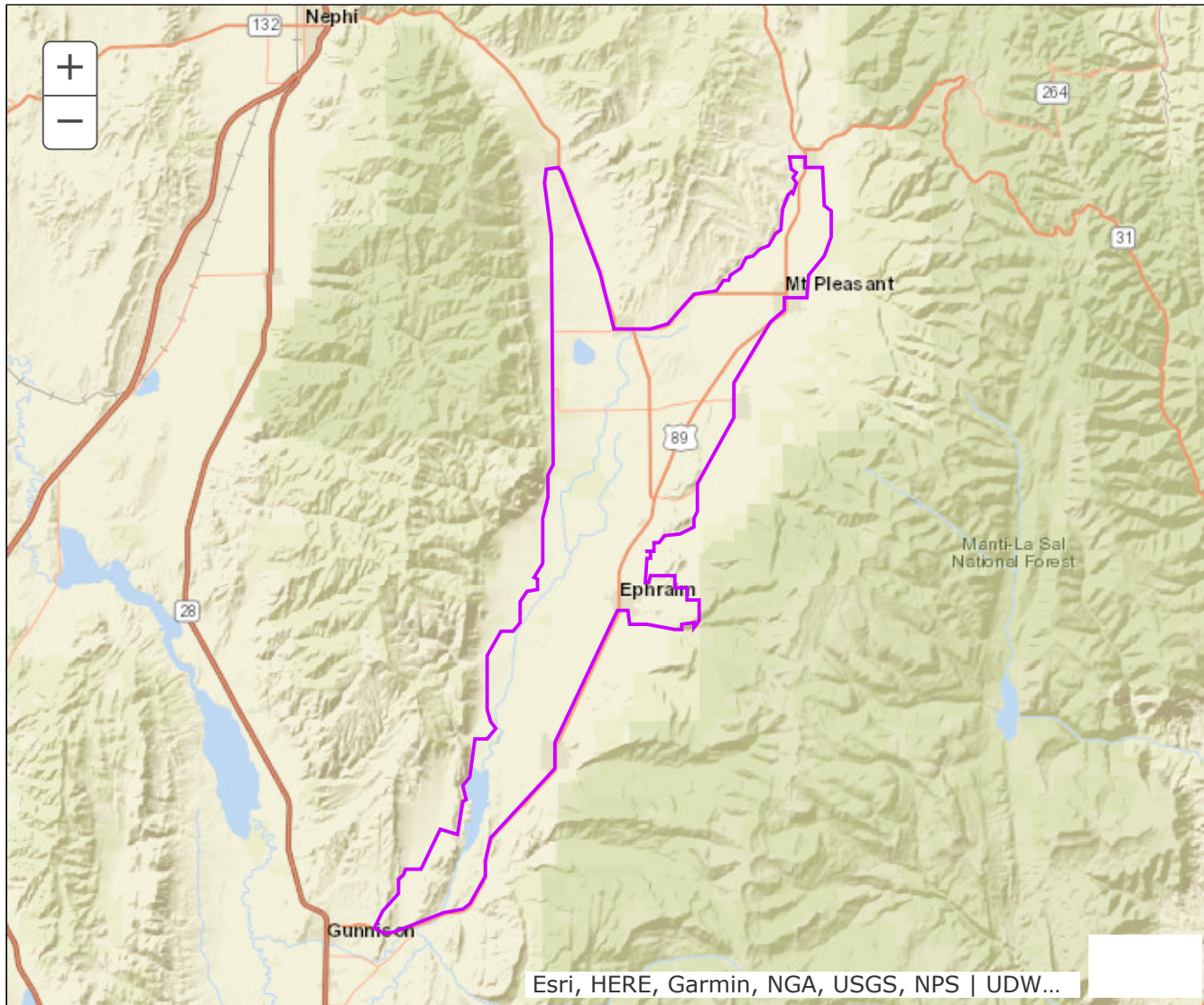
Updated Boundary: Daggett, Duchesne, Uintah and Wasatch counties--Boundary begins at US-40 and SR-87 in Duchesne; north on SR-87 to SR-35; northwest on SR-35 to the Provo River; north along this river to North Fork Provo River; north along this river to SR-150; north along SR-150 to the Summit-Duchesne county line at Hayden Pass; east along this county line to the Duchesne-Daggett county line; east on this county line to the Daggett-Uintah county line; east along the Daggett-Uintah county line to US-191; north along US-191 to Cart Creek; north along Cart Creek to Flaming Gorge Reservoir; east along Flaming Gorge Reservoir to the Green River; east along the Green River to Gorge Creek; south along Gorge Creek to the USFS/private land boundary at the head of Davenport Draw; south along the USFS/private land boundary on the west side of Davenport Draw to the BLM boundary; south along the BLM boundary approximately one-third mile to the Diamond Mountain rim; south and east along the Diamond Mountain rim until the rim intersects the Diamond Mountain road (Jones Hole Road); southwest along this road to the Brush Creek road; south along this road to the Island Park/Rainbow Park road; east along this road to the Dinosaur National Monument boundary;

northeast along this boundary to the Utah-Colorado state line; south along this state line to the White River; west along this river to the Green River; west along this river to the BLM boundary near Pariette Draw; west along the BLM boundary to the Pleasant Valley/Antelope Canyon road (CR-31); west along this road to the Antelope Canyon road (CR-27); south along this road to the Sowers Canyon road; south along this road to the Ute Tribal boundary; west along this boundary to the Cottonwood Ridge WMA boundary; west and north along this boundary to the Ute Tribal boundary; north and west along this boundary to Indian Canyon (US-191); north along US-191 to US-40; east on US-40 to SR-87 in Duchesne; north on SR-87 to the Duchesne River. EXCLUDING ALL NATIVE AMERICAN TRUST LAND WITHIN THIS BOUNDARY. USGS 1:100,000 Maps: Duchesne, Dutch John, Kings Peak, Vernal. Boundary questions? Call the Vernal office, 435-781-9453.

BOUNDARY RECOMMENDATION

UNIT Sanpete Valley Extended Archery Area

SPECIES deer

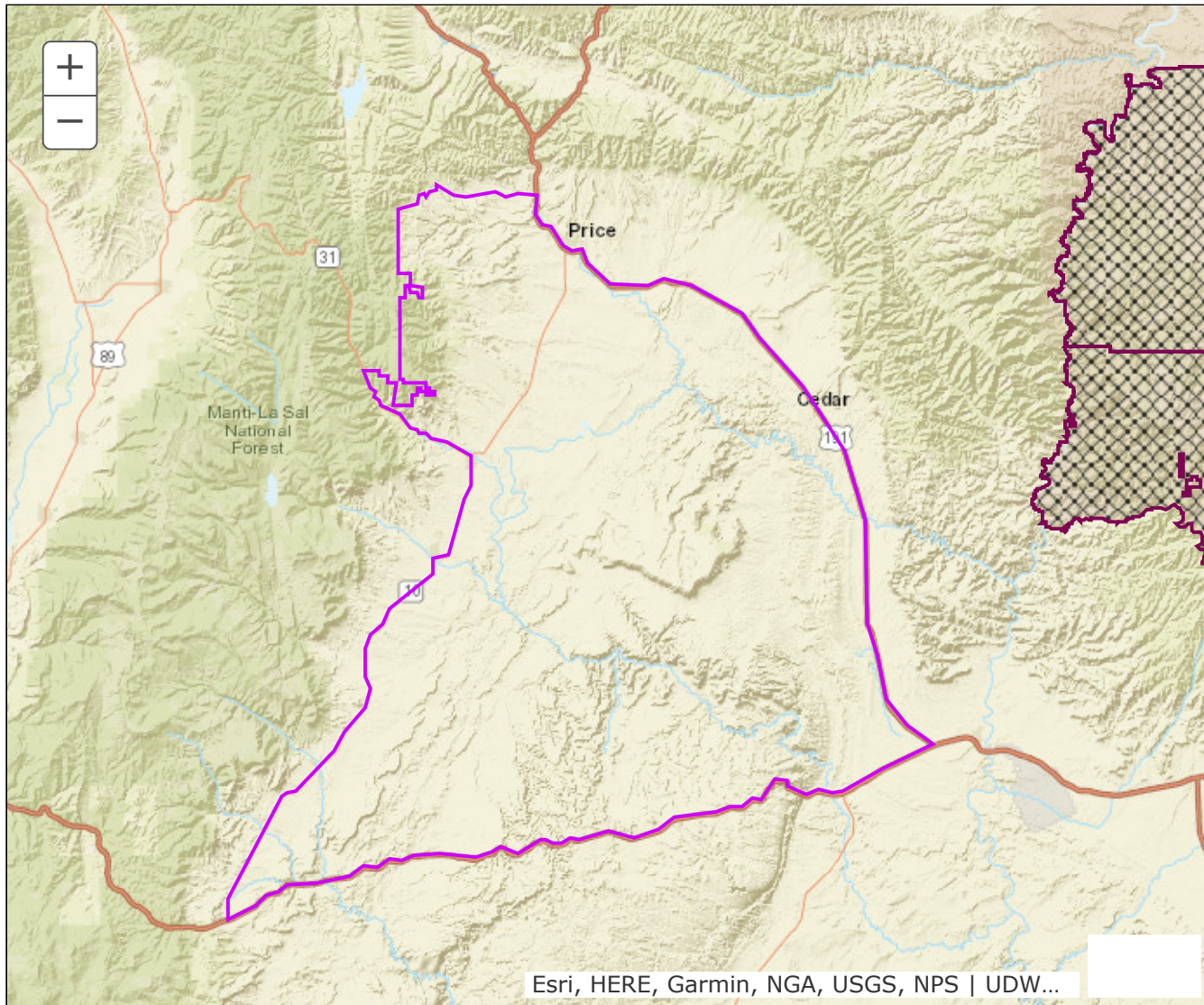


Updated Boundary: Sanpete County--Boundary begins at SR-132 and 400 S in Fountain Green; south and east on SR-132 to SR-116; east on SR-116 to the San Pitch River; north and east along this river to 100 N in Fairview; east on 100 N to US-89; south on US-89 to 300 S in Fairview; east on 300 S to Mountainville Hwy; south on Mountainville Hwy to 200 S in Mount Pleasant; west on 200 S to US-89; south on US-89 to SR-117(Pigeon Hollow Rd); south on SR-117 to Little Pigeon Hollow Rd; south on this road to Pigeon Hollow WMA boundary; south and east along this boundary to USFS boundary; south along this boundary to New Canyon Rd; west on this road to Bald Mountain WMA boundary; west along this boundary to Ephraim Canyon Rd; west on this road to 300 E in Ephraim; north on 300 E to 400 S; west on 400 S to US-89; south and west on US-89 to Antelope Rd near Gunnison; north on on this road to West Side Rd; north on this road to River Lane Rd; east then north on this road to West Side Rd; north on this road to 400 S in Fountain Green; east on 400 S to SR-132. USGS 1:100,000 Maps: Nephi, Manti. Boundary questions? Call the Springville office, 801-491-5678

BOUNDARY RECOMMENDATION

UNIT San Rafael, North

SPECIES Pronghorn

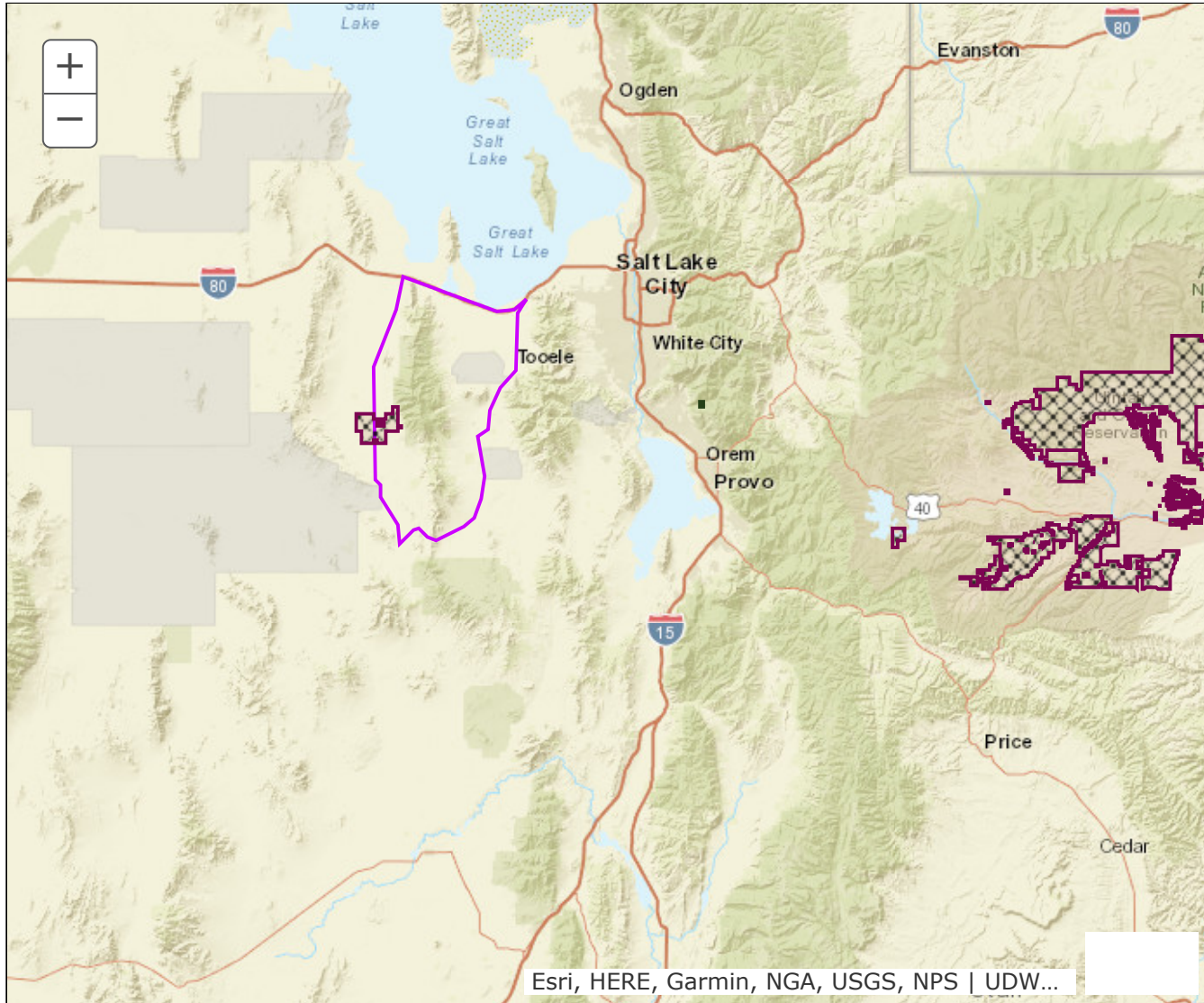


Updated Boundary: Carbon, Emery and Sevier counties--Boundary begins at SR-10 and US-6 at Price; east and south on US-6 to I-70; west on I-70 to SR-10; north on SR-10 to SR-31; northwest on SR-31 to the USFS boundary near MP 35; east and north along this boundary to Benches road; east on this road to Consumers Road; east on this road to US-6; south on US-6 to SR-10 at Price. Excludes all CWMUs. USGS 1:100,000 Maps: Huntington, Manti, Price, Salina, San Rafael Desert. Boundary questions? Call Price office, 435-613-3700.

BOUNDARY RECOMMENDATION

UNIT Oquirrh-Stansbury, West

SPECIES Bighorn-Sheep

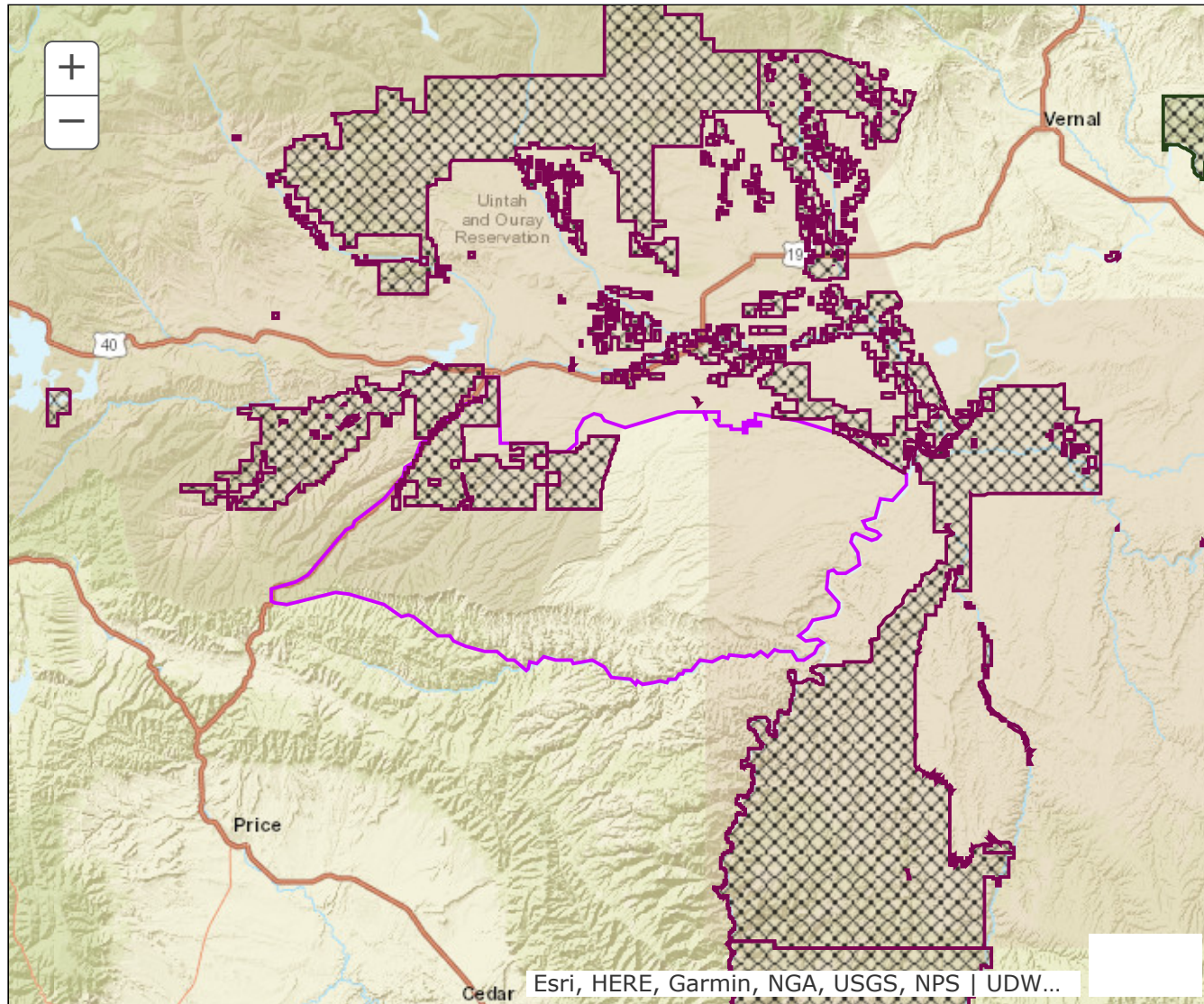


Updated Boundary: Salt Lake, Tooele and Utah counties--Boundary begins at I-80 and SR-36; south on SR-36 to Pony Express Road; west on this road to the Skull Valley road; north on this road to I-80 at Rowley Junction; east on I-80 to SR-36. EXCLUDES ALL NATIVE AMERICAN TRUST LANDS WITHIN THIS BOUNDARY. Excludes all CWMUs. USGS 1:100,000 Maps: Provo, Rush Valley, Salt Lake City, Tooele. Boundary questions? Call the Springville office, (801) 491-5678.

BOUNDARY RECOMMENDATION

UNIT Nine Mile, Anthro

SPECIES elk

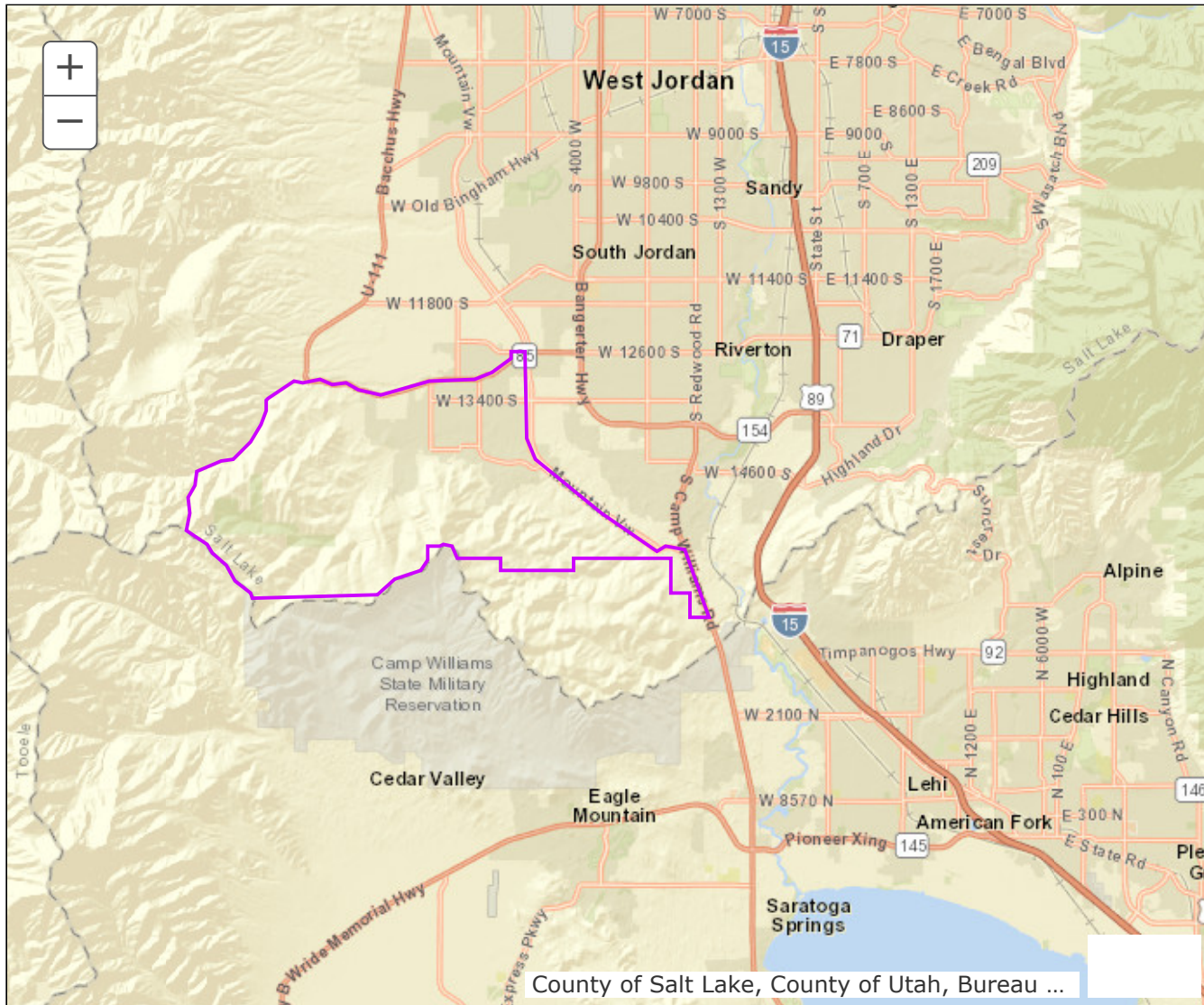


Updated Boundary: Duchesne and Uintah counties—Boundary begins at US-191 and the Argyle Canyon Road; southeast on this road to the Nine Mile Canyon Road; east along this road to its end near Bulls Canyon; south from the end of this road to Nine Mile Creek; east along this creek to the Green River; north along this river to the BLM boundary near Pariette Draw; west along the BLM boundary to the Pleasant Valley Road (CR-31); west along this road to the Antelope Canyon Road (CR-27); south along this road to the Sowers Canyon Road (CR-24); south along this road to the Ute Tribal boundary; west along this boundary to the Cottonwood Ridge WMA boundary; west and north along this boundary to the Ute Tribal boundary; north and west along this road to US-191; south along US-191 to the Argyle Canyon Road. EXCLUDING ALL NATIVE AMERICAN TRUST LAND WITHIN THIS BOUNDARY. USGS 1:100,000 Maps: Duchesne, Price, Seep Ridge, Vernal. Boundary questions? Call the Vernal office, 435-781-9453.

BOUNDARY RECOMMENDATION

UNIT Herriman South Valley Extended Archery Area

SPECIES deer

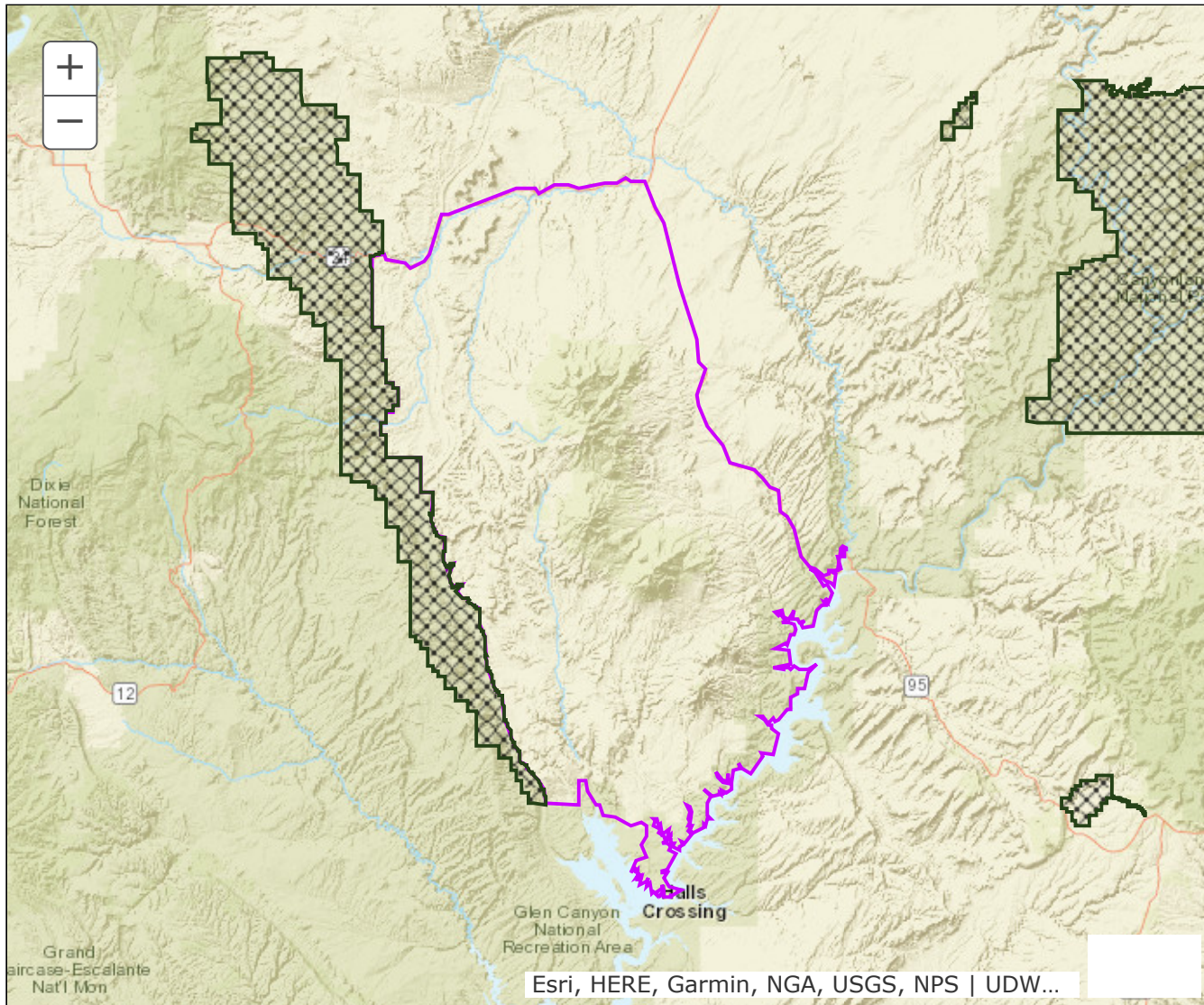


Updated Boundary: Salt Lake County--Boundary begins at 12600 South and Mountain View Corridor Hwy; south on Mountain View Corridor Hwy to Redwood Road; south on Redwood Road to the Camp Williams boundary fence; west along the boundary fence to the Salt Lake/Utah county line; west on this county line to Stockings Fork drainage bottom; north along this drainage bottom to Butterfield Canyon road; east on this road 13090 South; east along 13090 South to 12600 South; east along 12600 South to Mountain View Corridor.

BOUNDARY RECOMMENDATION

UNIT Henry Mtns (bison)

SPECIES bison

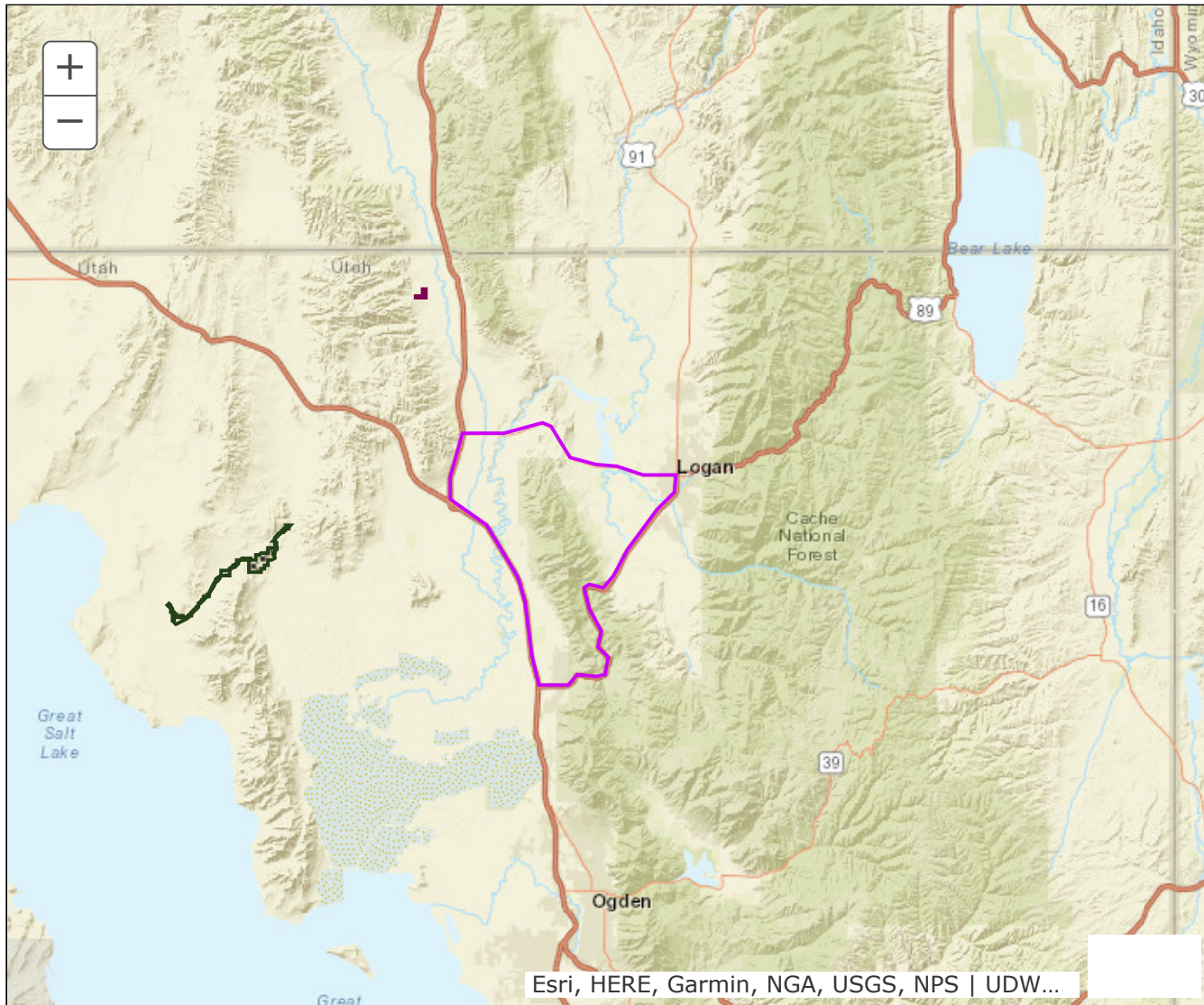


Updated Boundary: Garfield and Wayne counties—Boundary begins in Hanksville at the junction of SR-24 and SR-95; south on SR-95 to the west shoreline of Lake Powell; south along this shoreline to SR-276 at Bullfrog; north on SR-276 to the Burr Trail-Notom road; north on this road to the Glen Canyon National Recreation Area boundary west of the Bullfrog Creek drainage; southwest on this boundary to the Capitol Reef National Park boundary; north on this boundary to SR-24; east on SR-24 to SR-95 at Hanksville. EXCLUDES ALL NATIONAL PARKS. USGS 1:100,000 Maps: Escalante, Loa, Hanksville, Hite Crossing. Boundary questions? Call the Price office, 435-613-3700.

BOUNDARY RECOMMENDATION

UNIT Cache, Wellsville Mtns

SPECIES Elk

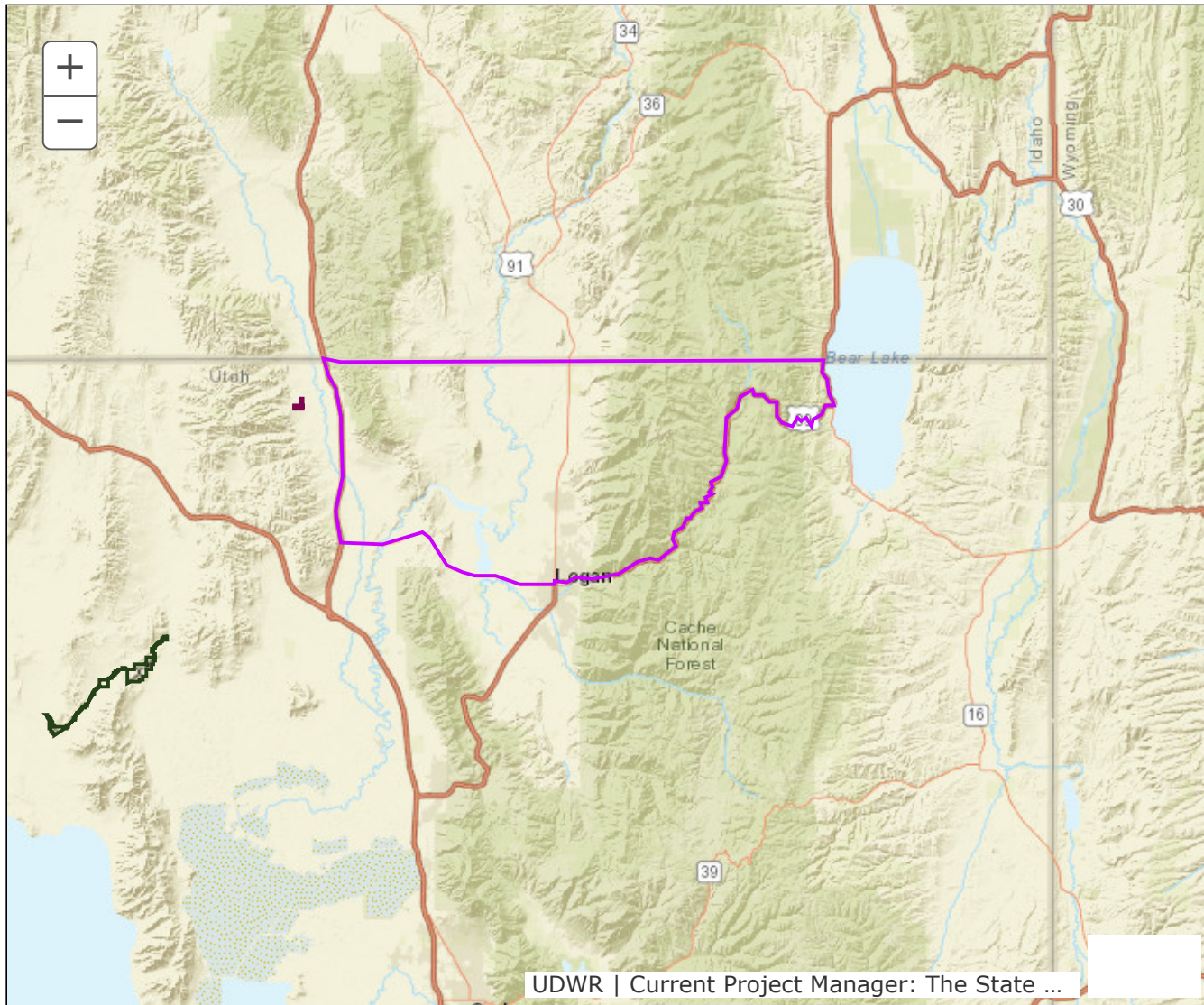


Updated Boundary: Box Elder and Cache counties--Boundary begins at US-89/91 and SR-30 in Logan; west on SR-30 to I-15; south on I-15 to US-91 in Brigham City; east on US-91 to US 89/91; northeast on US-89/91 to SR-30. USGS 1:100,000 Maps: Tremonton, Logan. Boundary questions? Call the Ogden office, 801-476-2740.

BOUNDARY RECOMMENDATION

UNIT Cache, North

SPECIES Elk



Updated Boundary: Cache, Box Elder and Rich counties--Boundary begins at US-89 and the Utah-Idaho state line; southwest on US-89 to US 89/91 in Logan; south on US 89/91 to SR-30; west on SR-30 to I-15 in Riverside; north on I-15 to the Utah-Idaho state line; east along this state line to US-89. USGS 1:100,000 Maps: Tremonton, Logan. Boundary questions? Call the Ogden office, 801-476-2740.

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.

R657-5-8. Rifles, Shotguns, Airguns, and Crossbows.

(1) A rifle used to hunt big game must fire centerfire cartridges and expanding bullets.

(2) A shotgun used to hunt big game must be 20 gauge or larger, firing only 00 or larger buckshot or slug ammunition.

(3) An airgun used to hunt big game must:

(a) be pneumatically powered;

(b) be pressurized solely through a separate charging device; and

(c) may only fire a bolt or arrow:

(i) no less than 16 inches long;

(ii) with a fixed or expandable broadhead at least 7/8 inch wide at its widest position; and

(iii) traveling no less than 400 feet per second at the muzzle.

(4)(a) A crossbow used to hunt big game must have a minimum draw weight of 125 pounds and 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) Unless otherwise authorized by the division through a certificate of registration, it is unlawful for any person to:

(i) hunt big game with a crossbow or airgun during a big game archery hunt;

(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; or

(iii) hunt any protected wildlife with a crossbow utilizing a bolt that has any chemical, explosive or electronic device attached.

([4]5) A crossbow used to hunt big game may have a fixed or variable magnifying scope only during an any weapon hunt.

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 30 pounds at the draw or the peak, whichever comes first;
- (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.

(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 a magnifying aiming device; or
- (f) an airgun, except as provided in Subsection (5).

(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) only use 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.

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

- (c) The provisions of Subsection (a) do not apply to:
 - (i) a person lawfully hunting 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~~ and may also use a crossbow ~~or~~, draw-lock, or airgun satisfying the minimum requirements of this rule.

(6)(a) A person hunting an archery-only season on a once-in-a-lifetime hunt may:

(i) only use 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, or airgun while in the field during the archery-only season.

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

R657-5-13. Spotighting.

(1) Except as provided in Section 23-13-17:

(a) a person may not use or cast the rays of any spotlight, headlight, or other artificial light to:

(i) take protected wildlife; or

(ii) locate protected wildlife while in possession of a rifle, shotgun, archery equipment, crossbow, ~~or~~ muzzleloader, or airgun.

(b) the use of a spotlight or other artificial light in a field, woodland, or forest where protected wildlife are generally found is probable cause of attempting to locate protected wildlife.

(2) The provisions of this section do not apply to:

(a) the use of headlights, illuminated sight pins on a bow, or other artificial light in a usual manner where there is no attempt or intent to locate protected wildlife; or

(b) 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 wildlife.

R657-5-14. Use of Vehicle or Aircraft.

(1)(a) A person may not use an airplane, drone, or any other airborne vehicle or device, or any motorized terrestrial or aquatic vehicle, including snowmobiles and other recreational vehicles, except a vessel as provided in Subsection (c), to take protected wildlife.

(b) A person may not take protected wildlife being chased, harmed, harassed, rallied, herded, flushed, pursued or moved by any vehicle, device, or conveyance listed in Subsection (a).

(c) Big game may be taken from a vessel provided:

(i) the motor of a motorboat has been completely shut off;

(ii) the sails of a sailboat have been furled; and

(iii) the vessel's progress caused by the motor or sail has ceased.

(2)(a) A person may not use any type of aircraft, drone, or other airborne vehicle or device from 48 hours before any big game hunt begins in the area where they are flying through 48 hours after any big game hunting season ends in the area where they are flying to[;]

~~[(i) transport a hunter or hunting equipment into a hunting area;]~~

~~[(ii) transport a big game carcass; or]~~~~[(iii)]~~ locate, or attempt to observe or locate any protected wildlife.

~~[(b) Flying slowly at low altitudes, hovering, circling or repeatedly flying over a forest, marsh, field, woodland or rangeland where protected wildlife is likely to be found may be used as evidence of violations of Subsections (1) and (2).]~~

(3)(a) The provisions of this section do not apply to the operation of an aircraft, drone, or other airborne vehicle or device ~~[in a usual manner, or landings and departures]~~used for the purposes of transporting hunters, equipment, or legally harvested wildlife, provided the aircraft takes off and lands only from an improved [airstrips]airstrip, where there is no attempt or intent to locate protected wildlife.

(b) Hunters that are transported by aircraft into an area may not hunt protected wildlife until the following day.

(c) For the purposes of this section, "improved airstrip" means a take-off and landing area with a graded or otherwise mechanically improved surface free of barriers or other hazards that is traditionally used by pilots for the purposes of air travel.

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 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~~[-of]~~, draw-lock, and airgun;
- (b) muzzleloader equipment, as defined in R657-5-10, when hunting the muzzleloader season; and
- (c) any legal weapon, including a muzzleloader~~[-and]~~, crossbow with a fixed or variable magnifying scope or draw-lock, or airgun 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 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 the]~~using the weapon type, within the area, and during season dates specified on the permit and in the Antlerless guidebook of the Wildlife Board for taking big game.

(b) A person may not hunt antlerless elk on an elk cooperative wildlife management unit unless that person obtains an antlerless elk permit for that specific cooperative wildlife management unit.

(3)(a) A person may obtain three elk permits each year, 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 multiple elk permits, a hunter's choice elk permit is considered a bull elk permit.

(4)(a) A person who obtains an antlerless elk permit and any of the permits listed in Subsection (b) may use the antlerless elk permit during the established season for the antlerless elk permit and during the established season for the applicable 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 antlerless elk during an archery season or hunt; and
(iii) the appropriate muzzleloader hunt equipment is used, if hunting antlerless elk during a muzzleloader season or hunt.

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

(ii) General bull elk for archery, muzzleloader, any legal weapon, or multi-season;

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

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

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

(vi) Antlerless deer or elk, excluding antlerless elk control permits.

(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 antlerless elk control permit allows a person to take one antlerless

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 antlerless elk control permit, as provided in the Antlerless 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 antlerless 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.

R657-5-40. Rocky Mountain Goat Hunts.

(1) To hunt Rocky Mountain goat, a hunter must obtain a Rocky Mountain goat permit.

(2) A person who has obtained a Rocky Mountain goat permit may not obtain any other Rocky Mountain goat permit or hunt during any other Rocky Mountain goat hunt.

(3) A Rocky Mountain goat of either sex may be legally taken on a hunter's choice permit.

(4) The goat permit allows a person to take one goat within the area, during the seasons, and using the weapon type prescribed by the Wildlife Board.

(5) A female-only goat permit allows a person to take one female goat within the area, during the seasons, and using the weapon type specified on the permit and in the Antlerless guidebook of the Wildlife Board for taking big game.

(6)(a) An orientation course is required for Rocky Mountain goat hunters who draw [or purchase a female-goat only](#) ~~[permits. Hunters will be notified of the orientation date, time and location.]~~ [permit or a hunter's choice permit.](#)

[\(b\) The orientation course must be completed online through the division's website.](#)

(c) The orientation course must be completed before the hunter obtains his or her permit.

(7)(a) A person who has obtained a Rocky Mountain goat 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 Rocky Mountain goat.

(b) Rocky Mountain goat 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 points in the following year.

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

KEY: wildlife, game laws, big game seasons

Date of Enactment or Last Substantive Amendment: July 9, 2018

Notice of Continuation: October 5, 2015

Authorizing, and Implemented or Interpreted Law: 23-14-18; 23-14-19; 23-16-5; 23-16-6



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State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Wildlife Resources

MICHAEL D. FOWLKS
Division Director

MEMORANDUM

Date: October 18, 2018

To: Wildlife Board and Regional Advisory Council Members

From: Mike Wardle, Private Lands/Public Wildlife Coordinator

Subject: 2019 Cooperative Wildlife Management Unit (CWMU) and Landowner Association (LOA) permit recommendations

The following is a summary of the 2019 CWMU recommendations for bucks, bulls and turkeys. There are three types of applications the DWR receives for CWMUs: new, renewal and change applications.

- The DWR received 30 CWMU applications for 2019 and recommends the approval of all of them.
 - 2 new CWMU applications
 - Heist CWMU (Southern Region)
 - Mountain Sky Ranch CWMU (Central Region)
 - 16 renewal applications
 - 12 change applications that require RAC/Board approval
 - 2 CWMUs did not reapply
- There will be a total of 126 CWMUs for the 2019 hunting season, based on the DWR's recommendations. The following table summarizes the recommended number of CWMU permits statewide:

Species	Private	Public
Bull elk	939	137
Buck pronghorn	99	68
Buck deer	1,945	252
Bull moose	48	36
Turkey	12	12
Total	3,043	505



The following is a summary of the DWR's 2019 LOA recommendations for bucks and bulls. No LOAs were up for renewal this year, and there were no new applications.

- 1 LOA submitted a change application for 2019.
 - The Indian Peaks LOA increased acreage and qualifies for an additional elk permit.

2019 CWMU Recommendations

Region	CWMU Name	Species	Gender	Private	Public	Rcmnd_HuntDate	Ratio	Status	Acres_Private	Acres_Public	Unit	County
CRO	Wallsburg	MOOSE	Bull	1	0	9/01-10/31/2019	60:40	Change	9379	0	17a	Wasatch
CRO	Mountain Sky Ranch	DEER	Buck	9	1	9/11-11/10/2019	90:10	New	10213	0	16	Utah
CRO	Mountain Sky Ranch	ELK	Bull	6	1	9/01-11/30/2019	80:20	New	10213	0	16	Utah
NERO	West Willow Creek Ranch	DEER	Buck	11	4	9/11-11/10/2019	90:10	Renewal	19200	3200	10	Uintah
NERO	West Willow Creek Ranch	ELK	Bull	1	1	9/01-11/30/2019	75:25	Renewal	19200	3200	10	Uintah
NERO	West Willow Creek Ranch	PRONGHORN	Buck	1	1	9/01-10/31/2019	60:40	Renewal	19200	3200	10	Uintah
NRO	Deseret	DEER	Buck	77	14	9/11-11/10/2019	90:10	Change	220631	15359	4	Morgan/Rich/Weber
NRO	Deseret	ELK	Bull	89	17	9/01-11/22/2019	90:10	Change	220631	15359	4	Morgan/Rich/Weber
NRO	Deseret	PRONGHORN	Buck	44	34	9/01-10/31/2019	60:40	Change	220631	15359	4	Morgan/Rich/Weber
NRO	East Fork Chalk Creek	DEER	Buck	36	4	9/11-11/10/2019	90:10	Change	16002	0	6	Summit
NRO	East Fork Chalk Creek	ELK	Bull	27	3	9/01-11/20/2019	90:10	Change	16002	0	6	Summit
NRO	East Fork Chalk Creek	MOOSE	Bull	3	2	9/01-10/31/2019	60:40	Change	16002	0	6	Summit
NRO	Ensign Ranches	ELK	Bull	20	3	9/01-11/20/2019	85:15	Change	83363	0	6	Morgan/Rich/Summit
NRO	Folley Ridge	TURKEY	Bearded	0	0	None		Change	15385	0	4	Morgan
NRO	Jacob's Creek	DEER	Buck	18	2	9/01-10/31/2019	90:10	Change	13017	0	5	Davis/Morgan
NRO	Lone Tree Tunnel Hollow	DEER	Buck	18	2	9/11-11/10/2019	90:10	Change	10014	0	5	Morgan/Summit
NRO	Lone Tree Tunnel Hollow	ELK	Bull	18	2	9/01-10/31/2019	90:10	Change	10014	0	5	Morgan/Summit
NRO	Mountain Top	ELK	Bull	27	3	9/01-10/31/2019	90:10	Change	10480	0	5	Morgan/Summit
NRO	North Peaks	ELK	Bull	5	1	9/01-10/31/2019	90:10	Change	22480	2040	1	Box Elder
NRO	Weber Florence Creek	DEER	Buck	45	5	9/01-10/31/2019	90:10	Change	36915	0	6	Summit
NRO	Causey Spring	DEER	Buck	9	1	9/11-11/10/2019	90:10	Renewal	8725	537	4	Weber
NRO	Causey Spring	ELK	Bull	9	1	9/11-11/10/2019	90:10	Renewal	8725	537	4	Weber
NRO	Causey Spring	MOOSE	Bull	2	2	9/01-10/31/2019	60:40	Renewal	8725	537	4	Weber
NRO	Cotton Thomas	DEER	Buck	9	1	9/11-11/10/2019	90:10	Renewal	13113	730	1	Box Elder
NRO	Cotton Thomas	ELK	Bull	2	1	9/01-10/31/2019	90:10	Renewal	13113	730	1	Box Elder
NRO	George Creek	DEER	Buck	9	1	9/11-11/10/2019	90:10	Renewal	11879	783	1	Box Elder
NRO	George Creek	PRONGHORN	Buck	2	1	9/01-10/31/2019	60:40	Renewal	11879	783	1	Box Elder
NRO	Junction Valley	DEER	Buck	54	6	9/11-11/10/2019	90:10	Renewal	32203	0	1a	Box Elder
NRO	Junction Valley	ELK	Bull	5	1	9/01-10/31/2019	90:10	Renewal	32203	0	1a	Box Elder
NRO	Junction Valley	MOOSE	Bull	0	1	9/01-10/31/2019	60:40	Renewal	32203	0	1a	Box Elder
NRO	Pine Canyon	DEER	Buck	27	3	9/11-11/10/2019	90:10	Renewal	6420	0	4	Morgan
NRO	Rabbit Creek	PRONGHORN	Buck	2	1	9/01-10/31/2019	60:40	Renewal	7588	560	2	Rich
NRO	Rattlesnake Pass	DEER	Buck	25	3	9/01-10/31/2019	90:10	Renewal	7740	0	1	Box Elder
NRO	Riverview Ranch LLC	ELK	Bull	5	2	9/01-10/31/2019	80:20	Renewal	19817	13895	1	Box Elder
NRO	Strawberry Ridge	DEER	Buck	18	2	9/11-11/10/2019	90:10	Renewal	26220	48	2	Cache/Rich
NRO	Strawberry Ridge	ELK	Bull	18	2	9/01-11/30/2019	90:10	Renewal	26220	48	2	Cache/Rich
NRO	Strawberry Ridge	MOOSE	Bull	1	2	9/01-10/31/2019	60:40	Renewal	26220	48	2	Cache/Rich
NRO	Strawberry Ridge	PRONGHORN	Buck	3	2	9/01-10/31/2019	60:40	Renewal	26220	48	2	Cache/Rich
NRO	Whites Valley	DEER	Buck	9	1	9/11-11/10/2019	90:10	Renewal	11463	320	1	Box Elder
SERO	Scofield Canyons	ELK	Bull	7	1	9/01-10/31/2019	85:15	Change	12284	40	16b	Carbon/Utah
SERO	Spring Creek/Dodge	ELK	Bull	11	2	9/01-10/31/2019	85:15	Change	85063	0	14	San Juan
SERO	Black Hawk	DEER	Buck	3	1	9/11-11/10/2019	90:10	Renewal	11778	0	16b17c	Carbon
SERO	Black Hawk	ELK	Bull	5	1	9/01-11/30/2019	80:20	Renewal	11778	0	16b17c	Carbon
SERO	J.B. Ranch	DEER	Buck	16	2	9/01-10/31/2019	90:10	Renewal	9162	0	13a	Grand/San Juan
SERO	J.B. Ranch	ELK	Bull	6	1	9/01-10/31/2019	80:20	Renewal	9162	0	13a	Grand/San Juan
SRO	Pahvant Ensign	TURKEY	Bearded	12	12	2nd Sat. in Apr. - 5/31/19	50:50	Change	37176	0	21b	Millard/Sevier
SRO	Heist	PRONGHORN	Buck	3	2	9/01-10/31/2019	60:40	New	9520	0	20	Iron

2019 CWMU Recommendations

SRO	East Zion	DEER	Buck	18	2	9/11-11/10/2019	90:10	Renewal	5766	0	29	Kane
SRO	Grazing Pasture	DEER	Buck	9	1	9/01-10/31/2019	90:10	Renewal	6700	0	25a	Sevier
SRO	Grazing Pasture	ELK	Bull	5	1	9/01-10/31/2019	80:20	Renewal	6700	0	25a	Sevier
SRO	Johnson Mountain Ranch	DEER	Buck	9	1	9/01-10/31/2019	90:10	Renewal	13200	91	25a	Sevier
SRO	Johnson Mountain Ranch	ELK	Bull	17	2	9/01-10/31/2019	90:10	Renewal	13200	91	25a	Sevier

2019 Landowner Association Recommendations

Association Name	Species	Unit	Acreage	Requested	Qualified	Recommended
Indian Peaks	Elk	Southwest Desert	24,266	4	Same	4



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DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Wildlife Resources

MICHAEL D. FOWLKS
Division Director

October 18, 2018

TO: Utah Wildlife Board / Regional Advisory Council Members
FROM: Bryan Christensen
Volunteer Services Coordinator
SUBJECT: 2018 Dedicated Hunter Program Recommendations (Rule 657-38)

Several portions of the Dedicated Hunter Program rule were adjusted in 2016. Since then, a few additional aspects have been identified as needing to be updated—some of which have been requested by Dedicated Hunter program participants. Recommended changes to R657-38 are intended to simplify and clarify program requirements while also improving administrative procedures.

Recommendations for this rule:

- Eliminate redundancy
- Provide additional clarity to the existing rule
- Improve process for participants to withdraw from the program
- Redistribute minimum annual service hour requirements

R657. Natural Resources, Wildlife Resources.

R657-38. Dedicated Hunter Program.

R657-38-1. Purpose and Authority.

(1) Under the authority of Section 23-14-18, this rule provides the standards and requirements for qualified deer hunters to participate in the Dedicated Hunter Program by obtaining a certificate of registration.

(2) The Dedicated Hunter Program is a program that~~[-provides]~~:

(a) provides expanded hunting opportunities;

~~[-(b) opportunities to participate]~~(b) requires participation in wildlife conservation projects; and

(c) ~~[education]~~provides educational training in hunter ethics and wildlife management principles.

R657-38-2. Definitions.

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

(2) In addition:

(a) "Dedicated Hunter Permit" means a general buck deer permit issued to a participant in the Dedicated Hunter Program, which authorizes the participant to hunt deer during the general archery, general muzzleloader and general any weapon open seasons in the hunt area specified on the permit.

(b) "Division" means the Utah Division of Wildlife Resources

(c) "Hunt area" means an area prescribed by the Wildlife Board where general archery, general muzzleloader and general any legal weapon buck deer hunting is open to permit holders for taking deer.

~~[(e)d]~~ "Participant" means a person who has remitted the appropriate fee and has been issued a Dedicated Hunter certificate of registration.

~~[(d) "Program" means the Dedicated Hunter Program]~~

(e) "Program" means the Dedicated Hunter Program

(f) "Program harvest" means using a Dedicated Hunter permit to tag a harvested deer or failing to return a Dedicated Hunter permit with the kill tag attached, while enrolled in the program.

~~[(f)g]~~ "Wildlife conservation project" means any project that provides wildlife habitat protection or enhancement, improves public hunting or fishing access, or directly benefits wildlife or the Division~~[':]~~'s current needs and is pre-authorized by the Division.

R657-38-3. Dedicated Hunter Certificates of Registration~~[-]~~

(1)(a) To participate in the program, a person must apply for, ~~[obtain]~~be issued, and sign a Dedicated Hunter certificate of registration as prescribed by the Division. ~~[A participant is not required to have the Dedicated Hunter certificate of registration on their person while hunting.]~~

(b) Certificates of registration are issued by the Division through a drawing as prescribed in the guidebook of the Wildlife Board for taking big game and R657-62.

(c) Certificates of registration are valid for ~~[3]~~three consecutive years, except as provided by R657-38-10 and R657-38-13, beginning on the date the big game

drawing results are released and ending on the last day of the general season hunt for the ~~3rd~~third year of enrollment.

(d) The ~~number~~quantity of Dedicated Hunter certificates of ~~registration~~registrations is limited to 15~~%~~percent of the total annual general season buck deer quota for each respective hunt area.

~~(i)~~(e) Certificates of registration remaining unissued from the Dedicated Hunter portion of the big game drawing shall be redistributed as general single-season permits for their respective hunt areas in the general buck deer drawing.

(2) The Division may deny issuance of a Dedicated Hunter certificate of registration for any of the reasons identified as a basis for suspension in Section 23-19-9(7) and R657-38-15.

(3) (a) A certificate of registration conditionally authorizes the participant to obtain ~~and use~~ a Dedicated Hunter permit which may be used to hunt deer within the area listed on the permit, during the general archery, general muzzleloader and general any legal weapon buck deer seasons according to the dates and boundaries established by the Wildlife Board.

(b) When available, the certificate of registration may also authorize ~~hunting within~~the permit to include the general deer archery extended area during the extended season dates.

~~(a)~~(c) The person must use the appropriate ~~weapons and equipment otherwise applicable to~~weapon type specified by each season and boundary.

(4) The participant~~'s selected~~'s hunt area, as issued through the drawing, shall remain the same for the entire duration of that program enrollment period.

(5) Participants in the program shall be subject to any changes subsequently made to this or other ~~rules during~~rules during the term of enrollment~~;~~ unless a variance is authorized by the Division.

R657-38-4. Applications for Certificates of Registration.

(1) Applications to obtain a Dedicated Hunter certificate of registration are made pursuant to R657-62-16.

(2) To apply for a Dedicated Hunter certificate of registration, applicants must:

(a) have a valid Utah hunting or combination license;

(b) meet all age, hunter education, and license requirements in Sections 23-19-11, 23-19-22, 23-19-24, and 23-19-26 and in applicable rules~~;~~, except that:

(i) A person 11 years of age may apply for and obtain a Dedicated Hunter certificate of registration if that person~~'s~~'s ~~12th~~twelfth birthday falls in the calendar year the certificate is issued~~;~~ and

(ii) a person may not hunt big game prior to their ~~12th~~twelfth birthday; and

(c) be compliant with the restrictions in Subsection (2).

(3) A person under any wildlife suspension may not apply for a certificate of registration until their suspension period has ended.

R657-38-5. Dedicated Hunter Preference Point System.

~~(1)~~ Dedicated Hunter Preference points are issued pursuant to R657-62-10.

R657-38-6. Fees.

(1) Any person who is 17 years of age or younger on July 31~~[st]~~ of the application year shall pay the youth participant fees.

(2) Any person who is 18 years of age or older on July 31~~[st]~~ of the application year, or is a Lifetime License holder, shall pay the ~~[adult]~~associated participant fees.

~~[(3) Lifetime License holders shall pay a reduced fee as authorized by the annual fee schedule.]~~

(3)(4)a A participant who enters the program as a Utah resident and thereafter becomes a nonresident~~[-]~~ shall be changed to a nonresident status and may be issued nonresident permits ~~[at no additional charge]~~ for the remainder of the ~~[three-year]~~ enrollment period.

(i) No additional fee shall be applied to the nonresident certificate of registration or its respective permits following this change.

(5)a A participant who enters the program as a nonresident and thereafter becomes a Utah resident, shall be changed to a resident status and may be issued resident permits ~~[with no reimbursement of the higher nonresident fee]~~ for the remainder of the ~~[three-year]~~ enrollment period.

(i) No refund will be issued for the difference of the resident certificate of registration fee or its respective permits following this change.

R657-38-7. Refunds.

(1) A refund for the Dedicated Hunter certificate of registration may not be issued, except as provided in ~~[Section]~~Sections 23-19-38 and 38.2 and R657-42.

(2) Any eligible refund of a certificate of registration fee~~[-]~~ may be issued pro rata, based on the number of years in which any portion of a hunt may have occurred during the enrollment period.

(3) Drawing application fees are nonrefundable.

(4) A refund shall not be issued under any circumstance if a participant~~[-]~~'s harvest record indicates two program harvests.

R657-38-8. Wildlife Conservation and Ethics Course Requirement~~[-]~~

(1) After ~~[successfully obtaining]~~being issued a Dedicated Hunter certificate of registration and prior to obtaining the first Dedicated Hunter permit of the program, a participant must complete a wildlife conservation and ethics course as prescribed by the Division.

(2) The wildlife conservation and ethics course is available through the Division's ~~[Internet site]~~Website.

(3) The Division shall keep a record of all participants who complete the wildlife conservation and ethics course as required by Utah law.

R657-38-9. Service Hour Requirement~~[-]~~

(1)a ~~[Except as provided in R657-38-14, each]~~A participant ~~[in]~~must complete the ~~[program shall provide a]~~ minimum ~~[of 32 hours]~~annual required service hours as a volunteer on Division -approved wildlife conservation projects~~[-]~~~~[(i) A~~

~~participant may obtain a permit in the 1st year of the program without having provided service hours.] in order to obtain a Dedicated Hunter permit.~~

~~[(ii) A participant must have completed a minimum of 16 service hours prior to receiving a Dedicated Hunter permit in the 2nd year of the program.]~~

~~[(iii) A participant must have completed a minimum of 32 total service hours prior to receiving a Dedicated Hunter permit in the 3rd year of the program.]~~

(b) A participant must complete a minimum of 8 service hours prior to receiving a Dedicated Hunter permit in the first year of the program.

(c) A participant must complete a minimum total of 24 service hours prior to receiving a Dedicated Hunter permit in the second year of the program.

(d) A participant must complete a minimum total of 32 service hours prior to receiving a Dedicated Hunter permit in the third year of the program.

(e) If the participant has two program harvests, the full 32 hours must be completed prior to the expiration of the certificate of registration.

~~(f) If the a participant having two program harvests fails to complete the minimum 32 required hours of service by the prior to expiration of the certificate of registration in the 3rd year, the participant will be is ineligible to apply for or obtain any Utah hunting licenses license or permits permit until the remaining service hours have been completed.~~

~~(g) After a certificate of registration has expired, incomplete service hours may be completed through Division approved projects or by payment at the established purchase rate.~~

~~(h) A participant who has not been issued any Dedicated Hunter permits during the enrollment shall not be required to complete the service hour requirement.~~

~~(i) Residents and nonresidents may complete service hour requirements through service, purchase, or a combination of the two options.~~

~~(j) If a participant fails to fulfill the wildlife conservation and ethics course or the minimum service requirements in any year of participation, the participant shall not be issued a Dedicated Hunter permit for that year.]~~

~~(k) Wildlife conservation projects may be designed provided by the Division, or any other individual or entity, but must be pre-approved by the Division.~~

~~(l) Goods or services provided donated to the Division for wildlife conservation projects by a participant may be, at the discretion of the Division, substituted for service hours based upon current market values or comparative state contract rates for the goods or services, and the approved service hour purchase rate.~~

~~(m) The Division shall publicize the dates, times, locations and description of approved wildlife conservation projects and activities on the Division's Internet site's Website.~~

~~(n) Service hours must be completed within the performed prior to an enrollment period shall not be accepted as service credit.~~

~~(o) Service hours exceeding the 32-hour minimum requirement shall not be applicable beyond the enrollment period and shall not be credited to any subsequent certificate of registrations registration.~~

~~(p) Except as provided in R657-38-14 for participants surrendering due to injury or illness, all participants] (q) Participants are required to perform their own service hours.~~

([a]b) Service hours are not transferrable to other participants or certificates of registration.

R657-38-10. [~~Service Hour Exceptions and Program~~ Certificate of Registration Extension]

(1) (a) A participant who is a member of the United States Armed Forces or public safety organization that is mobilized or deployed on orders in the interest of national defense or declared state of emergency while enrolled in the program may request a one-year program extension if[;]:

([a]i) the person is mobilized or deployed for a minimum period of [~~3~~]three consecutive months[;]; or[;]

([b]ii) the participant is mobilized or deployed during the general buck deer season.

([i]b) [~~The extension may not be granted for a year where the participant was issued a Dedicated Hunter permit and the division determines~~]The participant must provide evidence of the mobilization or deployment period and that the mobilization or deployment precluded the participant from using the Dedicated Hunter permit.

(c) An extension may not be granted if the participant hunted [~~with~~]during the [~~permit~~]general deer season.

([2]d) If an extension is granted[:]due to mobilization or deployment:

([a]i) the minimum annual program requirements shall be postponed into the subsequent year of the enrollment; [~~and~~]

([b]ii) a permit will not be issued in the year the qualifying mobilization or deployment occurs. [~~(3) The participant must provide evidence of the mobilization or deployment period.~~]

(2)(a) A person who is enrolled in the program and obtains a limited entry buck deer permit through the Utah Big Game drawing or accepts a poaching reported reward limited entry buck deer permit, may request the Dedicated Hunter program enrollment period be extended one additional year.

(b) The extension request must be received by the Division before the established deadline, as published on the Division's website.

(c) An extension is not available to participants who have two program harvests.

R657-38-11. Allowable Harvest and Permit Return Requirements.

(1)(a) A program participant may take a maximum of two general season deer within the enrollment period. Only one deer may be harvested in a single year.

(b) The harvest of an antlerless deer using a Dedicated Hunter permit, when permissible in the extended archery areas and seasons established in the big game guidebook, shall be considered a program harvest.

(2) Upon [~~issue~~]issuance of a Dedicated Hunter permit, the participant is credited with a program harvest.

(a) Two program harvests are allowed within an enrollment period.

(b) If program harvests [~~are accrued~~]accrue during the [~~4st~~]first year and [~~2nd~~]second year of the enrollment, a permit shall not be issued for the [~~3rd~~]third year.

(c) In order to remove a program harvest credit, the participant must:
(i) not have harvested a deer with the Dedicated Hunter permit; and
(ii) return the permit ~~[and]~~with the attached tag, or a qualifying affidavit as proof of non-harvest to a Division office. A handling fee and notarization may be ~~[assessed]~~required for processing an affidavit.

R657-38-12. Dedicated Hunter Permits.

(1) (a) Pursuant to Sections 23-19-24 and 23-19-26 person must have a valid Utah hunting or combination license to apply for or obtain a big game permit.

(a)b Except as provided in subsection (b)c, a permit may not be issued if the participant does not possess a valid hunting or combination license at the time of permit issuance.

(b)c A valid hunting or combination license is not required to obtain a permit in the first year of the enrollment period, provided the participant possessed a valid license when applying for the Dedicated Hunter certificate of registration.

(2) The participant must have a valid Dedicated Hunter permit in possession while hunting.

(3) Upon completion of the minimum annual requirements, a Dedicated Hunter permit may be issued~~[-The method and dates in which the Division issues and distributes Dedicated Hunter permits shall be]~~as published on the Division~~[']s website[-or in the guidebook of the Wildlife Board for taking big game]~~.

(4) The Division may exclude multiple season opportunities on specific management units~~[-due to extenuating circumstances on a portion or all of a hunt area.]~~or may close or reduce a season on part or all of a management unit, when in the interest of the wildlife resource or as necessary for the Division to accomplish its management objectives.

(5)(a) The Division may issue a duplicate Dedicated Hunter permit pursuant to Section 23-19-10.

(b) If a participant's unused Dedicated Hunter permit and tag is destroyed, lost, or stolen prior to, or during the hunting season in which the permit is valid, a participant may obtain a duplicate~~[-A]~~after paying the associated handling fee~~[-may be assessed for the duplication]~~.

(c) A duplicate Dedicated Hunter permit shall not be issued after the closing date of the general buck deer season.

(6)(a) A participant may surrender a Dedicated Hunter permit in accordance with Rule R657-42.

(b) A participant may not surrender a Dedicated Hunter permit ~~[once the general archery deer hunt]~~after the earliest season allowed by the permit has begun, unless the Division can verify that the permit was never in the participant~~[']s~~ possession.

(7)(a) Lifetime license holders may participate in the program.

(b) ~~[The Lifetime]~~A lifetime license holder shall apply for a certificate of registration in the same manner as all other prospective participants.

~~[-(c) Upon joining and for the duration of enrollment in the program, the]~~(c) A lifetime license holder participating in the program agrees to ~~[temporarily]~~forego any rights to receive a lifetime license buck deer permit as provided in Section 23-19-

~~[17.5.]~~17.5 while enrolled in the program and until all outstanding service hours owed from a period of enrollment are complete.

(d) A refund or credit is not issued for a forgone lifetime license permit.

R657-38-13. Obtaining Other Permits.

(1) (a) Participants may not apply for or obtain any other Utah general season buck deer permit, including general landowner buck deer permits, or respective preference points issued by the Division through the big game drawing, license agents, over-the-counter sales, or the internet during an enrollment period in the program.

(~~[a]~~b) Any other Utah general season deer permit obtained is invalid and must be surrendered prior to the beginning season date for that permit.

~~(c) Refunds for surrendered permits are governed by [Section]Sections 23-19-[38.] 38 and 38.2 and R657-42.~~

(2)(a) Participants may apply for or obtain a limited entry buck deer permit, including CWMU, limited entry landowner, conservation, expo, and poaching reported rewards permits.

(~~[i]~~b) A limited entry buck deer permit may be obtained without completion of the annual program requirements[~~;~~] but does not exempt the participant from fulfilling the minimum requirements of the[~~-entire-~~] enrollment.

~~[—(ii) A person who is enrolled in the program and obtains a limited entry buck deer permit through the Utah Big Game drawing or accepts a poaching reported reward limited entry deer permit, may request the Dedicated Hunter program enrollment period be extended one additional year. Any other method of obtaining a limited entry buck deer permit shall not extend the enrollment period, but shall take the place of one of the 3 enrollment years.]~~

~~[—(iii) Harvest with a limited entry buck deer permit shall not be counted as a program harvest.]~~

(~~[b]~~c) If the participant obtains a limited entry buck deer permit and has been issued a Dedicated Hunter permit, [~~that~~either the limited entry buck deer permit or the Dedicated Hunter permit must be surrendered as permissible by R657-38-~~[44]~~12 and R657-42.

(~~[i]~~d) A participant who obtains a limited entry buck deer permit may only use that permit in the prescribed area and season listed on the permit[~~-~~], but Dedicated Hunter privileges are not extended to that permit.

(~~[ii]~~e) A limited entry buck deer permit may not be obtained if the Dedicated Hunter permit has been [~~in possession of the participant during any open portion of~~]issued and the general buck deer season[~~-~~] has started.

(f) Harvest of a limited entry buck deer as permitted shall not be counted as a program harvest.

(3)(a) Participants may apply for or obtain antlerless deer permits as provided in Rule R657-5 and the guidebook of the Wildlife Board for taking big game.

(b) Except as provided in R657-38-~~[44(1),]~~11, harvest of an antlerless deer with an antlerless deer permit shall not be considered a program harvest.

R657-38-14. Certificate of Registration Surrender.

(1) A participant may ~~[formally]~~ request ~~[withdrawal]~~ to withdraw from the Dedicated Hunter program by surrendering the Dedicated Hunter certificate of registration pursuant to R657-42, provided the participant ~~[meets the surrender requirements and]~~ does not have ~~[a]~~ two program ~~[record indicating two]~~ harvests within the enrollment period.

~~[——(a) A participant who has not possessed any permits in the program during any portion of the hunting seasons applicable to those permits, may surrender and have all requirements waived.]~~

~~[——(b) A participant who has possessed only one permit in the program during any portion of the hunting seasons applicable to that permit and not credited with a program harvest on that permit, may surrender upon completing a minimum of 11 service hours;]~~

~~[——(c) A participant who has possessed two permits in the program during any portion of the hunting seasons applicable to those permits and credited with no more than program harvest between the permits, may surrender upon completion of a minimum of 22 service hours.]~~

(2) A participant who has two program harvests during the program enrollment may not withdraw from the program and is required to complete the program minimum requirement of 32 service hours

(3) The Division may reinstate preference point(s) for a participant successfully surrendering in the first year of the enrollment period, provided the ~~[person did not possess a dedicated hunter permit during any portion of the hunting seasons applicable to the permit.]~~ ~~—(3) "Possessed" means, for purposes of this section, that division records show a Dedicated Hunter permit was printed, mailed to or picked up by the participant, and not surrendered prior to the beginning of the general archery buck~~ surrender occurs prior to the start of the general deer season.

~~[——(4)(a) Pursuant to 23-19-38, a participant who becomes ill or suffers an injury that precludes that person from using the permits or completing program requirements, may request withdrawal from the Dedicated Hunter program pursuant to R657-42 and upon furnishing verification of illness or injury from a physician.]~~

~~[——(b) If the participant requesting withdrawal due to illness or injury has a program record indicating two harvests, the Division may waive the remaining service hours or authorize another person to fulfill the requirement in the participant's behalf.]~~

R657-38-15. Certificate of Registration Suspension.

(1) The Division may suspend a Dedicated Hunter certificate of registration pursuant to Section 23-19-9 and R657-26.

(2) A certificate of registration may also be suspended if the participant:

(a) fraudulently submits a time sheet for service hours; or

(b) fraudulently completes any of the program requirements; or

(c) is under a judicial or administrative order suspending any wildlife hunting or fishing privilege within Utah or elsewhere; or

(d) provides false information on the drawing application; or

(e) has violated the terms of any certificate of registration issued by the Division or an associated agreement.

(3) A Dedicated Hunter permit is invalid if a participant's certificate of registration is suspended.

(4) The program enrollment period shall not be extended in correlation with any suspension.

KEY: wildlife, hunting, recreation, wildlife conservation

Date of Enactment or Last Substantive Amendment: March 13, 2017

Notice of Continuation: October 5, 2015

Authorizing, and Implemented or Interpreted Law: 23-14-18



GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Wildlife Resources

MICHAEL D. FOWLKS
Interim Division Director

MEMORANDUM

Date: October 22, 2018

To: Wildlife Board and Regional Advisory Council Members

From: Blair Stringham, Migratory Game Bird Program Coordinator

Subject: **2019-2021 WATERFOWL HUNT RECOMMENDATIONS**

This year the Utah Division of Wildlife Resources is recommending a 3-year recommendation cycle for waterfowl hunting regulations. The following proposed season dates, bag limits and other changes would apply for the Waterfowl Guidebook for a 3-year cycle:

Youth Day

Northern Zone: Two weeks before the waterfowl season opening day

Southern Zone: Two weeks before the waterfowl season opening day

Duck/Coot/Merganser (Maximum Season, Bag and Possession allowed; 2 wood duck bag)

Northern Zone: First Saturday in October

Southern Zone: Second/Third Saturday in October

Dark Goose (Maximum Season, Bag and Possession allowed)

Eastern Box Elder Zone: Same dates as duck hunt

Northern Zone: First Saturday in October – Split – Last Saturday in October

Southern Zone: Same dates as duck hunt

Wasatch Front Zone: First Saturday in October – Split – First Saturday in November

Light Goose (Maximum Season, Bag and Possession allowed)

Statewide: October 25 – December 15; January 15 – March 10

- Closed in Millard County from February 15 – February 28
- If Oct or Jan 15 is a Sunday, hunt will open one day later
 - Oct 25, 2020 to Oct 26, 2020
 - On leap years, hunt will start one day later (Oct 26, 2019)

Snipe (Maximum Season, Bag and Possession allowed; season dates same as duck zone)



Falconry (Maximum Season, Bag and Possession allowed; season dates same as duck zone)

Swan (permits allocated through flyway process)

Season: First Saturday in October – Second Sunday in December

Allow swan hunting during youth hunt

Hunt Zone change:

Begins at I-15 and Exit 365 (SR 13/83); west and north on SR-83 to I-84; west on I-84 to SR-30; southwest on SR-30 to the Nevada-Utah state line; south on this state line to I-80; east on I-80 to I-15; north on I-15 to Exit 365 (SR 13/83).

We are proposing to amend Rule R657-9 to:

- 1) Redefine the definition of motor vehicle.
- 2) Define Antelope Island hunt boundary.

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.

R657-9-12. Motorized Vehicle Access.

(1) "Motorized vehicle" for the purposes of this section means a vehicle that is self-propelled or possesses the ability to be self-propelled. This does not include vehicles moved solely by human power, motorized wheelchairs, or an electric personal assisted mobility device~~[-or an electric assisted bicycle]~~.

(2) Motorized vehicle travel is restricted to county roads, improved roads and parking areas.

(3) Off-highway vehicles are not permitted on state waterfowl management areas, except as marked and posted open.

(4) Off-highway vehicles are not permitted on Bear River Migratory Bird Refuge.

(5) Motorized boat use is restricted on waterfowl management areas as specified in the guidebook of the Wildlife Board for taking waterfowl, Wilson[]'s snipe and coot.

(6) Electric-assisted bicycles and similar devices propelled in part by electrical assistance are not permitted on state waterfowl management areas.

R657-9-30. Rest Areas and No Shooting Areas.

(1) A person may only access and use state waterfowl management areas in accordance with state and federal law, state administrative code, and proclamations of the Wildlife Board.

(2)(a) The division may establish portions of state waterfowl management areas as ~~[""]~~"rest areas~~[""]~~" for wildlife that are closed to the public and trespass of any kind is prohibited.

(b) In addition to any areas identified in the proclamation of the Wildlife Board for taking waterfowl, Wilson[]'s snipe, and coot, the following areas are designated as rest areas:

(i) That portion of Clear Lake Waterfowl Management Area known as Spring Lake;

(ii) That portion of Desert Lake Waterfowl Management Area known as Desert Lake;

(iii) That portion of Public Shooting Grounds Waterfowl Management Area that lies above and adjacent to the Hull Lake Diversion Dike known as Duck Lake;

(iv) That portion of Salt Creek Waterfowl Management Area known as Rest Lake;

(v) That portion of Farmington Bay Waterfowl Management Area that lies in the northwest quarter of unit one; and

(iv) That portion of Ogden Bay Waterfowl Management Area known as North Bachman.

(c) Maps of all rest areas will be available at division offices, on the division's website, and to the extent necessary, marked with signage at each rest area.

(3)(a) The division may establish portions of state waterfowl management areas as "No Shooting Areas" where the discharge of weapons for the purposes of hunting is prohibited.

(b) No Shooting Areas remain open to the public for other lawful activities.

(c) In addition to any areas identified in the proclamation of the Wildlife Board for taking waterfowl, Wilson's snipe, and coot, the following areas are No Shooting Areas:

(i) All of Antelope Island, including all areas within 600 feet of the upland vegetative line or other clearly defined high water mark;

(ii) Within 600 feet of the north and south side of the center line of Antelope Island causeway;

(iii) Within 600 feet of all structures found at Brown's Park Waterfowl Management Area;

(iv) The following portions of Farmington Bay Waterfowl Management Area:

(A) within 600 feet of the Headquarters;

(B) within 600 feet of dikes and roads accessible by motorized vehicles;

and

(C) within the area designated as the Learning Center.

(v) Within 600 feet of the headquarters area of Ogden Bay Waterfowl Management Area;

(vi) Within the boundaries of all State Parks except those designated open by appropriate signage as provided in Rule R651-614-4;

(vii) Within 1/3 of a mile of the Great Salt Lake Marina;

(viii) Below the high water mark of Gunnison Bend Reservoir and its inflow upstream to the Southerland Bridge, Millard County;

(ix) All property within the boundary of the Salt Lake International Airport; and

(x) All property within the boundaries of federal migratory bird refuges, unless hunting waterfowl specifically authorized by the federal government.

(4) The division reserves the right to manage division lands and regulate their use consistent with Utah Code ~~Section~~ § 23-21-7 and Utah Administrative Code R657-28.

KEY: wildlife, birds, migratory birds, waterfowl

Date of Enactment or Last Substantive Amendment: February 7, 2018

Notice of Continuation August 1, 2016

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